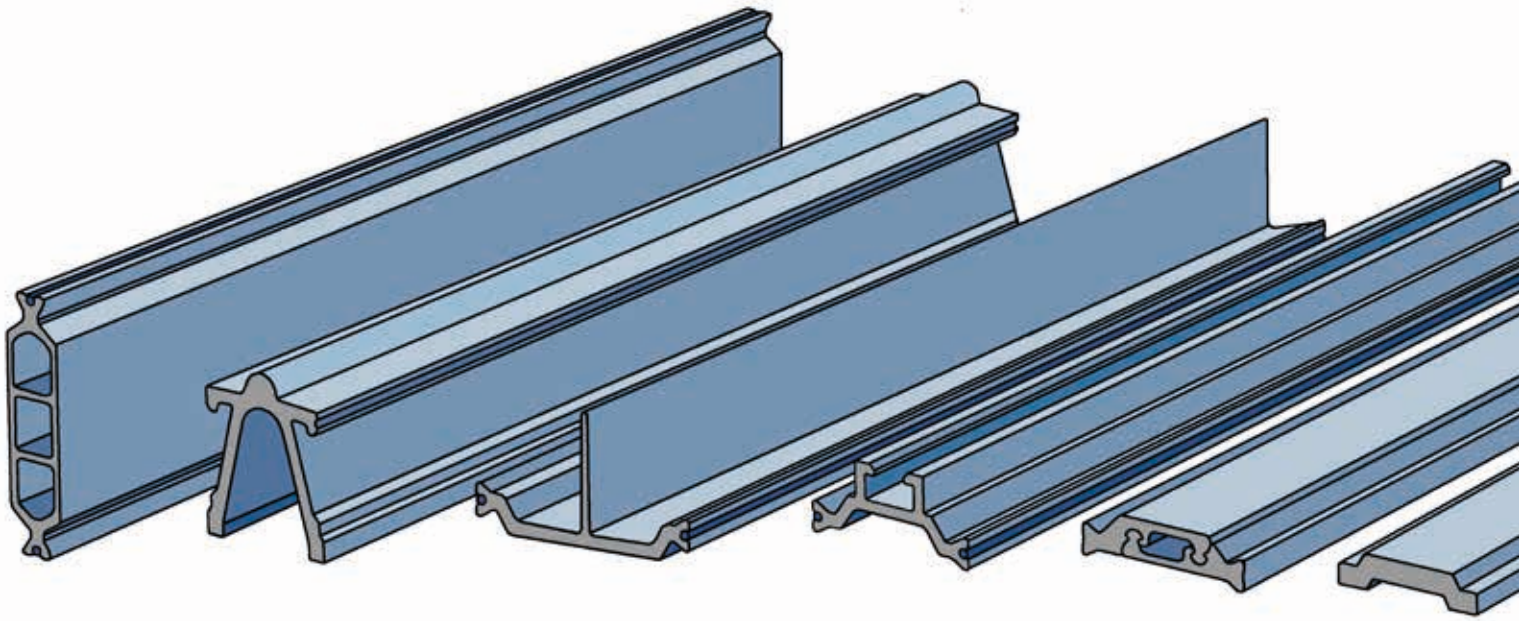
insulbar®

Ensinger



Standard program worldwide

insulbar® insulating bars for windows, doors and façades

Edition 2-2024

Table of contents

The thermal break professionals. Innovative and future-oriented – but steeped in tradition!

Plastic insulating profiles are key components for the thermal break of modern window, door and façade systems made of metal. Ensinger profiles are the first choice for quality-conscious system manufacturers and processing companies.

Under the brand name insulbar, Ensinger develops and produces technically superior thermal insulating bars, and for over 40 years has been one of the leading manufacturers worldwide.

Profile professionals and inventors

It was over four decades ago that company founder and pioneer Wilfried Ensinger developed insulating profiles for metal windows, doors and façades. The driving force for this was the rising market demand for thermally improved aluminum systems, in order to thereby save on energy and costs and protect the environment. Nowadays, one associates the name Ensinger with the invention of the plastic insulating bar: durable, stable, quality made in Germany – marketed across the world under the insulbar brand name.

Plastics experts and partners to industry

insulbar represents only a part of Ensinger's extensive range of products and services. The company develops and produces – with its outstanding expertise in plastics – compounds, stock shapes, composites, finished parts and profiles made from technical plastics. These products are used nowadays in nearly all areas of industry and are impressive thanks to their cost-effectiveness and performance advantages. To process the thermoplastic engineering and high-performance plastics, Ensinger uses a number of production techniques, such as extrusion, machining, injection molding, custom casting, sintering and pressing.

Left:
The Ensinger company headquarters in Nufringen near Stuttgart. Home to the company's administration, production and warehousing activities.

Right:
The insulbar production facility in Cham, Bavaria.

Efficient thermal break of window, door and façade systems with insulbar insulating bars

Aluminum systems are weather-resistant, light and yet stable – but also have a high thermal conduction capacity. insulbar plastic insulating bars minimize this heat loss and thereby enable particularly low U values. In this way the energy consumption and hence heating and cooling costs can be lowered efficiently.

Thermal break of windows, doors and façades

Plastic insulating bars are key components of modern window, door and façade systems made of metal. They thermally decouple aluminum frames and thereby reduce heat losses to a minimum.

Insulate effectively and save energy - with insulbar insulating profiles

insulbar insulating bars, also known as thermal insulating bars, thermal insulating profiles or insulating profiles, prevent energy losses in buildings very efficiently and enable outstanding U_f values even up to passive house standards. Reduce energy consumption, save on heating and cooling costs and protect the environment in the process – these are the effects which can be achieved with insulbar bars.

With a standard to a system

insulbar insulating bars from the standard program: universal, versatile, economical.

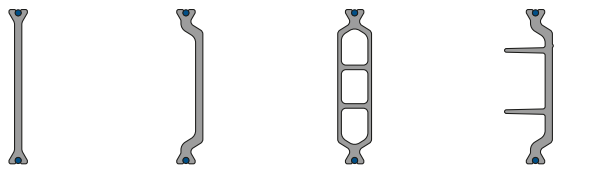
Economical and rapidly available – for any task

System manufacturers and metalworkers benefit from an extensive range of standard profiles. Using the insulating bars from the standard program, nearly all common thermally separated window, door and façade systems can be put together quickly and cost-effectively. In addition, no tool costs arise.

All profile types from a system group

Profile type A

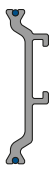
Simple, straight or offset profile, without additional functional element.



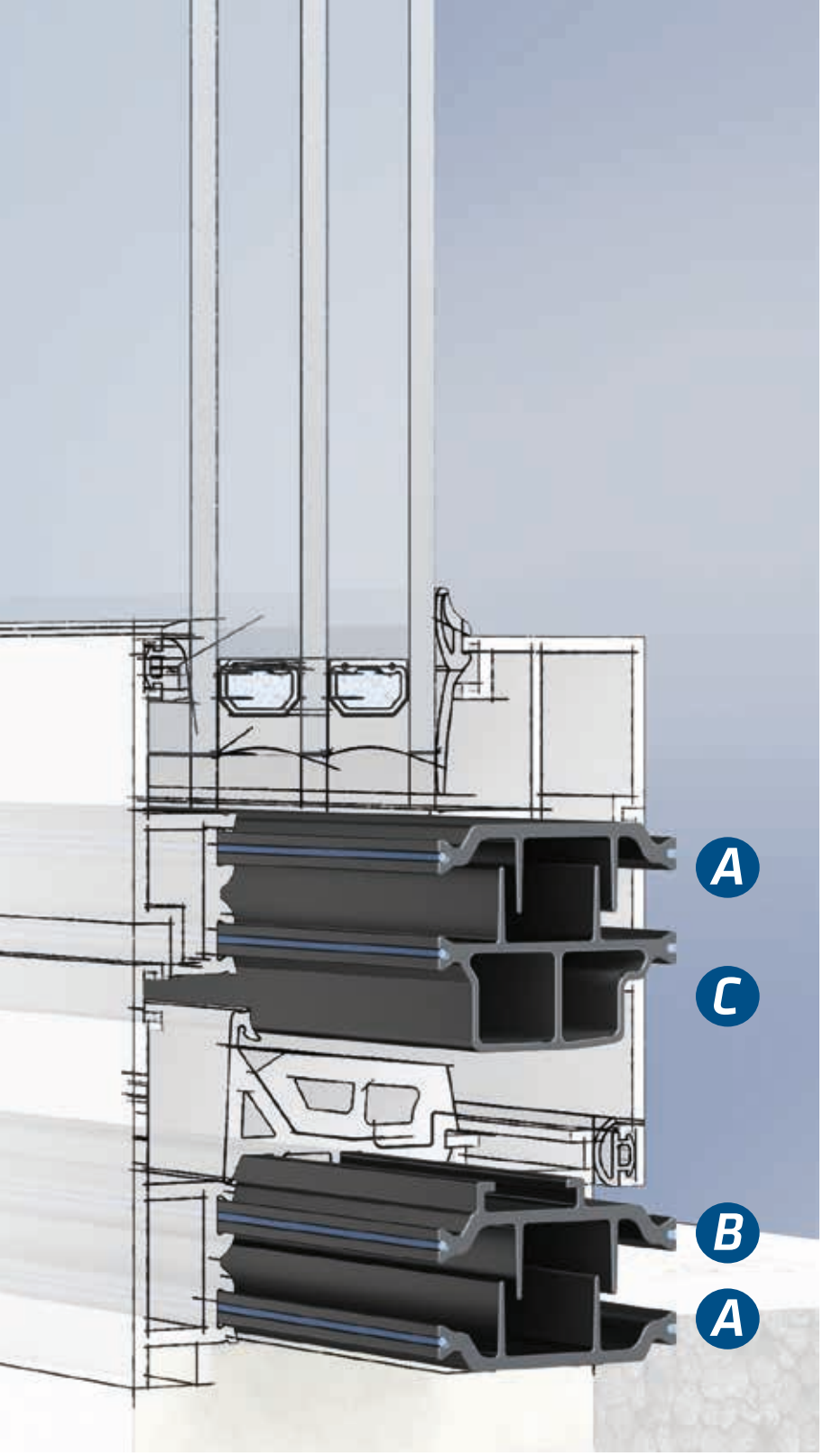
straight | offset | hollow chamber | offset with flags

Profile type B

Profile for accommodating a central gasket with groove, hook or "T".



offset with groove



Diversity as a matter of course

insulbar standard profiles are available in several geometries, made from different materials and, on request, having undergone further finishing. Depending on the window type and climatic conditions, all requirements for a system are thus optimally fulfilled.

Standard bars – the rapid system solution

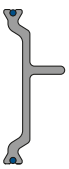
For simple and quick complete solutions for tilt and turn windows, we also offer – in the common insulation depths – several system groups as standard. These consist of three different profile types (A, B, C) in an identical size with all the requisite functional zones. The insulating bars within a group have the same base geometries and offset areas and are characterized by their standardized tolerances.

Profile type C

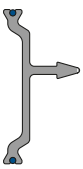
Functional element such as nose, arrow, hollow chamber.

offset with hook

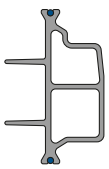
offset with “T”



offset with nose



offset with arrow



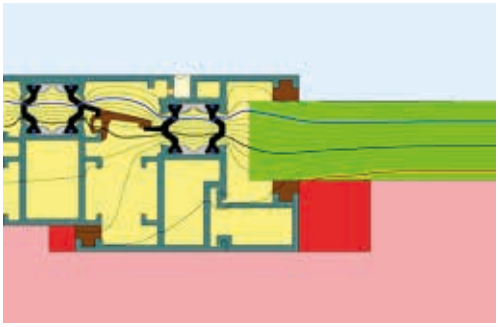
special hollow chamber

System groups: typical applications

Four schematic window cross sections: the right profile for every requirement

The U_f values and isothermal lines have been calculated using two-dimensional simulation software.

1 Standard profiles with insulation depth 14.8 mm



Article number: 2440, 3286, 2167

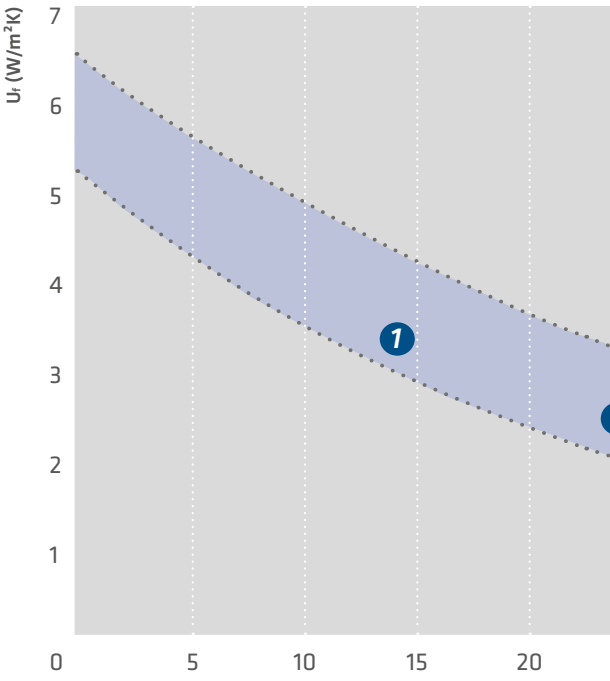
Installation depth: 45.8 mm
Visible width: 90 mm
U_f = 3.3 W/m²K
U_w = 3.1 W/m²K*
* Double glazing U_g = 2.7 W/m²K
Aluminum spacer Ψ = 0.08 W/mK

3 Standard profiles with insulation depth 34 mm

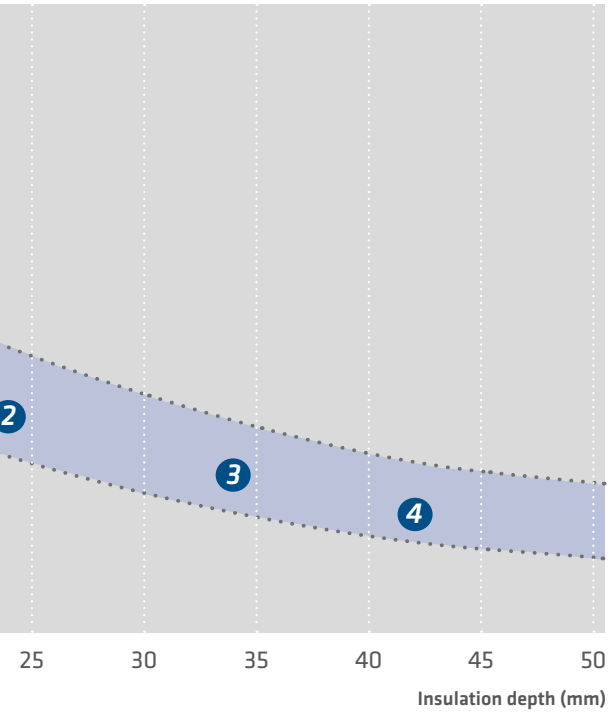
Article number: 2807, 2805, 3172*

Installation depth: 68 mm
Visible width: 92.5 mm
U_f = 1.9 W/m²K
U_w = 1.1 W/m²K*
* Triple glazing U_g = 0.7 W/m²K
Warm edge spacer Ψ = 0.044 W/mK
* All profiles with Low-E film on the flags

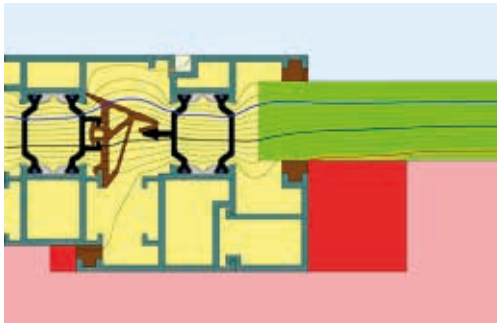
Influence of insulation depth on the U_f value



The U_f value of a thermally broken tilt and turn window is determined to a large degree by the insulating height of the insulating bar. Gaskets, flags, reflective films, insulating foams etc. also influence the thermal transmission coefficient. As visible from the graphic, the U_f value decreases with increasing insulation depth. Numbers 1 to 4 stand for the system cross sections.



2 Standard profiles with insulation depth 24 mm



Article number: 3023, 3024, 3285

Installation depth: 58 mm
Visible width: 92.5 mm
U_f = 2.6 W/m²K
U_w = 1.6 W/m²K*

* Double glazing U_g = 1.1 W/m²K
Warm edge spacer Ψ = 0.049 W/mK

4 Standard profiles with insulation depth 42 mm

Article number: 3272, 3273, 3274

Installation depth: 76 mm
Visible width: 96.5 mm
U_f = 1.5 W/m²K
U_w = 1.0 W/m²K*

* Triple glazing U_g = 0.7 W/m²K
Warm edge spacer Ψ = 0.044 W/mK

Always the right profile

Insulating bars for the thermal break of windows, doors and façades must above all be stable and reliable as well as having a highly insulating effect. But not all bars are the same. Different application requirements require different materials.

insulbar RE

made of TECATHERM 66 GF RE

The recycled profile: from 100 % recycled polyamide, unmixed and with an environmental declaration. Thanks to the special upcycling process has outstanding mechanical properties - just like the conventional insulbar insulating bars.

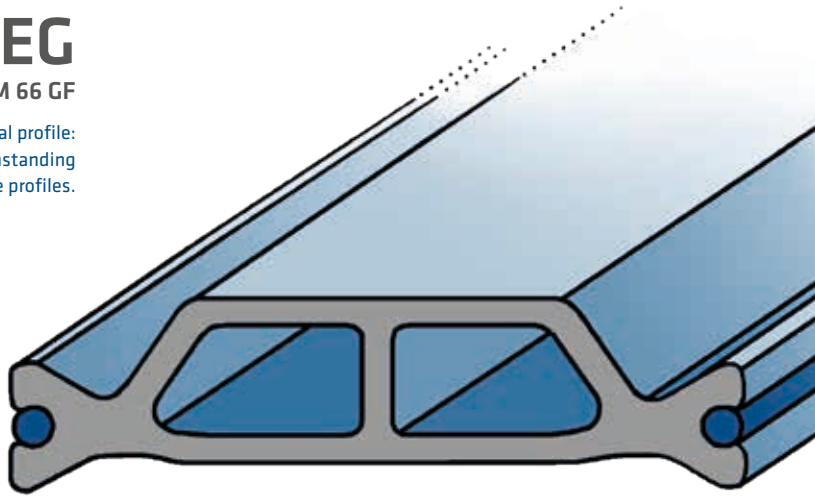
insulbar REG

made of TECATHERM 66 GF

The universal profile:
glass fibre reinforced and capable of withstanding extreme loads, for customary metal frame profiles.

made of TECATHERM 66 GF40

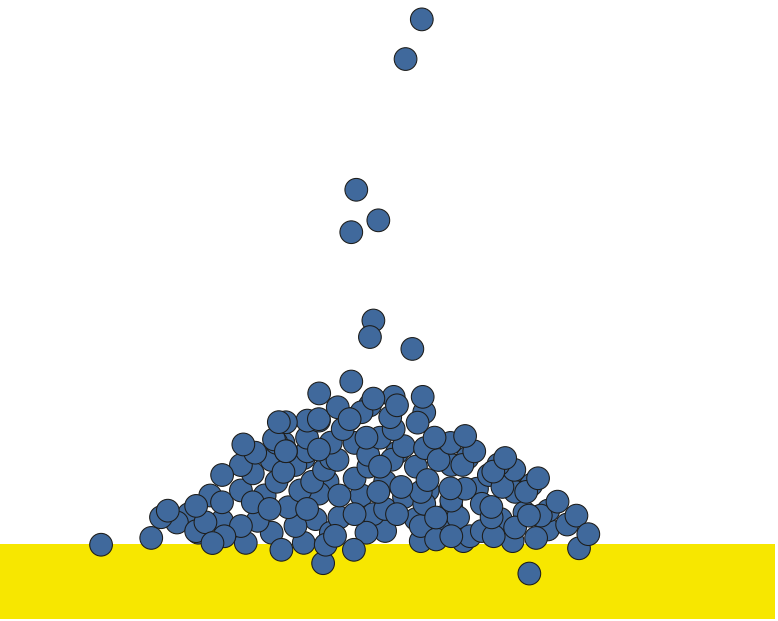
Highly reinforced profile with optimised strength and stiffness:
perfect for demanding mechanical applications.



insulbar ESP

made of TECATHERM 66 ESP

From electrostatically optimised polyamide 66 GF: thanks to improved powder attraction, ideal for powder coating.



insulbar LI

made of TECATHERM 66 GF

The insulating profile made from foamed polyamide 66 GF with a lambda value of 0.21 W/mK (in the optimum product): ideal for improving existing systems in respect of the U_f value or installation depth.

insulbar RE-LI

made of TECATHERM 66 GF RE

The bar which combines the low thermal conduction capacity of a foamed polyamide 66 GF with the ecological advantages of recycled material: ideal for green construction.

insulbar materials:
it's all about the right mixture

Our standard profiles are made from glass fiber reinforced polyamide 66, which is one of the most important engineering plastics. This material stands out for its optimum mechanical strength, high rigidity and thermal dimensional stability. It conducts little heat and also has a similar linear expansion to aluminum. For decades it has therefore been used for the thermal separation of window, door and façade systems made from aluminum.

Alongside our most common material TECATHERM 66 GF, we also offer other polyamide materials with a variety of properties, specific to the profile and application. Our applications team will work with you to ensure the correct material for your design is selected.

Certified quality and performance

insulbar bars meet high internationally applicable quality standards. This is proven by a large number of documents, for example the ATG test, Environmental Product Declaration (EPD) and Cradle-to-Cradle Material Health Certificates.

cradle to cradle CERTIFIED GOLD

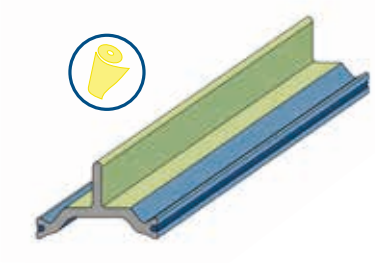
cradle to cradle CERTIFIED SILVER

Environmental Product Declaration EPD DIN ISO 14025 y EN 15804

atg

Further finishing at the customer's request

We supply profiles that have already been fully processed – with individually defined properties and ready to assemble.

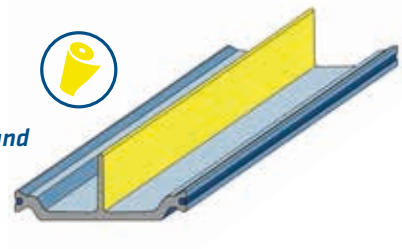


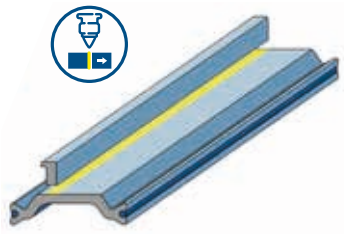
Film-coating with a temperature-resistant, removable film: more possibilities during powder coating

The film protects defined areas of the profile prior to paint application and can subsequently be removed without leaving any residues.

Low-E film: the simple alternative to foam

The insulating profile with a Low-E film 12 ε 3 reflects heat radiation and thereby enables reduced U_f values without the additional use of foam.





Milling: when it's not worth buying a new tool

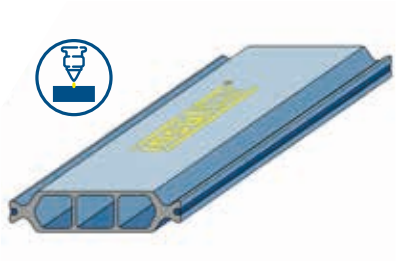
If there is so little demand for new tools that they do not represent a financially viable alternative, functional zones such as grooves can be removed from existing geometries. Flags, too, can be shortened to a certain length or completely removed.

Bundling of the profiles: for easy handling in the production process

In order to facilitate the handling of the insulating profiles during storage, order picking and processing, we offer our customers delivery of the bars in bundles with the desired numbers of units.

Delivery in the form of coils: easy handling, less waste

For system manufacturers and processing companies whose logistical processes or processing methods are tailored to coils, we also supply the profiles in roll form if requested – if the geometry permits this.

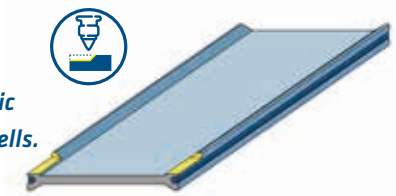


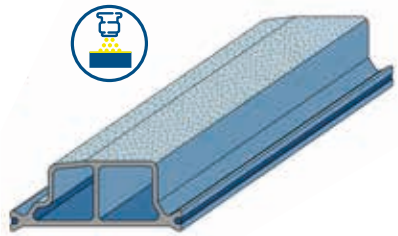
Marking: for optimized quality assurance

With inkjet or laser technology, or through embossing, customer-specific product markings can be applied to the profiles. This ensures reliable traceability of all the associated data.

Sharpening of the profiles: improved drawing-in

"Sharpening" of the profile ends to a point facilitates the automatic insertion of the bars into the receiving cavities of the aluminum shells.



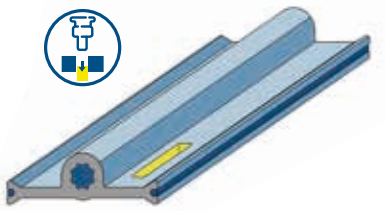


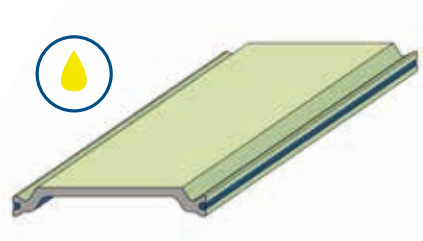
Dust blasting: optimum painted results

Dust blasting roughens the surface of the insulating bar. This increases the surface energy, improves the paint adhesion and thereby the painted result.

Recesses in accordance with the tolerances in DIN ISO 2768-1 m: precise, rapid, cost-effective

Before the bars leave the factory we punch any desired drainage, attachment or pressure equalization openings. Application-specific boreholes or milling operations are also possible. This eliminates the need for subsequent punching by processing companies





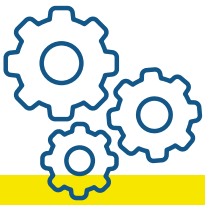
Conditioning: moisture content as required

The polyamide profiles can be conditioned in a water bath after manufacture. By this means, the moisture content of the insulating bars can be adjusted in order, for example, to facilitate subsequent machining. The moisture content is dependent on the geometry, water temperature and conditioning period.

Ensinger – your expert partner

Contact

Do you have questions about our insulating profiles, require detailed technical data or additional information regarding application engineering and possible uses? Or would you like to place a direct order and require a quotation? Talk to us!



Development and application engineering

Application engineering-related advice, from the choice of material and geometry through handling and processing to the application of insulbar insulating profiles is one of our core competencies.

We are at your side to give advice and will be pleased to help you further in every instance.

RPT Rapid Prototyping

Using rapid prototyping we develop and produce profile samples of your individual insulating bars, precisely in line with your specifications and wishes. We supply series-identical bars extruded from prototype tools reliably, on schedule and on fair terms.

Production and Logistics

Our efficient, highly flexible production at several locations ensures short delivery times and enables virtually unlimited delivery quantities. Our logistics processes ensure that your goods are delivered fast, reliably and on time.

Quality Management

Whether a standard or special solution – all insulbar bars fulfil stringent quality requirements which also comply with country-specific stipulations. Quality-relevant parameters are constantly monitored, continually checked, registered and the associated data archived for reasons of traceability.

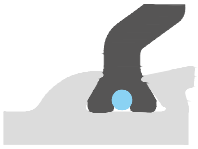
The cavity makes all the difference

The aluminum cavity is instrumental in determining the efficiency of the overall assembly.

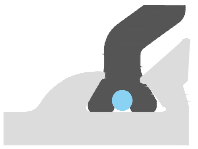
The cavity of the aluminum profile forms the connection to the insulbar thermal insulating bar. Its correct configuration ensures a high shear strength, lateral stiffness and shear stiffness of the assembly.

For insulbar insulating profiles, Ensinger recommends two different aluminum cavities depending on the application. The most commonly used variant is the cavity with a short hammer. In exceptional circumstances – for instance in the case of obstacles which make the hammer difficult to access for the roll-on wheel – Ensinger offers an alternative with a long hammer.

Both variants are compatible for most standard profiles. A full overview is provided by the table on pages 42 - 51. We will be pleased to check your cavities for compatibility with insulbar insulating profiles.



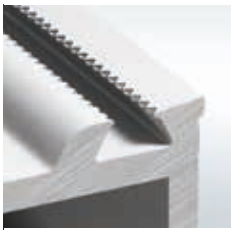
Variant 1 – short hammer



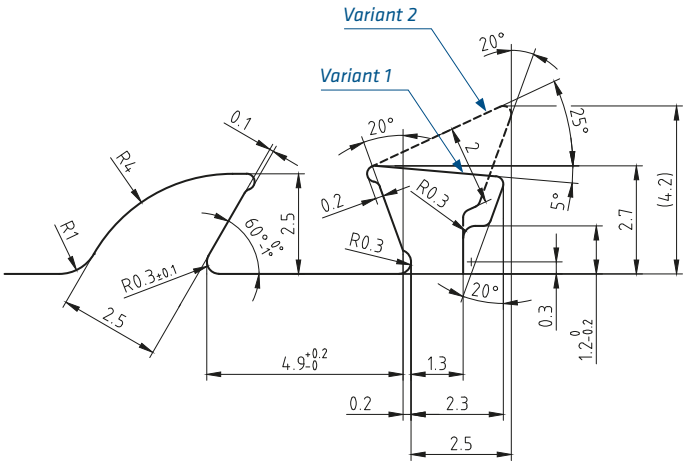
Variant 2 – long hammer

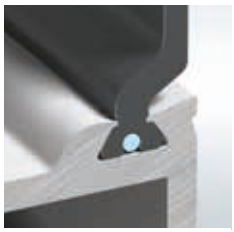
Steps to create the perfect connection

Extruded aluminum cavity

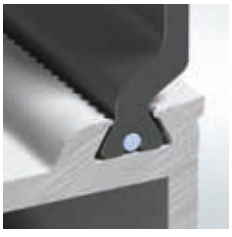


Milled cavity





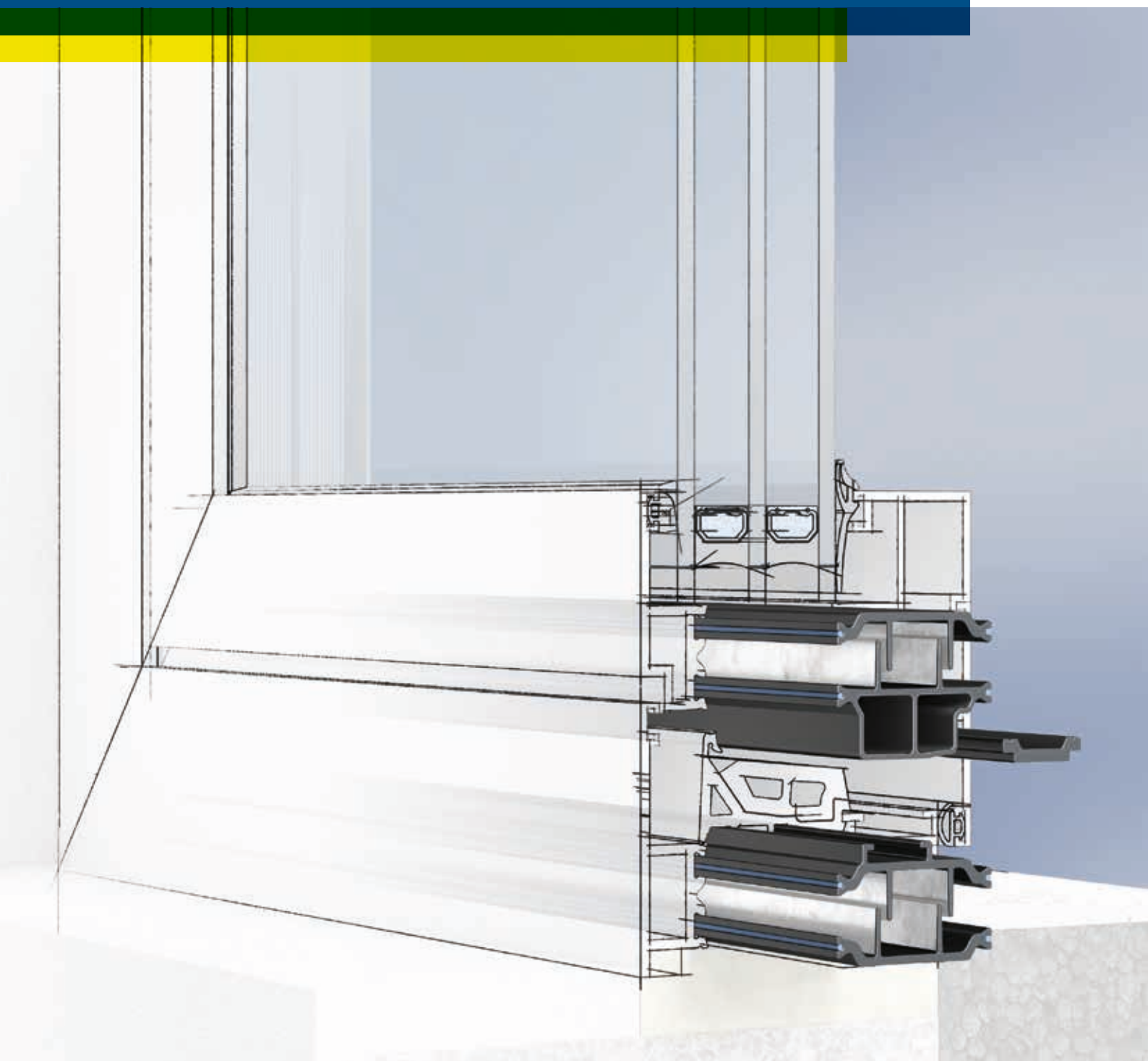
Rolled-on hammer



Cavity with insulbar insulating profile inserted

Classic profiles for windows, doors and façades

Our classic profiles enable the thermal break of all commonly used metal systems. Depending on the window type and area of application, all requirements for insulation are thus optimally fulfilled.



Functionality as standard, diversity as a matter of course

To meet the needs of the different window, door and façade systems, Ensinger offers insulating bars in all common profile shapes and/or geometries and for all common insulation depths (size of 10 to 54 mm). The insulating profiles are – appropriate to the particular requirements – equipped with special functional elements and can be supplied in different wall thicknesses and base geometries. Thus when designing the insulation zone the design engineer has a large number of options available to them for optimizing thermal insulation and achieving the desired U_f value.

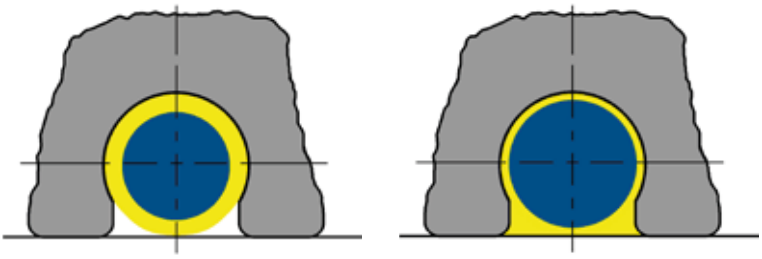
You can find special profiles for particular applications from page 32 onwards.

insulbar with Low-E film - an effective upgrade

You can achieve a simple but effective system upgrade by using our highly reflective Low-E film 12 ε 3, which can be additionally applied to flags. This enables outstanding U_f values without the use of foams. insulbar with Low-E film is suitable for coating and anodising in the assembly.

Coex wire – a reliable moisture barrier

The coex wire integrated into the base serves to perfectly seal the assembly system. Alongside a reliable moisture barrier, it also provides additional protection against shifting of the assembly. The polyamide core of the coex wire is coated with a hot-melt glue. This melts under the impact of temperature during coating and is activated by this.



Before powder coating

After powder coating

Specific, accompanying documents

→ Brochures: insulbar with Low-E film
→ Data sheets: Coex sealing wire
insulbar.com/en-us/downloads

Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

Classic profiles

10 mm

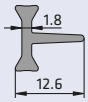
3632

2530

12 mm

3560

4698

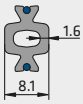


2192

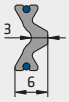
2310

1142

2164 2164



2531 2531

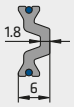


13.4 mm

2014

13.5 mm

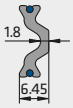
2156



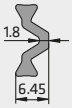
14 mm

1044

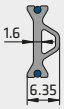
4386



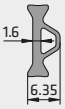
3557



2104



3725



14.6 mm

2952

1910

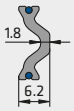
2046

0818

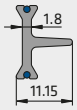
1173

2877

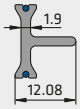
2028 2028



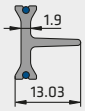
2045



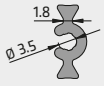
1674



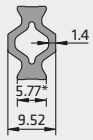
1884



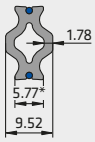
4060



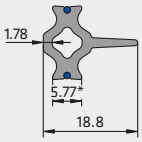
4059 4059



1953



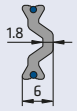
3378



0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

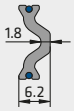
14.8 mm

2440

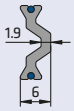


2102

1946

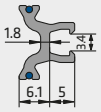


2237

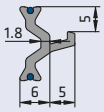


3138

2134

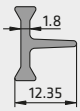


3286

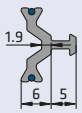


2186 2186

3368

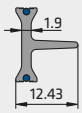


3745

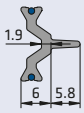


0508

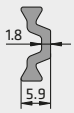
0785



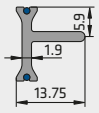
2167



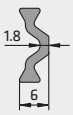
3633



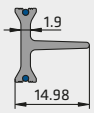
1135



3388



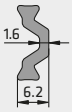
1090



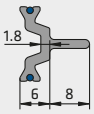
15 mm

1754

2196 2196

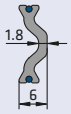


3985

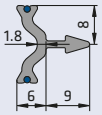


16 mm

2423

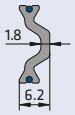


4102

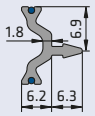


1928

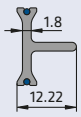
1945



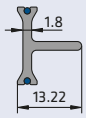
1947



1927



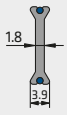
1989



1864

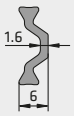
2634

2103



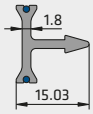
2334

3714

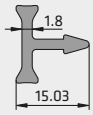


1532

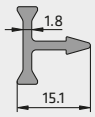
1866



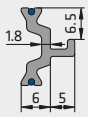
2635



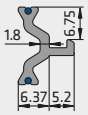
2335



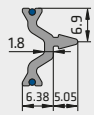
2189



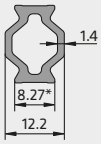
2375



2376



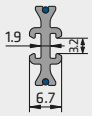
4061



Classic profiles

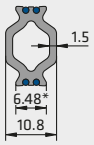
16.5 mm

2195



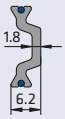
16.6 mm

2147

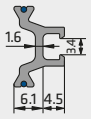


17 mm

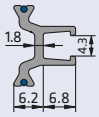
2250



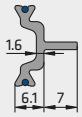
1918



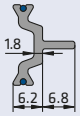
2262



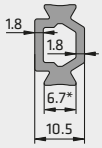
1919



2263

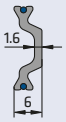


3909

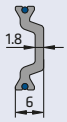


18 mm

3375

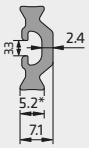


1987 1987



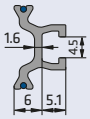
2111

2951

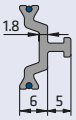


2594

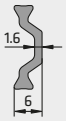
3374



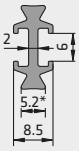
2154



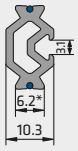
3715



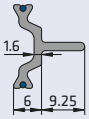
2899



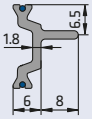
4683



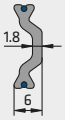
3373



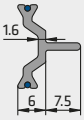
1988



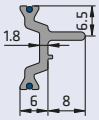
2797



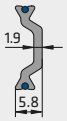
3621



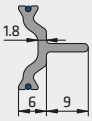
2098



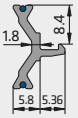
2379



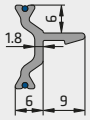
2063



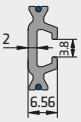
2593



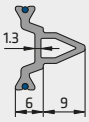
3122



2444



4777

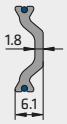


0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

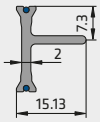
18.6 mm

1926

2520

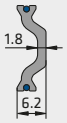


1418

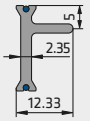


1991

2126

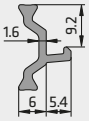


0346



3369

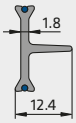
3784



2703

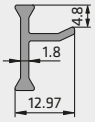
0838

2305

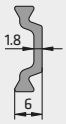


1174

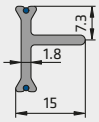
3370



3389

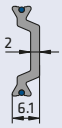


2793

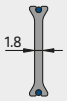


20 mm

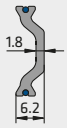
3062



2521

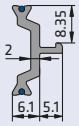


1673



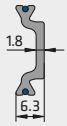
3255

3199

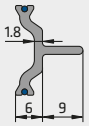


3591

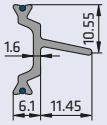
2742



2016

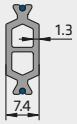


3454

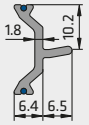


1220

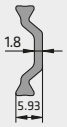
3546



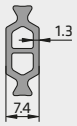
2495



2605

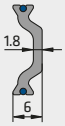


4199

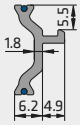


2365

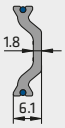
2078 2078



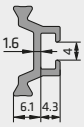
2031



2479

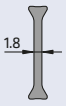


4351

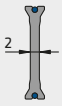


21 mm

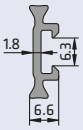
2907



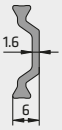
1136



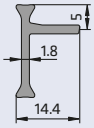
2909



3804 3804



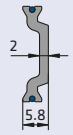
2908



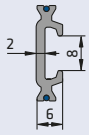
Classic profiles

21.9 mm

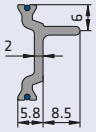
0748



0749

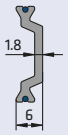


0750

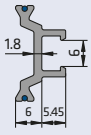


22 mm

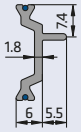
2202



2204



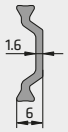
2203



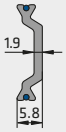
22 mm

2049

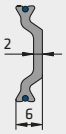
3716



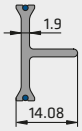
4263



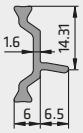
2285



2062

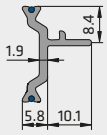


3918



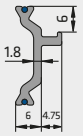
22 mm

2380



23 mm

3341

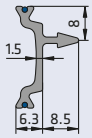


23.9 mm

0292

24 mm

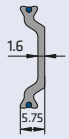
3425



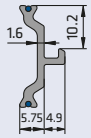
3387

24 mm

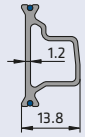
4543



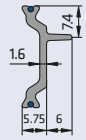
4544



3893

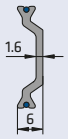


4388

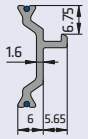


24 mm

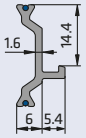
3023



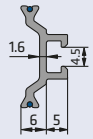
4063



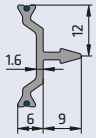
4101



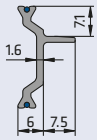
3024



3285



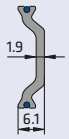
3022



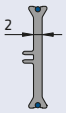
0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

24 mm

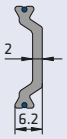
2206 **2206**



1922

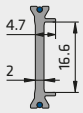


1393

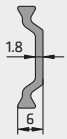


2884

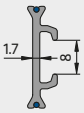
1707



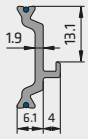
3390



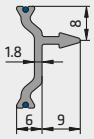
3149



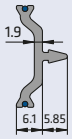
2200



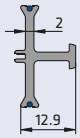
2425



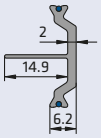
2279



1921

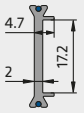


3020

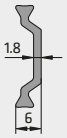


3371

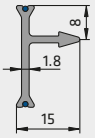
3380



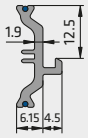
3448



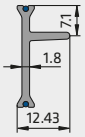
3148



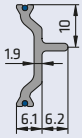
2396



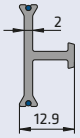
2902



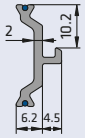
2432



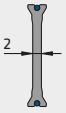
2268



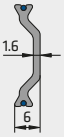
3622



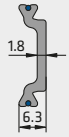
0839



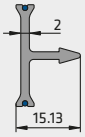
3257



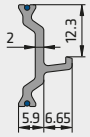
2794



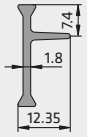
1498



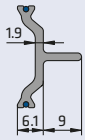
2165



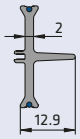
3372



2331

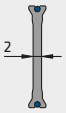


1920

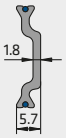


3283

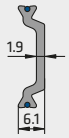
1175



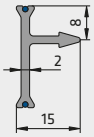
2730



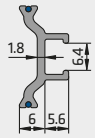
2199



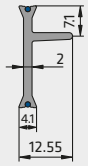
2214



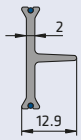
2426



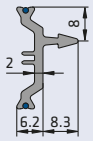
1750



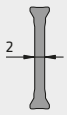
2267



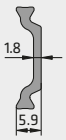
3021



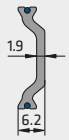
2633



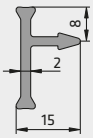
2780 **2780**



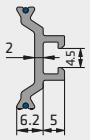
1619



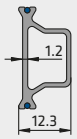
2632



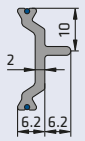
2191



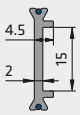
4283



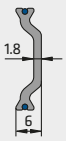
1392



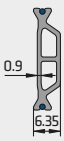
3284



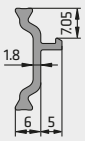
2424



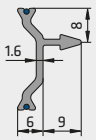
3386



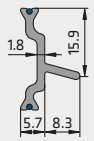
4557



3258



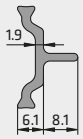
2729



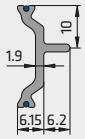
Classic profiles

24 mm

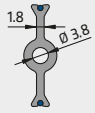
2774



2395



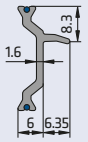
2316



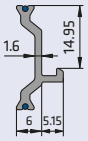
2366

24.8 mm

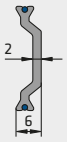
4215



4216

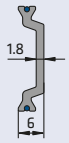


4214



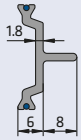
25 mm

2050

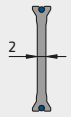


2155

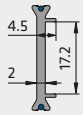
2051



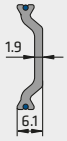
1058



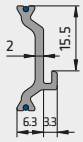
2106



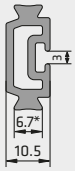
2817 **2817**



2311

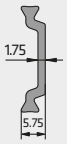


4330

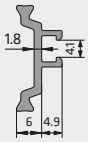


25.3 mm

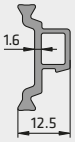
4271



4317



4272

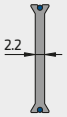


26 mm

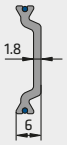
2006

4492

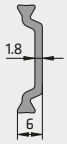
1186



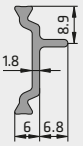
2535 **2535**



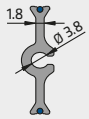
4493



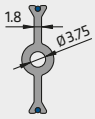
4494



1993

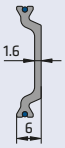


3433

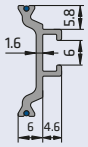


27 mm

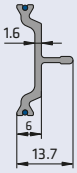
3078



3080



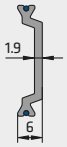
3079



0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

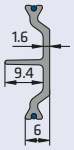
27 mm

2883

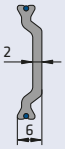


28 mm

3920



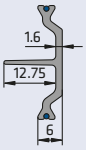
2795



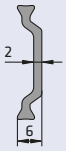
2007

2614

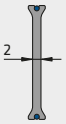
3798



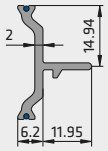
4200



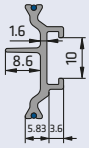
2198



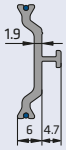
2501



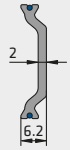
3842



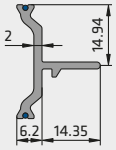
3109



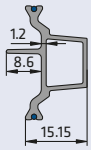
1669



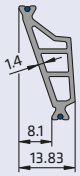
2515



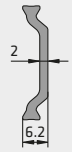
3843



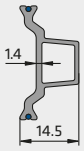
3110



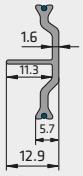
3724



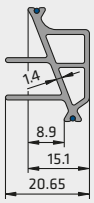
3413



3896

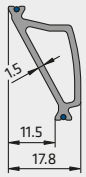


3145



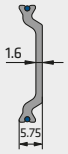
2796

3244

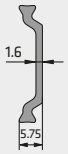


29 mm

3555



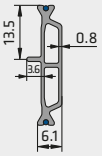
3761



30 mm

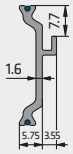
3432

3606

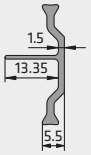


1729

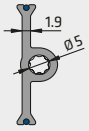
3419



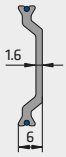
3790



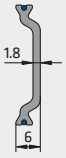
2383



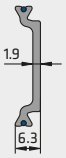
4262



2080 2080

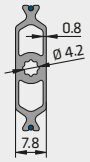


2740 2740

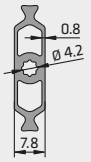


31.8 mm

3212



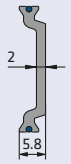
3760



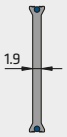
Classic profiles

31.9 mm

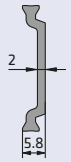
0724



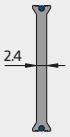
2522



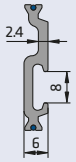
3723



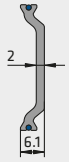
0774



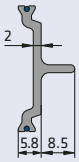
0725



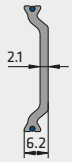
2523



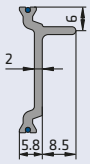
0726



1651



0758

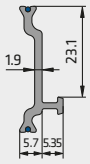


0773

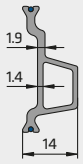
32 mm

2638

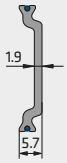
2728



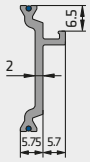
2727



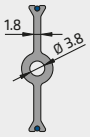
2246



3025



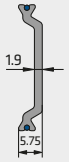
2764



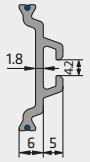
0725

2523

2923



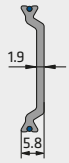
2361



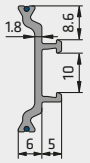
0726

1651

2631



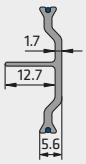
2649



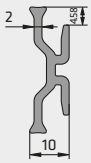
0758

0773

3889

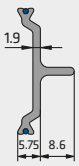


2911



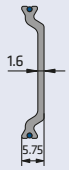
3057

3444

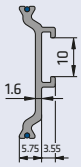


34 mm

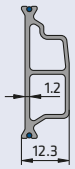
3829



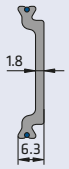
3377



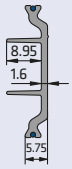
3826



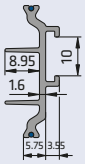
2765



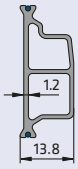
2807 2807



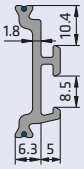
2805



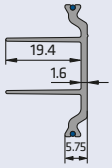
3282



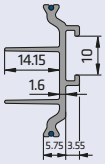
2857



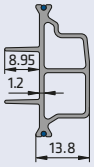
3316



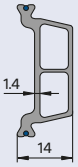
3315



3172 3172

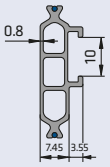


2856

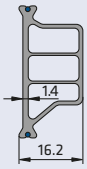


3986

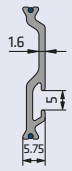
3825



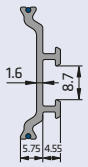
2855



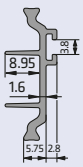
3746



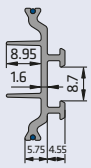
3623



4327



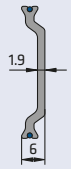
3620



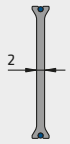
0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

34 mm

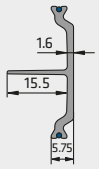
3123



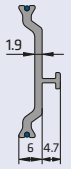
1885 **1885**



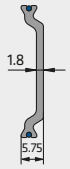
3655



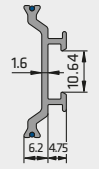
3124



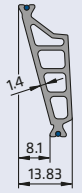
3935



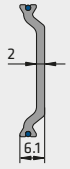
3379



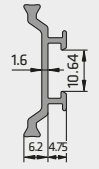
3125



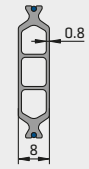
3012



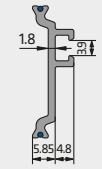
4402



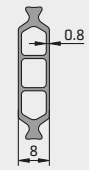
1861



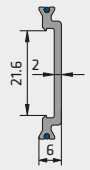
4347



3848

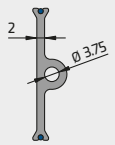


1650



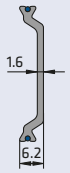
3660

4275



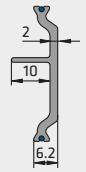
35 mm

3391

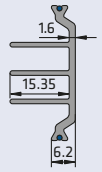


3281

1986 **1986**

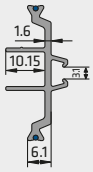


3351

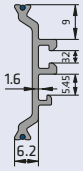


4396

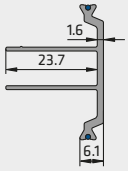
3280



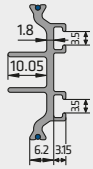
3352



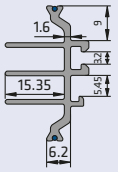
3279



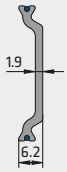
3146



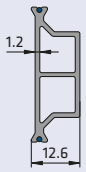
3392



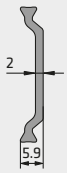
2427



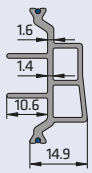
3936



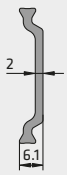
3229



3350

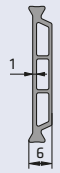


3010

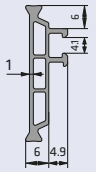


35.3 mm

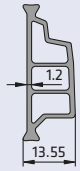
4320



4318



4319

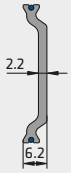


36 mm

1814

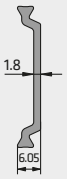
3813

1958



37 mm

4365



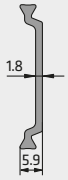
Classic profiles

38 mm

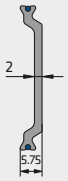
4277

3824

4075

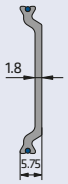


4276

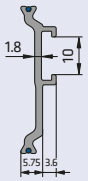


39 mm

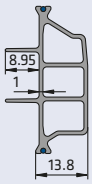
3827



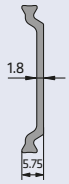
3984



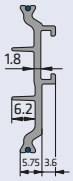
2429



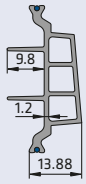
4192



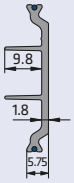
4786 !



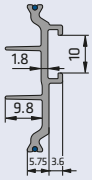
3398



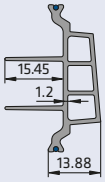
3399



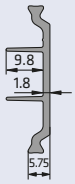
3400



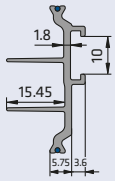
3640



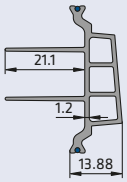
3864



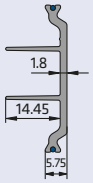
3636



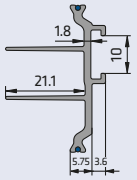
3639



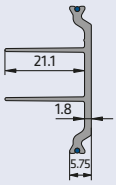
4701



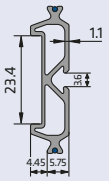
3638



3637



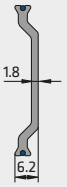
3828



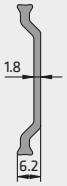
40 mm

3353

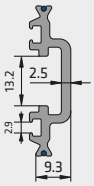
3354



3812



3307

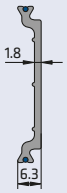


41 mm

2636

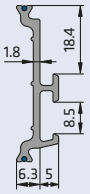
42 mm

3272

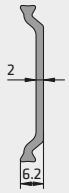


2655

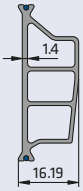
3273



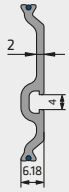
4202



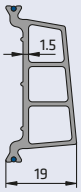
4022



2656

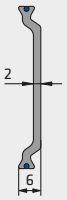


3274

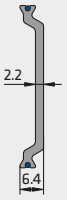


44 mm

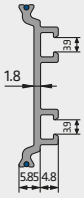
2647



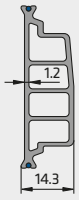
2275



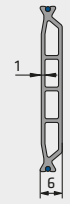
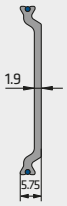
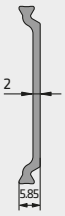
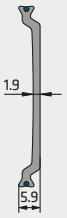
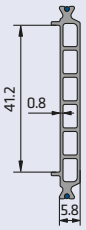
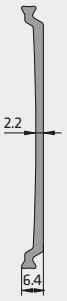
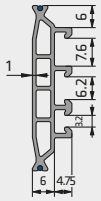
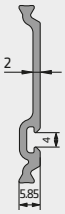
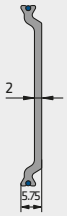
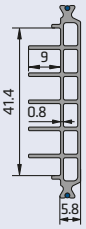
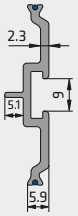
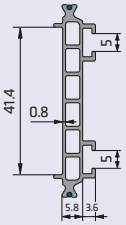
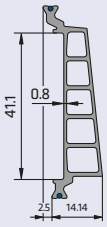
4348



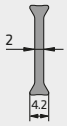
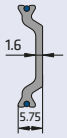
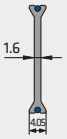
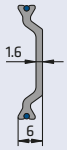
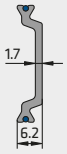
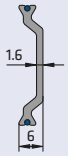
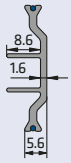
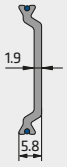
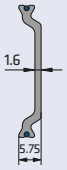
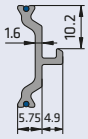
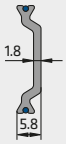
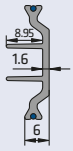
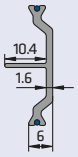
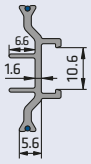
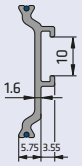
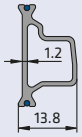
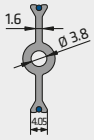
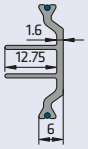
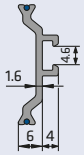
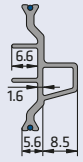
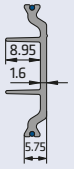
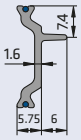
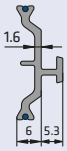
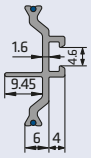
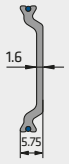
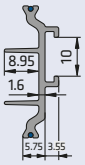
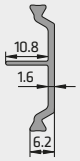
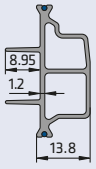
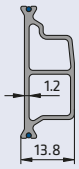
4349



0000 Article number 0000 Article production outside EU System groups ! New *Special foot width. Individual aluminium cavity design available on request.

45 mm	46 mm	49 mm	50 mm	52 mm	54 mm	77 mm
4680	3641	2969	3311	4461	3339	4813 !
						
4682		3068	4062		3338	
						
			3310		3277	
						
					3278	
						

Classic profiles

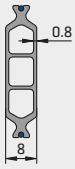
20 mm	24 mm	26 mm	28 mm	29 mm	30 mm	32 mm	33 mm	34 mm
4245 	4543 	4616 	4618 	4178 	4370 	4467 	4474 	3829 
	4544 	4542 	4804 		4367 	4468 		3377 
	3893 	4617 	4296 		4368 	4469 		2807 
	4388 		4298 		4371 	4620 		2805 
			4056 		4619 	3957 		3172 
								3282 

0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

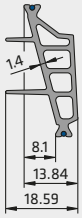
34 mm

4621

1861

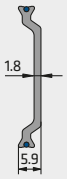


4720



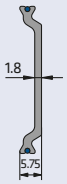
37 mm

4325

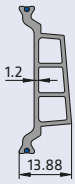


39 mm

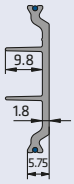
3827



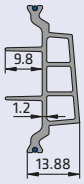
4623



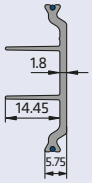
3399



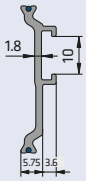
3398



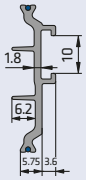
4701



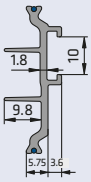
3984



4786

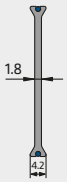


3400



40 mm

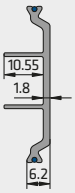
3353



4518

42 mm

4503

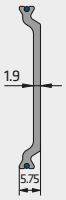


43 mm

4458

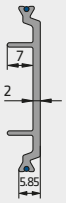
44 mm

4622



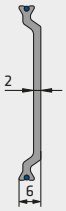
45 mm

4807



48 mm

4666



Special profiles for doors

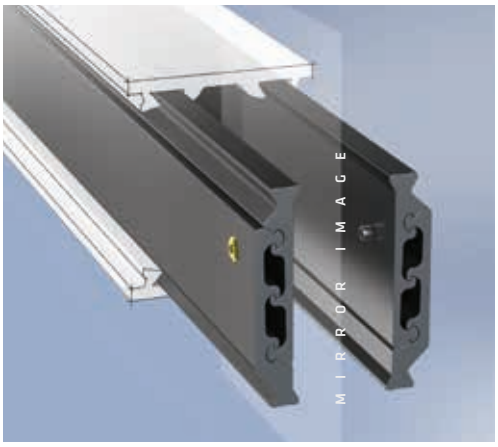
The ideal solution for doors with thermal breaks: shear-free profiles from insulbar minimise the impact of the bi-temperature effect. In this way the door stays in perfect shape even in the case of extreme differences between the external and internal temperature.

How the door stays in shape

The shear-free insulating bar consists of two intermeshing parts. With temperature-related, differing linear expansion of the inner and outer shells, the two parts shift against one another. A moveable, corrective insulating zone is generated which minimizes the bi-temperature effect and reduces deformation of the door effectively. Thanks to this solution, top climate categories can be achieved for aluminum doors.

Easy to process

A rivet at the end of the profile rod prevents slippage of the two parts of the bar during processing. By this means, the anti-bi-metal profile can be easily drawn into the aluminum cavity like a conventional insulating bar, and coated in the assembly. To ensure the assembly is perfectly balanced, Ensinger recommends that insulbar shear-free be incorporated with the profiles as mirror images.



To ensure that drawing-in as mirror images is straightforward, we supply the shear-free bars appropriately aligned: half of the goods are ready-turned in the stillage. Two rivets of different colors ensure clear marking of the direction of rotation of the plastic profiles

Advantages

→ Can be rolled up and laminated like a conventional insulating profile
→ Ensures high transverse tensile strength Q thanks to optimized geometry
→ Minimizes shear stiffness c and ensures low shear strength T
→ Reduces the bi-temperature effect more significantly compared with shear-weak and shear-resistant profiles

Specific, accompanying documents

→ Brochures: Shear-free insulating profile from insulbar
insulbar.com/en-us/downloads

Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

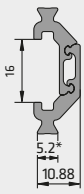
Our recommendation

Material shear-free
→ TECAHTERM 66 GF
→ TECAHTERM 66 GF RE

Further processing

You can find more detailed information on pages 10-13

Shear-free profiles

18 mm	20 mm	22 mm	24 mm	26 mm	28 mm	30 mm	32 mm	
3989	3963 3963	3995	3998	4004	4007	3884	4010	4788 H
								

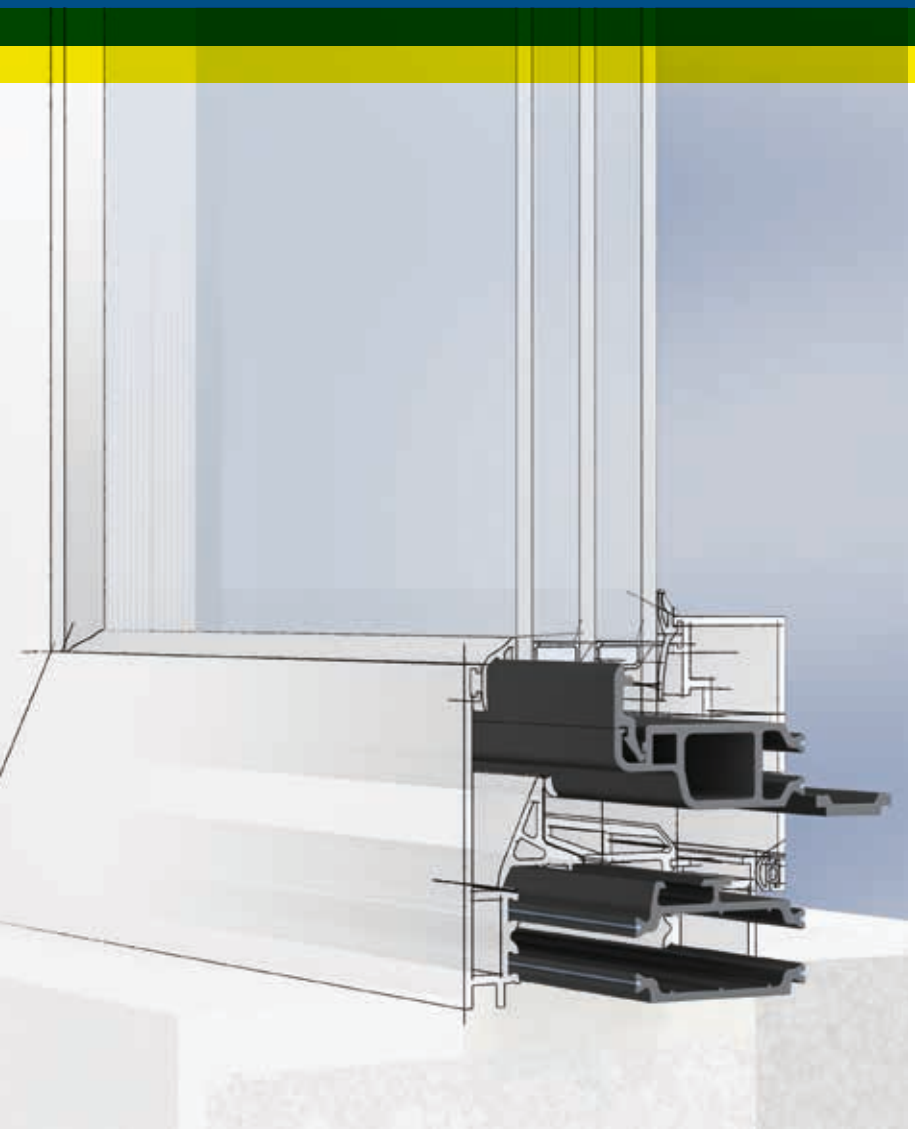
34 mm	36 mm	42 mm	44 mm	46 mm
4013	4362	4019	4789 H	4607
				

Also, additional shear-free bars are available to you for trials from our RPT technology, in the insulation depths 25 and 40 mm

0000 Article number 0000 Article production outside EU System groups H New *Special foot width. Individual aluminium cavity design available on request.

Special profiles for hidden sash

Hidden sash windows have particular appeal thanks to their elegant design with a particularly slim frame. The window sash is completely hidden and does not have any outer shell. The glazing is held directly on the insulating bar by the glazing bead.



insulbar profiles for hidden sash

Enables high design and insulation standards

Hidden sash windows combine an elegant, light appearance with slim visible widths and very good U_w values. The insulbar profiles, specially developed for these systems, either have a wide roll-in base or two bases which are connected to the inner shell of the sash. Narrow tolerances enable the profiles to be easily inserted into the aluminum cavity.

For an optimum painted result: insulbar ESP

With assemblies that are difficult to coat, for example the hidden sash, insulbar ESP is the ideal solution.

The insulating profile made from electrostatically modified material ensures improved attraction of paint particles during powder coating of the assembly. Combined with a dust-blasted surface of the plastic bar, the particles thereby adhere significantly better to the material. The result is a perfect painted finish.

Our recommendation

Material profiles for hidden sash

→ TECATHERM 66 GF
→ TECATHERM 66 GF RE
→ TECATHERM 66 ESP

Further processing

Material glazing bead

→ TECATHERM 66 GF
→ TECATHERM 66 GF RE
→ TECATHERM 66 GF40

Further processing

You can find more detailed information on pages 10-13

insulbar glazing bead

An alternative to aluminum

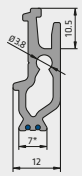
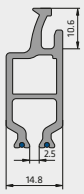
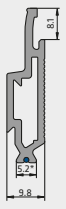
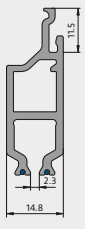
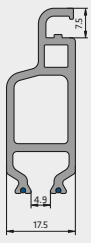
For further improvement of the U_w value, glazing beads made from aluminum can be replaced with bars made from glass fiber reinforced polyamide. To meet high demands regarding mechanical stability, the bead supplied can be made from the material TECATHERM 66 GF40 with a particularly high glass fiber content.

Specific, accompanying documents

→ Brochures: insulbar ESP
→ Data sheets: TECATHERM 66 ESP
insulbar.com/en-us/downloads

Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

Profiles for hidden sash

31.5 mm	36.5 mm	40 mm	43.5 mm	47.05 mm
2455	4430	4558	3966	3319
				

Glazing bead

13.3 mm
3320

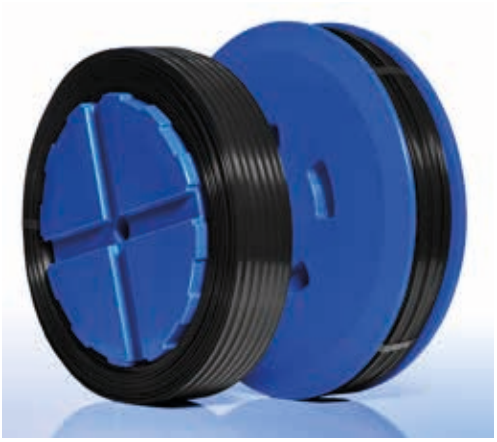

0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

Special profiles - bolt operating profile

insulbar bolt operating profiles are the perfect alternative to metal push rods: the plastic profile prevents the rattling in the window commonly encountered with aluminum rods. A sophisticated packaging and spool concept ensures ease of handling and cost-effective processing.

All nicely wound

All bolt operating profiles are available as rolled goods, referred to as coils. You therefore have less waste from unnecessary cutting compared with cut lengths. Reusable spools from Ensinger fix the wound profile and dispense with the need for disposable spools.



With two different types of spools (left: single spool, right: double spool) the coils fit onto all commonly available unwinding facilities.

Our recommendation

Material bolt operating profiles

→ TECATHERM 66 GF

→ TECATHERM 66 GF RE

Further processing

You can find more detailed information on pages 10-13

Easy handling, guaranteed quality

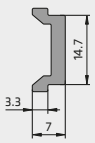
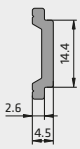
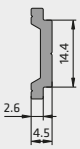
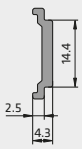
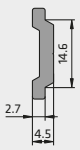
The coil can simply be positioned on the spool and fixed in the unwinding machine. Thanks to the optional orderly winding and stable fixing, the bolt operating profile runs into the blank in a straight line, stress-relieved and without tilting. Precise, accurately positioned punching operations are the result.

Specific, accompanying documents

→ Brochures: insulbar bolt operating profiles
insulbar.com/en-us/downloads

Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

Bolt operating profiles

17.7 mm	19.5 mm			19.7 mm
3778	3266	3582	3668	1840
				

0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

Special profiles for sliding systems

Thermally broken sliding systems enable contemporary and open room concepts and create a pleasant indoor climate at all times. At the same time they must meet tough functional and thermal requirements. Special insulating profiles from Ensinger help with this.

Runner profiles for maximum functionality

Runner profiles from the material TECATHERM 66 GF have a very smooth surface with very narrow tolerances. They thereby guarantee movement that is as friction-free as possible.

With large elements, runner profiles made from TECATHERM 66 GF40 with an increased glass fiber component are suitable, as is Article 3129, where additionally a metal rail is inserted.

Chicane for the middle section

Chicanes are in the visible area, therefore appearance plays an important part. Like all insulbar bars, our chicanes have a deep black, shiny surface. Lots of customized chicanes are coated in the assembly. Here, Ensinger recommends these dust-blasted from electrostatically modified TECATHERM 66 ESP. Attraction and adhesion of the powder particles is thereby improved significantly and ensure an optimum painted result.

Special profiles for sliding systems

By way of an addition, our program for sliding systems also encompasses special profiles e.g. for incorporating the roller cage or bolt operating profile.

Specific, accompanying documents

→ Data sheets: TECATHERM 66 ESP, TECATHERM 66 GF40
insulbar.com/en-us/downloads

Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

Our recommendation

Material chicanes
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE

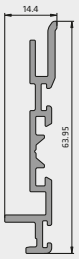
Material runner railes
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE
→ TECATHERM 66 GF40

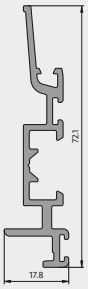
Material supplementary profiles
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE
→ TECATHERM 66 GF40

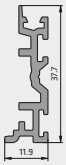
Further processing

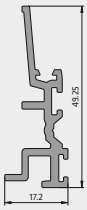

You can find more detailed information on pages 10-13

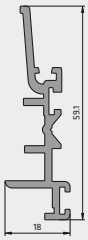
Chicanes

3298


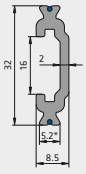
3077


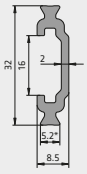
3493


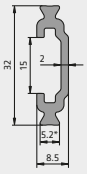
3342


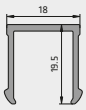
3494


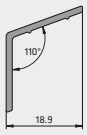
Supplementary profiles

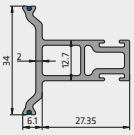
2834 2834


3726


2910


3008


3424


2435


Runner rails

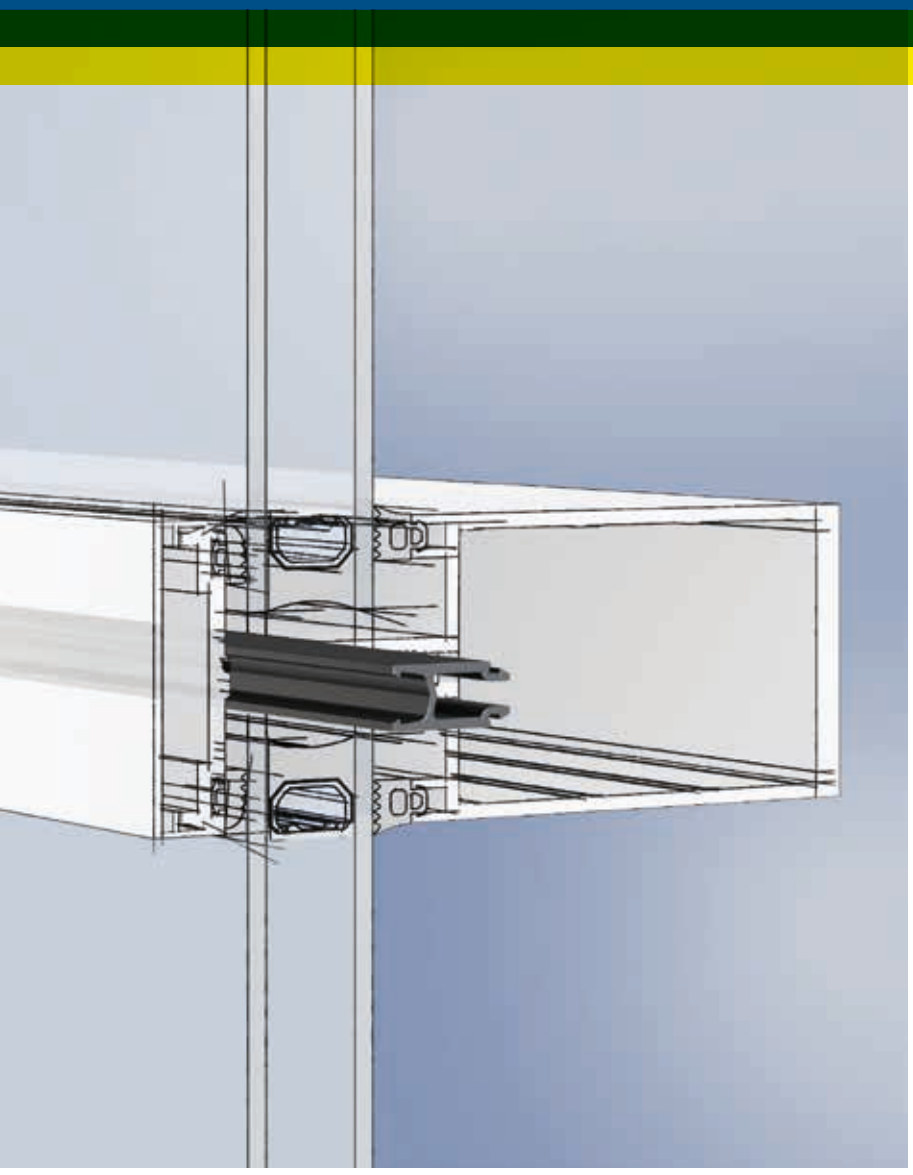
2835 2835


3129


0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

Special profiles insulbar for façades

Spacers and roll-in profiles made from polyamide are the perfect complement to thermally broken façade systems – above all when it comes to green construction. Because all profiles are also available made from 100 % recycled polyamide.



Through a combination of two spacers, the insulation depth of the façade can be adapted to fit the particular filling thickness

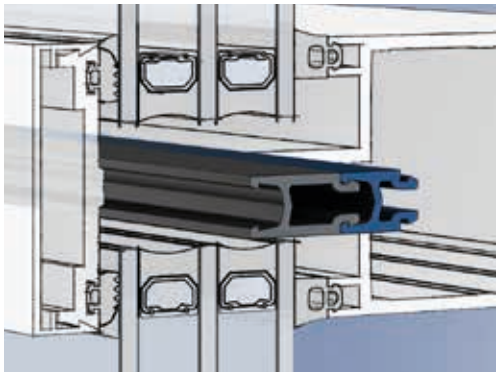
Spacers for curtain walls

Owing to the improved thermal dimensional stability and the increased requirements in relation to fire safety, spacers made from glass fiber reinforced polyamide are increasingly being incorporated into the mullion and transom façade. For optimized thermal insulation, PE foams can additionally be glued to the side of these.

Roll-up profiles for element façades

In order to thermally separate the aluminum shells of element façades, conventional roll-up bars made from PA 66 GF are used. They reduce heat losses and enable large areas of glass with low U values. All of our materials recommended for the façade fulfill the requirements relating to suitability for thermal separation in line with DIN EN 14024.

You can find more on insulbar classic profiles on pages 16 and 17.



Green construction – building certification made easy

Particularly in project business and in construction projects with building certification, green construction in line with DGNB, LEED or BREEAM plays a key role. For this reason, like with all other insulbar bars, façade profiles from unmixed recycled polyamide with a significantly reduced CO_2 footprint are also available.

Customized solutions such as glass edge profiles, contact pressure rails or special spacers are available on request.

Our recommendation

Material spacers
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE

Material pressure plate
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE
→ TECATHERM 66 GF40

Material glass edge profiles
→ TECATHERM 66 GF
→ TECATHERM 66 GF RE

Further processing

You can find more detailed information on pages 10-13

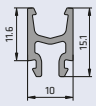
Specific, accompanying documents

→ Brochures: insulbar RE
insulbar.com/en-us/downloads

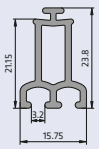
Not found anything suitable here? If you have any further questions, get in touch with us, we will be pleased to advise you.

Spacers

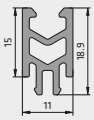
11.6 mm
3693



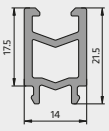
21.15 mm
3585



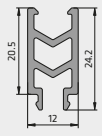
15 mm
3297



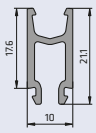
17.5 mm
3836 3836



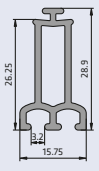
20.5 mm
4329



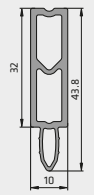
17.6 mm
3747



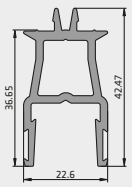
26.25 mm
3584



32 mm
3102 3102

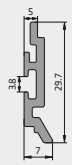


36.65 mm
2705

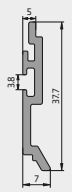


Glass edge profiles

29.7 mm
4331

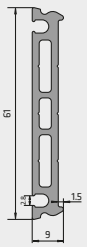


37.7 mm
4332



Pressure plate

61.65 mm
4700



0000 Article number 0000 Article production outside EU System groups New *Special foot width. Individual aluminium cavity design available on request.

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
0292	23.9	straight	2400	■	■	◎
0346	18.6	straight with nose	2300	■		
0508	14.8	straight	4800	■	■	◎
0724	31.9	offset	1600	■		
0725	31.9	offset with groove	1500	■		
0726	31.9	offset with nose	1000	■		
0748	21.9	offset	2500	■		◎
0749	21.9	straight with groove	2400	■		
0750	21.9	offset with nose	1300	■		
0758	31.9	offset with nose	1100	■		
0773	31.9	straight with nose	1000	■	■	
0774	31.9	straight	2000	■	■	◎
0785	14.8	straight with nose	3000	■	■	
0818	14.6	straight	4500	■	■	◎
0838	18.6	straight	3000	■	■	◎
0839	24	straight	3100	■	■	◎
1044	14	straight	4800	■	■	◎
1058	25	straight	2400	■	■	◎
1090	14.8	straight with nose	3000	■	■	
1135	14.8	straight with nose	3000	■	■	
1136	21	straight	2700	■	■	◎
1142	12	straight	5200	■	■	◎
1173	14.6	straight	4800	■	■	◎
1174	18.6	straight	3000	■	■	◎
1175	24	straight	3600	■	■	◎
1186	26	straight	2200			◎
1220	20	straight	2900	■	■	◎
1392	24	offset with nose	1150	■		
1393	24	offset	2300	■		◎
1418	18.6	straight with nose	1700	■	■	
1498	24	straight with arrow	1300	■	■	
1532	16	offset	3200	■	■	◎
1619	24	offset	2300	■	■	◎
1650	34	offset	1700	■		
1651	31.9	offset	1500	■	■	
1669	28	offset	1900	■	■	
1673	20	offset	2600	■	■	◎
1674	14.6	straight with nose	3000	■	■	
1707	24	straight with noses	2400	■	■	◎
1729	30	straight	2500	■	■	◎
1750	24	straight with nose	1300			
1754	15	straight	4200	■	■	◎
1814	36	straight	2200	■	■	◎
1840	19.7	bolt operating profile	2500			◎
1861	34	3 hollow chambers	1300	■	■	
1864	16	straight	4000	■	■	◎
1866	16	straight with arrow	2300	■	■	
1884	14.6	straight with nose	3000	■	■	
1885	34	straight	2000	■	■	◎
1910	14.6	straight	4500	■	■	◎
1918	17	offset with groove	1800	■		
1919	17	offset with nose	1800	■		

* approximate values, which can deviate in individual cases ** Dimensions may differ; LI and RE-LI not available in coils

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
1920	24	straight with groove and nose	1500	■	■	
1921	24	straight with groove and “T”	1500	■	■	
1922	24	straight with groove	2200	■	■	
1926	18.6	straight	3000	■	■	
1927	16	straight with nose	2900	■	■	
1928	16	straight	4000	■	■	
1945	16	offset	3200	■	■	
1946	14.8	offset	3500	■	■	
1947	16	offset with arrow	2800	■	■	
1953	14.6	hollow chamber with wide feet	2200			
1958	36	offset	1500	■	■	
1986	35	offset with flag	1500	■	■	
1987	18	offset	3550	■		
1988	18	offset with nose	1900	■		
1989	16	straight with nose	2900	■	■	
1991	18.6	straight	3000	■	■	
1993	26	straight with screw channel	1500	■	■	
2006	26	straight	2200	■	■	
2007	28	straight	2600	■	■	
2014	13.4	offset	3800	■		
2016	20	offset with nose	1500	■	■	
2028	14.6	offset	3650	■		
2031	20	offset with hook	1600	■	■	
2045	14.6	straight with nose	3000	■	■	
2046	14.6	straight	4500	■	■	
2049	22	straight	2600	■	■	
2050	25	offset	2200	■		
2051	25	offset with nose	1400	■		
2062	22	straight with nose	2400	■	■	
2063	18	offset with nose	1950	■	■	
2078	20	offset	2600	■	■	
2080	30	offset	2000	■	■	
2098	18	offset with nose	1800	■		
2102	14.8	straight	4800	■	■	
2103	16	straight	4000	■	■	
2104	14	hollow chamber	2200	■	■	
2106	25	straight with noses	2100	■	■	
2111	18	straight	3550	■	■	
2126	18.6	offset	2800	■	■	
2134	14.8	offset with groove	2500	■		
2147	16.6	hollow chamber with wide feet	1800			
2154	18	offset with “T”	1900	■		
2155	25	offset with “T”	1900	■		
2156	13.5	offset	3500	■		
2164	12	hollow chamber	3200	■		
2165	24	offset with hook	1300	■	■	
2167	14.8	offset with nose	2100	■	■	
2186	14.8	straight	4800	■	■	
2189	16	offset with hook	2100	■		
2191	24	offset with groove	1300	■		
2192	12	straight	5200	■	■	
2195	16.5	straight with 2 grooves	3200	■	■	

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
2196	15	offset	3650	■		◎
2198	28	straight	2600	■	■	◎
2199	24	offset	2500	■		◎
2200	24	offset with hook	1500	■		
2202	22	offset	2500	■		◎
2203	22	offset with nose	1500	■		
2204	22	offset with groove	1500	■		
2206	24	offset	2500	■	■	◎
2214	24	straight with arrow	1300	■	■	
2237	14.8	offset	3650	■	■	◎
2246	32	offset	1600	■		
2250	17	offset	2800	■		◎
2262	17	offset with groove	1800	■		
2263	17	offset with nose	2800	■		
2267	24	straight with nose	1700	■	■	
2268	24	straight with “T”	1700	■	■	
2275	44	offset	1300	■		
2279	24	offset with arrow	1400	■	■	
2285	22	offset	2500	■	■	◎
2305	18.6	straight with nose	2400	■	■	
2310	12	straight	5200	■	■	◎
2311	25	offset with hook	1600	■	■	
2316	24	straight with screw channel	2000	■	■	
2331	24	offset with nose	1550	■	■	
2334	16	straight	4500	■	■	◎
2335	16	straight with arrow	2300	■	■	
2361	32	offset with groove	1300	■		
2365	20	offset with screw channel	2400	■	■	
2366	24	offset with screw channel	2400	■	■	
2375	16	offset with hook	2100	■	■	
2376	16	offset with arrow	2500	■	■	
2379	18	offset	3550	■		◎
2380	22	offset with nose	1300	■	■	
2383	30	straight with screw channel	1400	■	■	
2395	24	offset with nose	1250	■		
2396	24	offset with hook and groove	1500	■		
2423	16	offset	3200	■	■	◎
2424	24	offset	2500	■	■	◎
2425	24	offset with arrow	1250	■	■	
2426	24	offset with groove	1300	■	■	
2427	35	offset	1700	■	■	
2429	39	offset with 3 hollow chambers and 2 flags	450	■		
2432	24	offset with nose	1600	■	■	
2435	34	supplementary profile for sliding systems	430	■	■	
2440	14.8	offset	3650	■	■	◎
2444	18	straight with groove	3000	■		
2455	31.5	profile for hidden sash	850			
2479	20	offset	2600	■	■	◎
2495	20	offset with nose	1800			
2501	28	offset with nose	1000	■	■	
2515	28	offset with nose	800	■	■	
2520	18.6	offset	2900	■	■	◎

* approximate values, which can deviate in individual cases ** Dimensions may differ; LI and RE-LI not available in coils

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
2521	20	straight	3000	■	■	
2522	31.9	straight	2000	■	■	
2523	31.9	offset	1500	■	■	
2530	10	offset	5000	■	■	
2531	12	offset	4500	■		
2535	26	offset	1700	■		
2593	18	offset with hook	1900	■	■	
2594	18	straight with screw channel	2500	■	■	
2605	20	offset	2600	■	■	
2614	28	offset with groove	2000	■	■	
2631	32	offset	1600	■		
2632	24	straight with arrow	1300	■	■	
2633	24	straight	3100	■	■	
2634	16	straight	4000	■	■	
2635	16	straight with arrow	2300	■	■	
2636	41	4 hollow chambers	1000	■	■	
2638	32	straight	2000	■	■	
2647	44	offset	1300	■	■	
2649	32	offset with hook and “T”	870	■		
2655	42	offset	1450	■	■	
2656	42	offset with groove	1450	■	■	
2703	18.6	straight with screw channel	2500	■	■	
2705	36.65	spacer for curtain walls	400			
2727	32	offset with hollow chamber	820	■		
2728	32	offset with “T”	1160	■	■	
2729	24	offset with nose	1560	■	■	
2730	24	offset	2760	■	■	
2740	30	offset	1920	■		
2742	20	offset	2600	■		
2764	32	straight with screw channel	1300	■	■	
2765	34	offset	1700	■		
2774	24	offset with nose	1570	■	■	
2780	24	offset	2500	■		
2793	18.6	straight with nose	1700	■	■	
2794	24	offset	2300	■		
2795	28	offset	2000	■	■	
2796	28	offset with hook and “T”	1150	■	■	
2797	18	offset	3550	■	■	
2805	34	offset with groove and 2 flags	1140	■		
2807	34	offset with 2 flags	1520	■		
2817	25	offset	2200	■	■	
2834	32	supplementary profile for sliding systems	1200			
2835		runner rail for sliding systems	800			
2855	34	offset with 3 hollow chambers	600	■		
2856	34	offset with 2 hollow chambers	750	■		
2857	34	offset with hook and “T”	950	■		
2877	14.6	straight	4500	■	■	
2883	27	offset	2300	■		
2884	24	straight	3100	■	■	
2899	18	straight with 2 grooves	2300			
2902	24	straight with nose	1300	■	■	
2907	21	straight	2900	■	■	

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
2908	21	straight with nose	1300	■		
2909	21	straight with groove	2500	■		
2910	32	supplementary profile for sliding systems	1200			
2911	32	offset with 2 hooks	1000	■		
2923	32	offset	1600	■		
2951	18	offset with groove	3000			
2952	14.6	straight	4500	■	■	
2969	49	offset	1150	■		
3008		supplementary profile for sliding systems	1900			
3010	35	offset	1400	■	■	
3012	34	offset	1500	■	■	
3020	24	offset with flag	1300	■		
3021	24	offset with arrow and groove	1300	■		
3022	24	offset with nose	1600	■	■	
3023	24	offset	2500	■	■	
3024	24	offset with groove	1320	■	■	
3025	32	offset with hook	1400	■		
3057	32	offset with 2 flags	1400	■		
3062	20	offset	2600	■		
3068	49	offset with groove	1150	■		
3077		chicane for sliding systems	270			
3078	27	offset	2300	■		
3079	27	straight with nose	1400	■		
3080	27	offset with groove	1300	■		
3102	32	spacer for curtain walls	780			
3109	28	offset with “T”	1400	■	■	
3110	28	offset with 3 hollow chambers	1090	■		
3122	18	offset with nose	1950	■	■	
3123	34	offset	1760	■	■	
3124	34	offset with “T”	1260	■	■	
3125	34	offset with 4 hollow chambers	1060	■		
3129		runner rail holder for sliding systems	860			
3138	14.8	straight	4800	■	■	
3145	28	offset with 2 hollow chambers and 2 flags	650	■		
3146	35	offset with 2 grooves and 2 flags	750	■		
3148	24	straight with arrow	1300	■	■	
3149	24	straight with groove	2150	■	■	
3172	34	offset with 2 hollow chambers and 2 flags	540	■		
3199	20	offset with hook	1600	■	■	
3212	31.8	3 hollow chambers with screw channel	1470	■	■	
3229	35	offset	1400	■	■	
3244	28	offset with hollow chamber	300	■		
3255	20	offset with groove	1600	■		
3257	24	offset	2500	■	■	
3258	24	offset with arrow	1300	■	■	
3266	19.5	bolt operating profile	3500			
3272	42	offset	1400	■		
3273	42	offset with hook and “T”	800	■		
3274	42	offset with 3 hollow chambers	480	■		
3277	54	6 hollow chambers with 2 grooves and noses	600	■		
3278	54	offset with 5 hollow chambers and noses	550	■		
3279	35	offset with 2 flags	700	■		

* approximate values, which can deviate in individual cases ** Dimensions may differ; LI and RE-LI not available in coils

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
3280	35	offset with groove and 2 flags	1400	■		
3281	35	offset with 2 flags	1000	■		
3282	34	offset with 2 hollow chambers	820	■		
3283	24	offset with double hook	1300	■		
3284	24	straight with noses	2400	■	■	
3285	24	offset with arrow	1100	■	■	
3286	14.8	offset with hook	2100	■	■	
3297	15	spacer for curtain walls	1600			
3298		chicane for sliding systems	360			
3307	40	offset with 3 grooves	900	■		
3310	50	offset with groove and flag	700	■		
3311	50	offset	1150	■		
3315	34	offset with groove and 2 flags	840	■		
3316	34	offset with 2 flags	820	■		
3319	47.05	profile for hidden sash	430			
3320		glazing bead	2500			
3338	54	6 hollow chambers with noses and 5 flags	450	■		
3339	54	6 hollow chambers with noses	800	■		
3341	23	offset with hook	1500	■	■	
3342		chicane for sliding systems	360			
3350	35	offset with 2 hollow chambers and 2 flags	500	■		
3351	35	offset with 3 flags	720	■		
3352	35	offset with hook and groove	920	■		
3353	40	straight	2200	■	■	
3354	40	offset	1500	■	■	
3368	14.8	straight with nose	3000	■	■	
3369	18.6	straight	3000	■	■	
3370	18.6	straight with nose	2200	■	■	
3371	24	straight	3100	■	■	
3372	24	straight with nose	1300	■	■	
3373	18	offset with nose	1900	■	■	
3374	18	offset with groove	1700	■		
3375	18	offset	3550	■	■	
3377	34	offset with groove	1100	■		
3378	14.6	hollow chamber with wide feet and nose	1300			
3379	34	offset with 2 “T”	900	■	■	
3380	24	straight with noses	2400	■	■	
3386	24	2 hollow chambers	2000	■	■	
3387	24	offset with “T”	1800	■		
3388	14.8	offset	3650	■	■	
3389	18.6	offset	2800	■	■	
3390	24	offset	2500	■	■	
3391	35	offset	1700	■		
3392	35	offset with hook, groove and 3 flags	500	■		
3398	39	offset with 3 hollow chambers and 2 flags	440	■		
3399	39	offset with 2 flags	950	■		
3400	39	offset with groove and 2 flags	750	■		
3413	28	offset with hollow chamber	1150	■	■	
3419	30	offset with hook	1600	■	■	
3424		supplementary profile for sliding systems	2500			
3425	24	offset with arrow	1250	■		
3432	30	straight	2500	■	■	

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
3433	26	straight with screw channel	1700	■	■	
3444	32	offset with nose	840	■		
3448	24	offset	2650	■	■	
3454	20	offset with nose	1500	■		
3493		chicane for sliding systems	900			
3494		chicane for sliding systems	320			
3546	20	2 hollow chambers	2200	■		
3555	29	offset	1950	■		
3557	14	offset	3500	■	■	
3560	12	straight	5200	■	■	
3582	19.5	bolt operating profile	4000			
3584	26.25	spacer for curtain walls	840			
3585	21.15	spacer for curtain walls	1000			
3591	20	straight	2900	■	■	
3606	30	2 hollow chambers with flag	1300	■		
3620	34	offset with 2 “T” and 2 flags	750	■	■	
3621	18	offset with nose	2000	■	■	
3622	24	offset with hook	1800	■		
3623	34	offset with 2 “T”	1200	■	■	
3632	10	straight	6000	■	■	
3633	14.8	offset	3500	■		
3636	39	offset with groove and 2 flags	800	■		
3637	39	offset with 2 flags	650	■		
3638	39	offset with groove and 2 flags	550	■		
3639	39	offset with 3 hollow chambers and 2 flags	400	■		
3640	39	offset with 3 hollow chambers and 2 flags	440	■		
3641	46	offset	1200	■		
3655	34	offset with flag	800	■		
3660	34	offset with flag	1050	■		
3668	19.5	bolt operating profile	4200			
3693	11.6	spacer for curtain walls	2500			
3714	16	offset	4000	■	■	
3715	18	offset	3500	■	■	
3716	22	offset	2900	■	■	
3723	31.9	offset	1900	■		
3724	28	offset	2000	■	■	
3725	14	hollow chamber	4000	■	■	
3726	32	supplementary profile for sliding systems	1300			
3745	14.8	offset with “T”	2300	■	■	
3746	34	offset with groove	1950	■	■	
3747	17.6	spacer for curtain walls	1800			
3760	31.8	3 hollow chambers with screw channel	1400	■	■	
3761	29	offset	2100	■		
3778	17.7	bolt operating profile	2900			
3784	18.6	offset with hook	1000	■	■	
3790	30	offset wih flag	800	■	■	
3798	28	offset wih flag	1100	■	■	
3804	21	offset	2800	■	■	
3812	40	offset	1440	■	■	
3813	36	offset	1600	■	■	
3824	38	offset	1600	■	■	
3825	34	3 hollow chambers with groove	940	■	■	

* approximate values, which can deviate in individual cases ** Dimensions may differ; LI and RE-LI not available in coils

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
3826	34	offset with 2 hollow chambers	840	■	■	
3827	39	offset	1600	■	■	
3828	39	2 hollow chambers with groove	900	■	■	
3829	34	offset	1800	■	■	
3836	17.5	spacer for curtain walls	1150			
3842	28	offset with groove and flag	1100	■	■	
3843	28	offset with hollow chamber and flag	720	■	■	
3848	34	3 hollow chambers	1300	■	■	
3864	39	offset with 2 flags	950	■		
3884	30	shear-free profile	1700	■	■	
3889	32	offset with flag	1050	■	■	
3893	24	offset with hollow chamber	1050	■	■	
3896	28	offset with flag	1200	■	■	
3909	17	hollow chamber with wide feet	1800			
3918	22	offset with nose	1500	■	■	
3920	28	offset with flag	1200	■	■	
3935	34	offset	1800	■	■	
3936	35	2 hollow chambers	850	■	■	
3957	32	offset with flag	1200	■		
3963	20	shear-free profile	2400	■	■	
3966	43.5	profile for hidden sash	600			
3984	39	offset with groove	1000	■	■	
3985	15	offset with nose	2500	■		
3986	34	3 hollow chambers	1200	■	■	
3989	18	shear-free profile	2500	■	■	
3995	22	shear-free profile	2300	■	■	
3998	24	shear-free profile	2100	■	■	
4004	26	shear-free profile	1950	■	■	
4007	28	shear-free profile	1800	■	■	
4010	32	shear-free profile	1600	■	■	
4013	34	shear-free profile	1450	■	■	
4019	42	shear-free profile	1200	■	■	
4022	42	offset with 3 hollow chambers	550	■		
4056	28	offset with flag	1500	■		
4059	14.6	hollow chamber with wide feet	2500			
4060	14.6	straight with screw channel	3000	■	■	
4061	16	hollow chamber with wide feet	1800			
4062	50	offset	1150	■		
4063	24	offset with hook	1600	■	■	
4075	38	offset	1600	■	■	
4101	24	offset with hook	1600	■	■	
4102	16	offset with arrow	2500	■	■	
4178	29	offset	2000	■		
4192	39	offset	1600	■	■	
4199	20	2 hollow chambers	2200	■		
4200	28	offset	2000	■	■	
4202	42	offset	1450	■	■	
4214	24.8	offset	2200	■	■	
4215	24.8	offset with nose	1600	■	■	
4216	24.8	offset with hook	1900	■	■	
4245	20	straight	2900	■	■	
4262	30	offset	2000	■	■	

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
4263	22	offset	2500	■		■
4271	25.3	offset	2200	■		
4272	25.3	offset with hollow chamber	1200	■		
4275	34	straight with screw channel	1400	■	■	
4276	38	offset	1600	■	■	
4277	38	straight	2200	■	■	■
4283	24	offset with hollow chamber	1050	■	■	
4296	28	offset with 2 flags	1500	■	■	
4298	28	offset with “T” and flag	1400	■	■	
4317	25.3	offset with groove	1300	■		
4318	35.3	3 hollow chambers with hook and “T”	940	■		
4319	35.3	offset with 3 hollow chambers	850	■		
4320	35.3	3 hollow chambers	1500	■		
4325	37	offset	1600	■	■	
4327	34	offset with groove and 2 flags	1140	■		
4329	20.5	spacer for curtain walls	1350			
4330	25	hollow chamber with wide feet and groove	1400			
4331	29.7	supplementary profile for curtain walls	2500			
4332	37.7	supplementary profile for curtain walls	1900			
4347	34	offset with groove	1200	■		
4348	44	offset with 2 grooves	740	■		
4349	44	offset with 4 hollow chambers	550	■		
4351	20	offset with groove	1600	■		
4362	36	shear-free profile	1300	■	■	
4365	37	offset	1600	■		
4367 LI	30	offset with flag	1050	■	■	
4368 LI	30	offset with groove	1300	■	■	
4370 LI	30	offset	2000	■	■	
4371 LI	30	offset with groove and flag	1150	■	■	
4386	14	offset	3600	■	■	■
4388	24	offset with nose	1600	■	■	
4396	35	offset with 2 flags	1000	■		
4402	34	offset with 2 “T”	900	■	■	
4430	36.5	profile for hidden sash	700			
4458 LI	43	offset	1400	■		
4461	52	straight	1700	■	■	
4467	32	offset with 2 flags	1400	■	■	
4468	32	offset with groove and 2 flags	1100	■	■	
4469	32	offset with hollow chamber and 2 flags	1000	■	■	
4474 LI	33	offset	1700	■		
4492	26	straight	2800	■	■	■
4493	26	offset	2500	■		
4494	26	offset with nose	1450	■		
4503 LI	42	offset with 2 flags	850	■		
4518	40	straight	2200	■	■	
4542	26	offset	2500	■	■	
4543	24	offset	2500	■	■	■
4544	24	offset with hook	1600	■	■	
4557	24	offset with hook	1600	■		
4558	40	profile for hidden sash	850			
4607	46	shear-free profile	1100	■	■	
4616	26	straight	2800	■	■	

* approximate values, which can deviate in individual cases ** Dimensions may differ; LI and RE-LI not available in coils

Article number	Insulating depth (mm)	Description of the geometry	Pieces per stillage *	Foot compatible with aluminum cavity suggestion short hammer	Foot compatible with aluminum cavity suggestion long hammer	Coils **
4617	26	straight with screw channel	1700	■	■	
4618	28	offset	2000	■	■	
4619	30	straight	2500	■	■	
4620	32	offset	1600	■	■	
4621	34	offset	1800	■	■	
4622	44	offset	1300	■	■	
4623	39	offset with 3 hollow chambers	600	■	■	
4666	48	offset	1150	■	■	
4680	45	4 hollow chambers	1100	■	■	
4682	45	4 hollow chambers with 3 hooks and “T”	660	■	■	
4683	18	hollow chamber with wide feet and groove	1800			
4698	12	straight with nose	3500	■	■	
4700		pressure plate	500			
4701	39	offset with 2 flags	680	■	■	
4720	34	offset with 4 hollow chambers and 2 flags	650	■		
4777	18	offset with hollow chamber	1950	■		
4786	39	offset with groove and 2 flags	950	■	■	
4788	32	shear-free profile with groove	1000			
4789	44	shear free profile	1150	■	■	
4804	28	offset with 2 flags	1200	■	■	
4807	45	offset with 2 flags	950	■		
4813	77	offset	650	■		

Additional information

Accompanying product brochures, recommendations and datasheets are available on request or from the download area on our website at any time insulbar.com.

Product brochures

→ insulbar with Low-E film
→ Shear-free insulating profile from insulbar
→ insulbar ESP
→ insulbar RE
→ insulbar LI
→ insulbar RE-LI

Recommendations

→ Transport, storage, delivery form
→ Coating of insulbar from polyamide GF
→ Anodizing of insulbar from polyamide GF
→ Processing of shear-free profiles

Datasheets

→ insulbar REG made from TECATHERM 66 GF or 66 GF40
→ insulbar RE made from TECATHERM 66 GF RE
→ insulbar LI made from TECATHERM 66 GF
→ insulbar RE-LI made from TECATHERM 66 GF RE
→ insulbar ESP made from TECATHERM 66 ESP
→ Coex wire
→ Low-E film 12 ε 3
→ Cover film 8.4 T 200
→ Cover film 5.5 T 200
→ Surface protection film

We will be pleased to send you additional information such as test reports, certificates etc. on request.

insulbar Germany

Ensinger GmbH
Rudolf-Diesel-Straße 8
71154 Nufringen
Tel. +49 7032 819 0
Fax +49 7032 819 270
insulbar@ensingerplastics.com

Ensinger GmbH
Wilfried-Ensinger-Straße 1
93413 Cham
Tel. +49 9971 396 0
Fax +49 9971 396 570
insulbar@ensingerplastics.com

insulbar worldwide

France
Ensinger France S.A.R.L.
Rue des Petites Combes
ZAC des Batterses
01700 Beynost
Tel. +33 4 78 55 36 35
Fax +33 4 78 55 68 41
contact@ensinger.fr

Italy
Ensinger Italia S.R.L.
Via Franco Tosi 1/3
20020 Olcella di Busto Garolfo
Tel. +39 0331 562 111
Fax +39 0331 567 822
insulbar.it@ensingerplastics.com

Spain
Ensinger S.A.
Girona, 21-27
08120 La Llagosta
Tel. +34 935 74 57 26
Fax +34 935 74 27 30
insulbar@ensinger.es

United Kingdom
Ensinger Building Products Ltd.
Wilfried Way
Tonyrefail
Mid Glamorgan
CF39 8JQ
Tel. +44 1443 678 400
Fax +44 1443 671 153
ebp-uk@ensingerplastics.com

China
Ensinger (China) Co., Ltd.
1F, Building A3
No. 1528 Gumei Road
Shanghai 200233
Tel. +86 21 522 851 11
Fax +86 21 522 852 22
info@ensinger-china.com

USA
Ensinger Inc.
1 Main St.
Grenloch, NJ 08032
Tel. +1 856 227 0500
Fax +1 856 232 1754
insulbar@ensingerusa.com

insulbar.com