

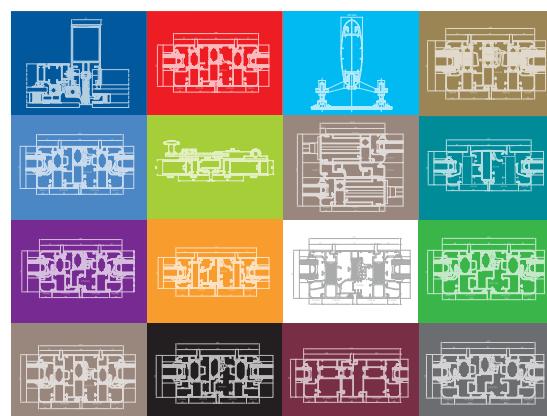
## Sistema R<sup>TT</sup>

**R** 85<sup>TT1.0</sup>  
SYSTEM

**R** 85<sup>TT1.0 hp</sup>  
SYSTEM

Sistema Rtt, per porte e finestre si è arricchito dei più avanzati contenuti estetici, tecnologici e funzionali atti a soddisfare tutte le esigenze costruttive e progettuali.

Rtt System for windows and doors, has been enriched of the most esthetical, technological and functional contents to fulfill all the construction and designing demands.





# sapa:

R | 85<sup>TT 1.0</sup>  
SYSTEM

**Finestre e porte a battente a taglio termico**  
*Casement windows and doors with thermal break*



## About the Sapa Group

Sapa develops, manufactures and markets value added profiles, profile-based building systems and heat-exchanger strip in the light-weight material aluminium and is one of the world's leading manufacturers.

Sapa's business concept is based on close co-operation with its customers, who are primarily located in Europe, North America and Asia. The largest customer segments are the construction, transport, domestic and office, and engineering sectors.

Sapa is organised into six Business Areas: Profiles North Europe, Profiles Central Europe, Profiles South Europe, Profiles North America, Building System and Heat Transfer.

## Sapa Profiles

Sapa is the world's leading producer of extruded aluminium profiles and maintains extensive operations in the value-added fabrication of profiles.

The company has 111 presses and more than 12.000 employees and production facilities in 18 countries: Belgium, China, Denmark, France, Germany, Hungary, Italy, Lithuania, Mexico, the Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, the United Kingdom and the United States, plus sales representation in a number of additional countries.

With footprints in North and Central America, Europe and Asia we can serve customers on a worldwide basis.

## Sapa Profili Srl

With 3 plants in Italy and the support of the rest of the group, Sapa Profili Srl is one of the largest extrusion companies within Italy.

Soft- and hard-alloy aluminium extrusions, standard rod and bars, seamless tube (round or shaped), simple or complex aluminium extrusion profiles (drawings), high fin ratio, tight tolerances with superior surface finish quality, or other demanding high-tech applications... There is a simple solution to almost any design problem: aluminium profiles by Sapa. The solutions are based on our unique experience in extrusion and our focus on the local market.

Sapa Profili Srl strategy is providing its customers with expertise, high quality and resources, releasing capacity to allow them to concentrate on their core operations. It's all about creating competitive, comprehensive solutions.

## Il gruppo Sapa

Sapa sviluppa, produce e commercializza profili a valore aggiunto, profili per l'edilizia e scambiatori di calore in alluminio. Sapa è un leader tra i produttori nel mondo.

Un elemento determinante per il concetto di business di Sapa è la stretta collaborazione con il cliente maggiormente basati in Europa, Nord America ed Asia. I segmenti di mercato maggiori sono quelli dell'edilizia, il settore trasporti, casa ed uffici ed il settore della meccanica.

La Sapa è suddivisa in sei aree: Profili Nord Europa, Profili Europa centrale, Profili Sud Europa, Profili Nord America, Sistemi per l'edilizia ed il settore per gli scambiatori di calore.

## Sapa Profili

Sapa è il maggior produttore di profili estrusi al mondo.

Questa nuova azienda dispone di 111 presse con oltre 12.000 dipendenti e con centri di produzione in 18 paesi: Belgio, Cina, Danimarca, Francia, Germania, Ungheria, Italia, Lituania, Messico, Olanda, Polonia, Portogallo, Romania, Slovenia, Spagna, Svezia, Gran Bretagna e negli stati uniti oltre ad avere rappresentanti commerciali in altri paesi.

Grazie alla presenza in America del Nord e Centrale, Europa ed Asia, possiamo servire i clienti in tutto il mondo.

## Sapa Profili Srl

Con i 3 stabilimenti produttivi in Italia ed il supporto del resto del gruppo la Sapa Profili Srl diventa uno dei maggiori estrusori in Italia.

Estruzioni di alluminio in lega leggera o dura, profili standard o barrame, tubi tondi o a disegno senza saldature, profili estrusi semplici o complessi a disegno, elevato rapporto di alettatura, tolleranze ristrette con qualità superficiale elevata o qualsiasi altra esigenza per applicazioni high tech... esiste una semplice soluzione a quasi tutte le esigenze di design: profili in alluminio Sapa. Le soluzioni basano sulla nostra esperienza unica e focalizzata sul mercato locale..

La strategia di Sapa Profili Srl è quella di fornire al cliente competenza, qualità superiore e risorse, per permettere loro di concentrarsi sulle proprie operazioni essenziali. Plastiamo il futuro creando soluzioni comprensive e competitive.



## Innovation and Experience: Sapa keys to Build The future

Since its beginnings Sapa has been recognized as an innovator. Through the years, we've balanced experience with innovation. We've listened to our customers, and we are dedicated to providing the tools our customers need to succeed.

Following this spirit, in the market of B&C Sapa offers a comprehensive line of architectural aluminum building products and systems for residential and non-residential buildings framing systems, windows and curtain wall systems.

Due to the accurate product design, in the B&C market, the Sistema R allows the realization of windows and doors with the less possible manufacturing, reducing so the assembling time and achieving the best quality.

This system is present in the South European market since more than 20 years and has allowed Sapa to renovate it constantly with the experience acquired. In this way the Sistema R, the most widespread for windows and doors on the Italian market, has evolved with the most advanced esthetical and technological contents, as to satisfy all planning demands.

For this reason Sapa has realized, within the Sistema R, four continuous bar thermal break series with different sections and performances, all defined in dimensional, technological and esthetical versatility.

## Innovazione ed esperienza: le chiavi Sapa per costruire il futuro.

Fin dalle sue origini, Sapa è stata riconosciuta come innovatrice. Attraverso gli anni, abbiamo equilibrato l'esperienza con l'innovazione. Abbiamo ascoltato i nostri clienti e ci siamo dedicati a fornir loro i mezzi necessari per avere successo.

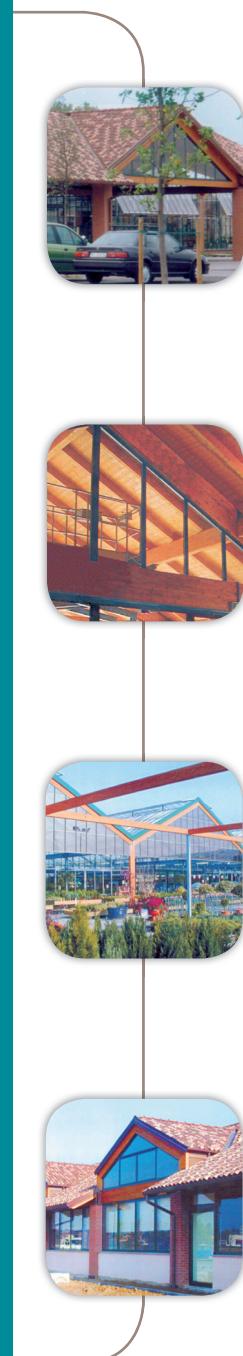
Seguendo questo spirito, nel mercato dell'edilizia, Sapa offre una completa linea di prodotti architettonici in alluminio e sistemi strutturali per edifici residenziali e non, finestre e pareti divisorie.

Nel mercato dell'edilizia, Il sistema R, grazie all'attenta progettazione, consente di realizzare serramenti in alluminio con il minor numero di lavorazioni possibili, riducendo i tempi di assemblaggio nel rispetto della migliore qualità.

La pluri decennale presenza sul mercato sud europeo di questo sistema ha permesso a Sapa di rinnovarlo costantemente nel tempo utilizzando l'esperienza acquisita negli anni. In questo modo il sistema R, il più diffuso e venduto, per porte e finestre, sul mercato italiano, si è arricchito dei più avanzati contenuti estetici, tecnologici e funzionali atti a soddisfare tutte le esigenze costruttive e progettuali.

Per questo Sapa ha realizzato, all'interno del sistema R, quattro serie di profilati a taglio termico a barra continua con diverse sezioni e prestazioni, tutte caratterizzate da polivalenza dimensionale, tecnologica ed estetica.

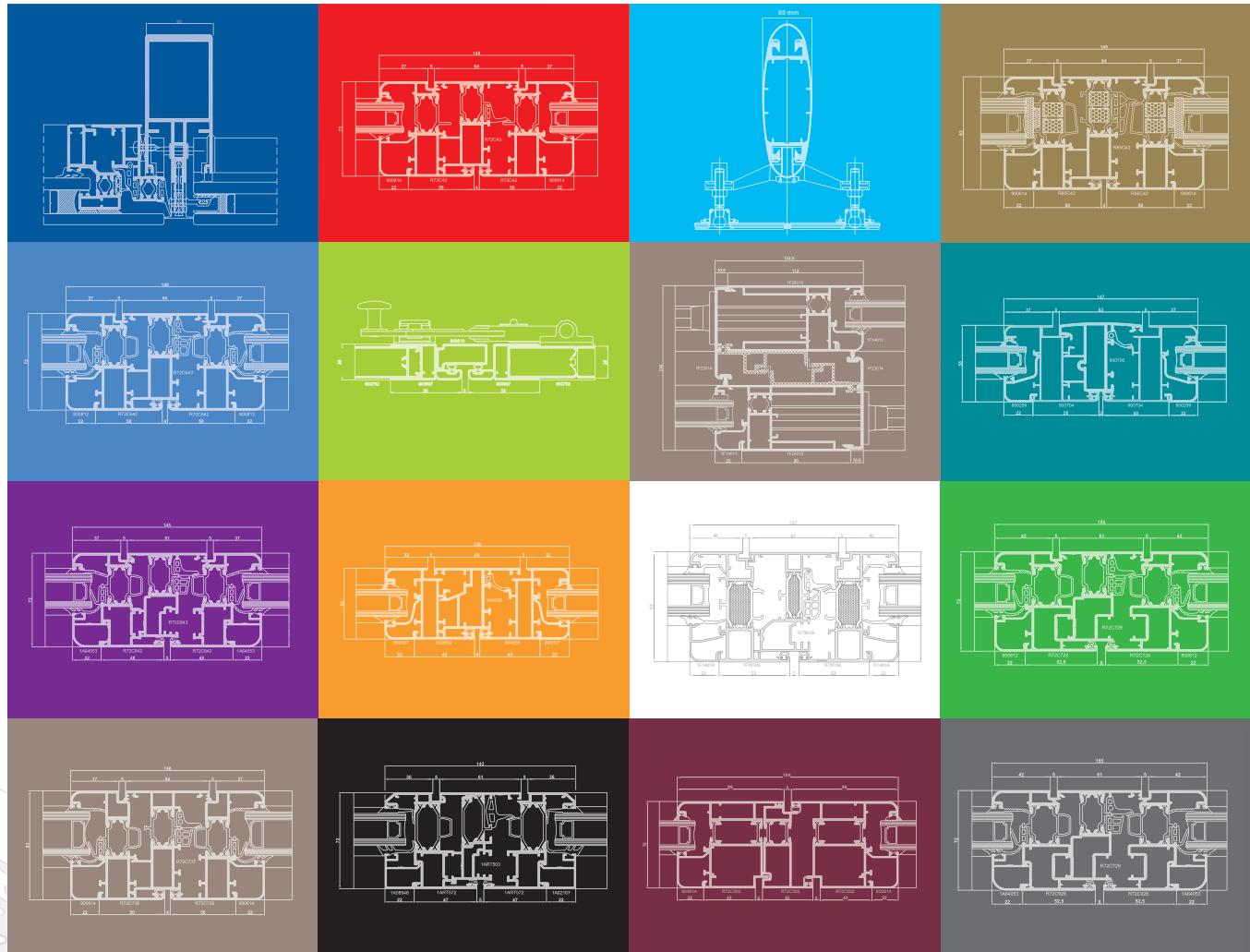
**sapa:**



**Sistema R<sup>TM</sup>**

Original Systems®  
**sapa:**

## Le serie dei sistemi di Sapa



Scegliere con **serenità**

**sapa:**

Creiamo il futuro

# sapa:

## Original Systems®

... scegliere con serenità

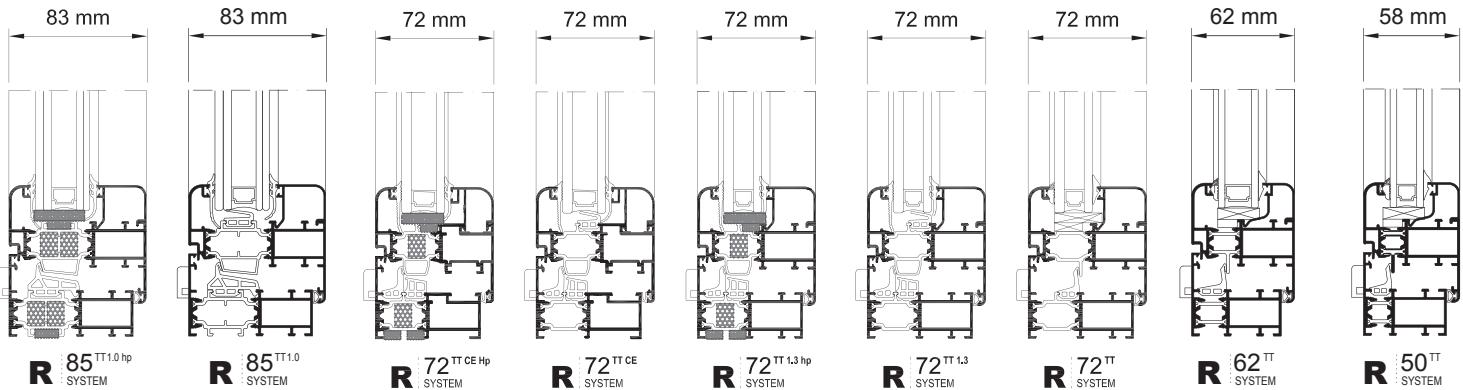
Original Systems Sapa non è soltanto un profilo in alluminio: è una soluzione completa per tutti gli attori della filiera, con l'obiettivo di fornire il miglior prodotto, col più alto valore aggiunto, dalla bauxite al serramento.

L'assistenza tecnica pre e post vendita, i certificati delle prestazioni dei serramenti, la formazione della Scuola del Serramento di Bareggio (MI), i software di calcolo, le soluzioni Autocad, gli opuscoli tecnici, i cataloghi, la comunicazione ed una capillare e competente Rete di Distribuzione Original Systems Sapa vi danno la serenità di aver fatto la scelta migliore.

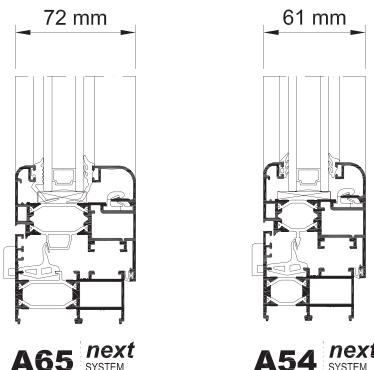


## soluzioni Original Systems®

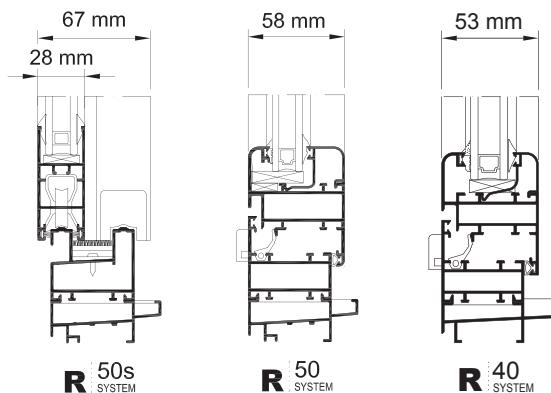
### Sistema R<sup>TT</sup>



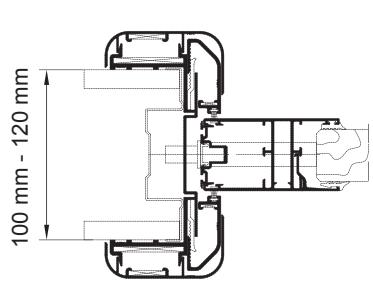
### Alfil next



### Sistema R



### Mr. Hide SYSTEM



A65 next  
SYSTEM

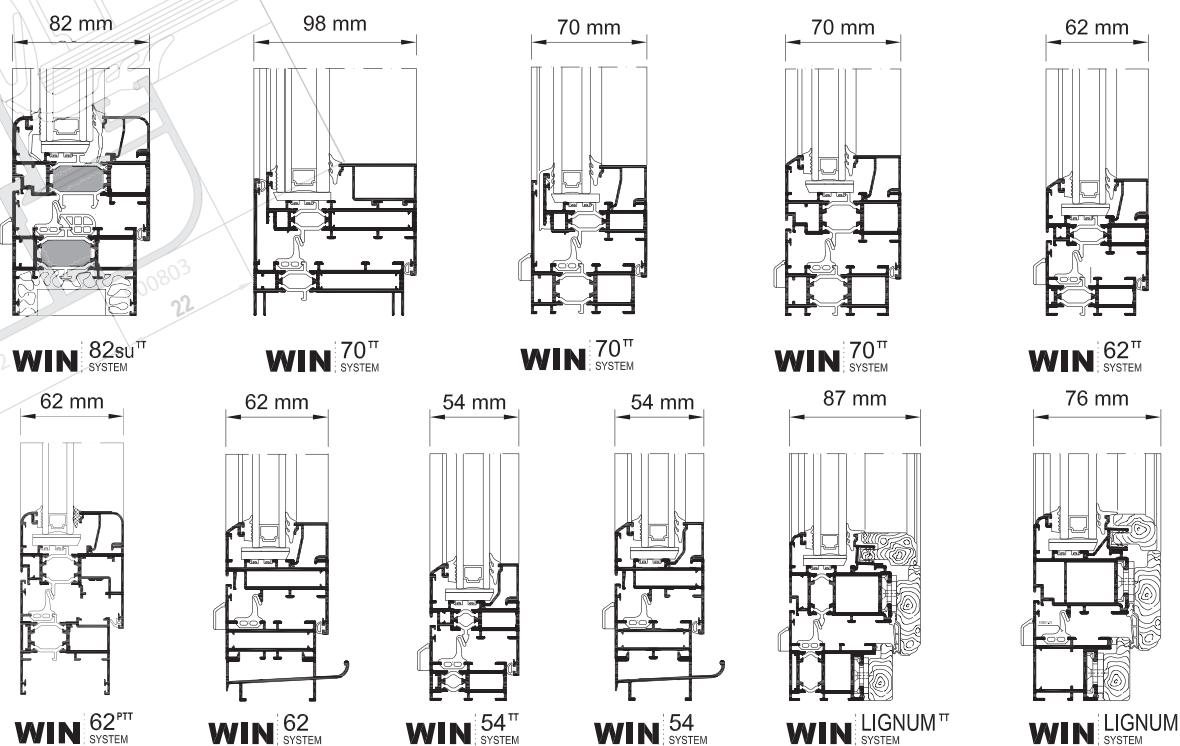
A54 next  
SYSTEM

R 50S  
SYSTEM

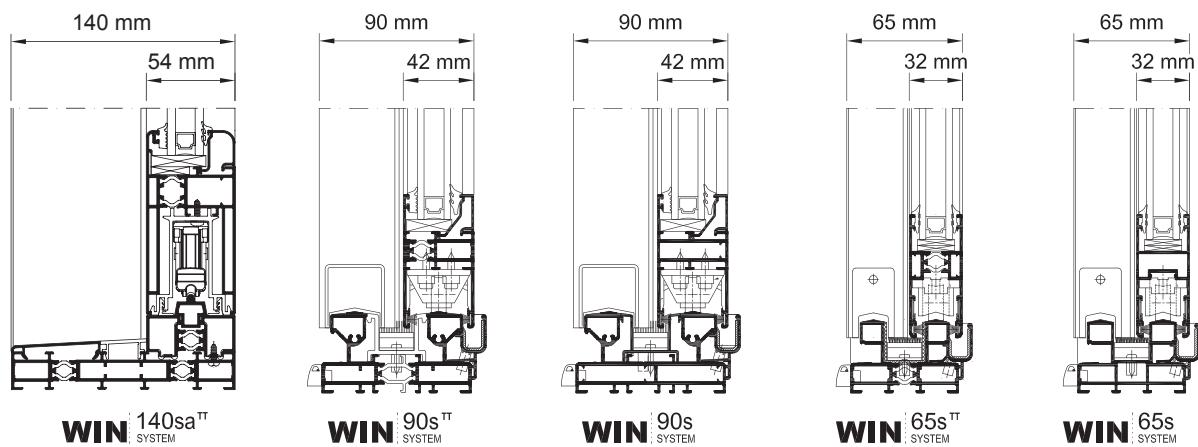
R 50  
SYSTEM

R 40  
SYSTEM

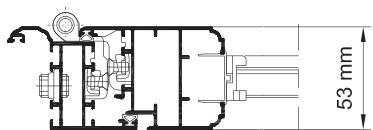
## Teknowindow Battente



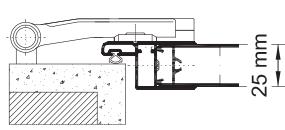
## Teknowindow Scorrevole



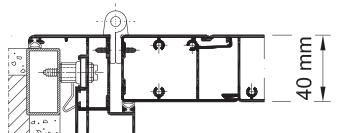
## Sistemi Oscuranti



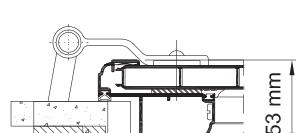
Persiane



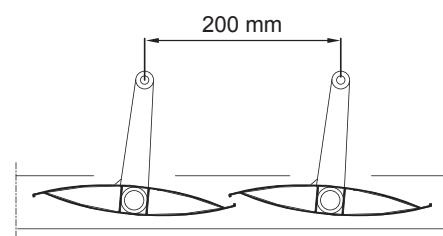
Scurone Venezia



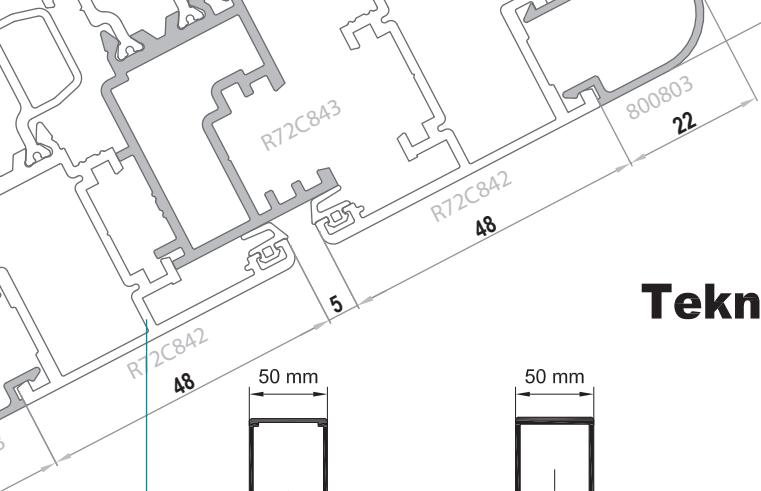
Scurone Padova



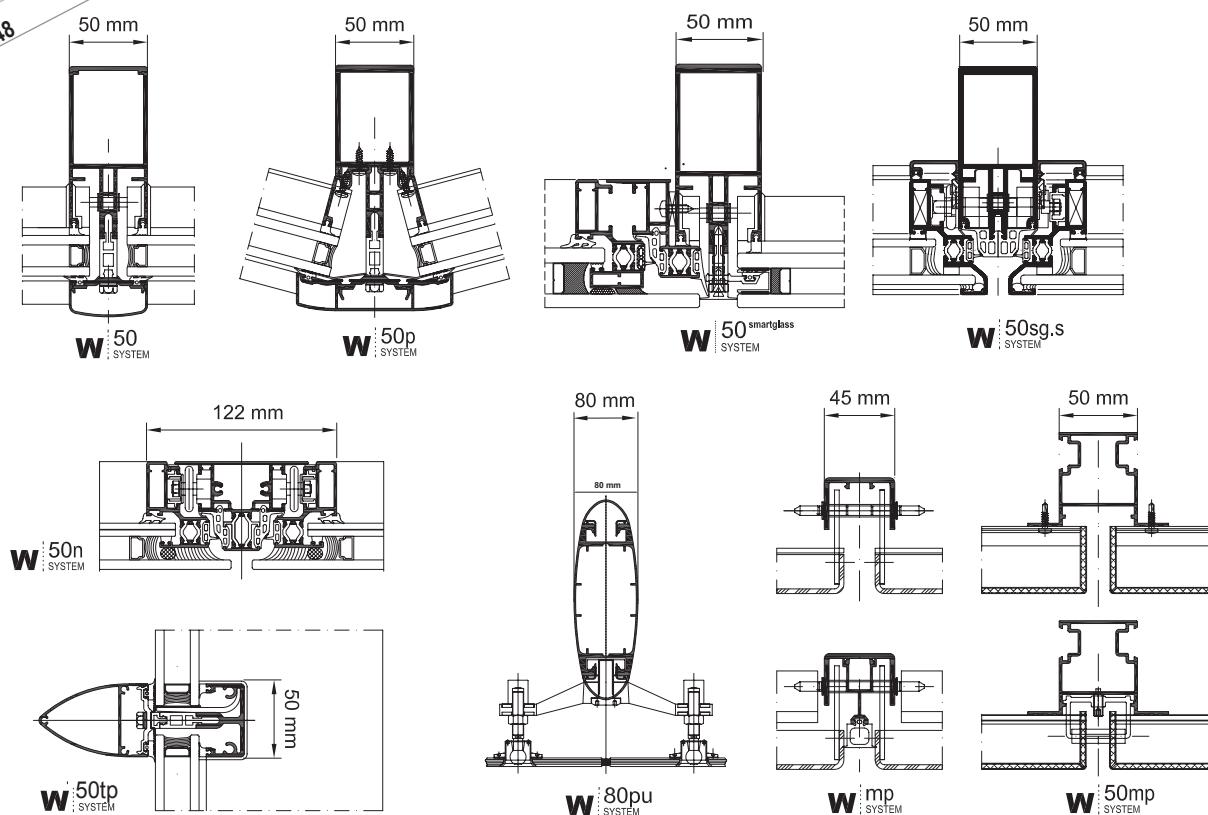
Scurone Romagna



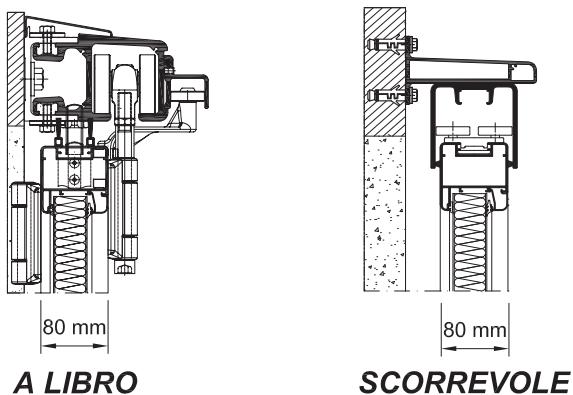
Frangisole



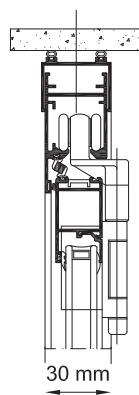
## Teknowall



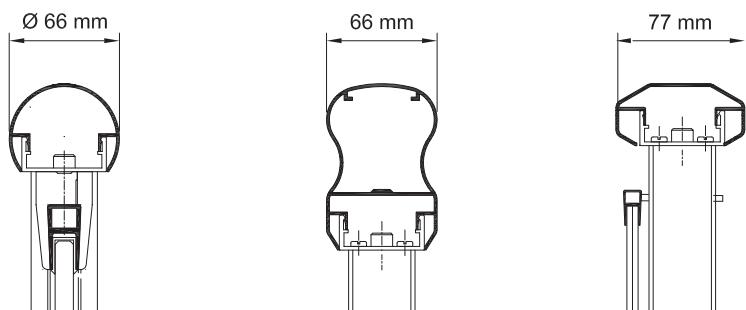
## Portoni



## Veranda a Libro

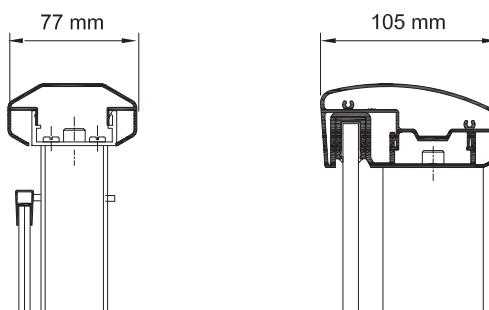


## GR | 14 SYSTEM



RINGHIERE E BALCONI

## plus® SYSTEM



## NOTE GENERALI GENERAL NOTES

### Il sistema

Il Sistema R a taglio termico è composto da sei serie di profilati:  
 R50TT, con telaio fisso da 50 mm ed anta mobile da 58 mm  
 R62TT, con telaio fisso da 54 mm ed anta mobile da 62 mm  
 R72TT, con telaio fisso da 64 mm ed anta mobile da 72 mm  
 R72TT1.3 , con telaio fisso da 64 mm ed anta mobile da 72 mm  
 R72TTCE, sistema a "Camera Europea", con telaio fisso da 64mm ed anta mobile da 72mm  
 R85TT1.0, con telaio fisso da 75 mm ed anta mobile da 83 mm

### I Profilati:

Estrusi in lega di alluminio primario da lavorazione plastica EN AW 6060 UNI-EN 573-3 sottoposti ad un processo di trattamento termico applicato secondo Normativa UNI EN 755-2 (bonifica con tempra in aria alla pressa, seguita da invecchiamento artificiale) per ottenere lo stato T5.  
 Per dettagli tecnici vedere pagina F1-T85-A-08

### Trattamenti superficiali:

I trattamenti superficiali di ossidazione anodica, elettrocolorazione e di verniciatura eseguiti negli impianti di proprietà Sapa, sono nel rispetto di quanto previsto dalle normative richieste dai marchi Qualanod (per ossidazione) e Qualicoat (per la verniciatura).

### Vetratura:

La scelta ed il tipo di vetro sarà in funzione del suo campo di impiego, per il montaggio attenersi scrupolosamente alle prescrizioni dei produttori.  
 Il Sistema consente l'inserimento di vetri aventi spessori da 6 a 39 mm per R50TT ; da 10 a 43 mm per R62TT; da 20 a 53 mm per R72TT ed R72TT 1.3; da 14 a 52 per R72TT CE; da 26 a 62 per R85TT 1.0.  
 Le guarnizioni di tenuta vetro sono in EPDM ed inseribili e sostituibili a serramento assemblato, studiate in vari spessori che, interpolati nel modo idoneo, garantiscono un'adeguata compressione sulla lastra di vetro.  
 La tassellatura sarà effettuata con appositi tasselli di regolazione e spessoramento aventi posizioni nel serramento ideali e rinforzate. Solo la completa e totale osservanza della tecnica di vetratura potrà garantire uno scatto vincolante e sicuro del fermavetro e la garanzia di durata agli sforzi di normale utenza.

### Calcolo dimensioni massime serramenti:

Nel definire le misure massime dei diversi tipi di serramento, si devono considerare oltre agli elementi costruttivi dell'infisso (sezione dei profili e loro campi d'impiego, tipo di attacco al muro, spessore e tipo del vetro), le caratteristiche di utilizzo, nonché le varianti metereologiche (esposizione dell'infisso, velocità dei venti agenti nella zona, altezza dal suolo alla quale sarà installato l'infisso, ecc.).

Consigliamo a tal fine la consultazione delle prescrizioni Uncsaal.

### Attrezzature:

Le attrezzature raccomandate (Comall e Tekna) sono state appositamente progettate e realizzate per le particolari caratteristiche del sistema e per l'applicazione specifica degli accessori a catalogo.

### Peso dei profilati:

I pesi indicati sono puramente indicativi (peso teorico ricavato sullo spessore nominale del profilo); Le matrici di estrusione sono soggette ad un normale processo di usura che porta il peso dell'estruso da un minimo (matrice nuova) ad un massimo (matrice usurata al limite delle tolleranze dimensionali).

### Tolleranze dimensionali

Per le tolleranze dimensionali si fa riferimento alla Normativa UNI EN 12020-2

### NB:

Il mancato impiego, anche parziale, dei prodotti originali, esclude qualsiasi possibilità di rivalsa nei confronti di Sapa.

Al fine di migliorare i propri prodotti, Sapa si riserva la facoltà di apportare, in qualsiasi momento e senza preavviso, le modifiche che riterrà opportuno.

I dati riportati su questo catalogo sono indicativi e non impegnativi.

### The system

The thermal break R system is made up of six series of section bars:  
 R50TT, with 50 mm fixed frame and 58 mm moving shutter  
 R62TT, with 54 mm fixed frame and 62 mm moving shutter  
 R72TT, with 64 mm fixed frame and 72 mm moving shutter  
 R72TT1.3, with 64 mm fixed frame and 72 mm moving shutter  
 R72TTCE, "European Chamber" system, with 64 mm fixed frame and 72 mm moving shutter  
 R85TT1.0, with 75 mm fixed frame and 83 mm moving shutter

### The sections

These are extruded in primary aluminium alloy from EN AW 6060 UNI -EN 573-3 plastic manufacturing, subject to a thermal treatment, applied according to UNI EN 755-2 regulation (austempering through air tempering at the press, followed by artificial ageing) in order to achieve the T5 physical state.

For technical detail refer to page F1-T85-A-08

### Surface treatments:

The surface treatments of anodization, electrocoloration and painting carried out in Sapa Italy plants, respect the regulations required by the brands: Qualanod (for anodization) and Qualicoat (for painting).

### Glazing:

The choice and the type of glass will depend on its final use. While assembling, it is essential to follow scrupulously the manufacturers' instructions. With this System it is possible to insert glass with thickness of 6 to 39 mm for R50TT; 10 to 43 mm R62TT; 20 to 53 mm for R72TT and R72TT 1.3; 14 to 52 for R72TT CE; 26 to 62 for R85TT 1.0. The weatherstrips for the glass containment is in EPDM and is conceived in different thickness. If interpolated in the correct way, it assures a proper compression on the glass. The plugging will be carried out through proper adjusting and shimming plugs, located in ideal and reinforced positions in the fastening. Only the full respect of the glazing technique will assure the proper functioning of the glass beading and will guarantee a long term resistance to the normal uses.

### Window maximum dimensions

During the definition of the maximum dimensions of the different sorts of windows, beside the structural elements of the frame (section, uses, juncture to the wall, thickness and sort of glass), the final use and the weather conditions (exposure of the window frame, speed of the wind in the area, distance from the ground where the frame will be installed, etc.) have to be taken into account.

To this purpose, we suggest to consult the Uncsaal regulations.

### Equipment:

The recommended equipment (Comall and Tekna) has been planned and realized on purpose according to the particular characteristics of the system and to the specific application of the catalogue accessories.

### Weight

Any weight is shown just as an indication (theoretical weight made out of the nominal thickness of the section) The extrusion dies are subject to the natural wear and tear, therefore the section weight varies from a minimum when the dies is new, to a maximum weight when the die is at highest dimensional tolerances limits.

### Dimensional allowance

As for the dimensional allowance it is to refer to UNI EN 12020-2 Regulation.

### NB:

Sapa declines any responsibility in case of use or partial use of non original products.

With the aim of improving its products, Sapa reserves the possibility to make changes to this document at any moment and with no advise.

The data reported in this catalogue are indicative and not binding.

## NOTE GENERALI GENERAL NOTES

L'esecuzione del serramento dovrà prevedere tutte le operazioni necessarie per il buon funzionamento del "componente finestra" quali la sigillatura e il bloccaggio sicuro degli angoli, il fissaggio a muro adeguato e, necessariamente, l'utilizzo di accessori e guarnizioni originali. Le lavorazioni, proprio per garantire la giusta applicazione dei particolari, dovranno essere eseguite con attrezzature originali e collaudate sul sistema stesso. Gli scarichi dell'acqua e le asole di aerazione per vetri camera dovranno essere di dimensione e numero ottimale in funzione della dimensione e della tipologia del serramento.

The frame construction must include all the operations necessary for good working of the "window component", such as sealing and safe blocking of corners, suitable wall fixtures and the use of the original accessories and weatherstrips. In order to guarantee the correct application of the parts, works must be carried out with original equipment that has been tested on the system. The size and number of water drains and ventilation slots for double glazing must correspond to the size and type of window frame.

### Attenzione

Nelle porte a taglio termico, nei casi in cui ci sia un'eccessiva variazione di temperatura, si possono generare, sulle ante, fenomeni di deformazione dovuta alla diversa dilatazione tra profilo esterno e profilo interno, con conseguente difficoltà di chiusura dell'anta stessa.

Ciò accade perché il sole riscalda i profilati esterni del serramento provocandone la dilatazione che risulta essere differente da quella del profilo interno non riscaldato dal sole, questo provoca delle tensioni che fanno deformare il profilo anta curvandolo verso l'esterno.

Non avendo più l'allineamento anta/telaio si hanno problemi di chiusura, nelle ore di maggiore esposizione si può riscontrare il bloccaggio e/o l'impossibile chiusura della porta.

Questo fenomeno si evidenzia in particolar modo quando si hanno porte d'ingresso con tamponamenti ciechi.

Ad oggi non esistono sistemi a taglio termico che risolvano totalmente il problema. Stiamo studiando, in collaborazione con i maggiori produttori di barrette, soluzioni che possano risolvere questo fenomeno nel prossimo futuro.

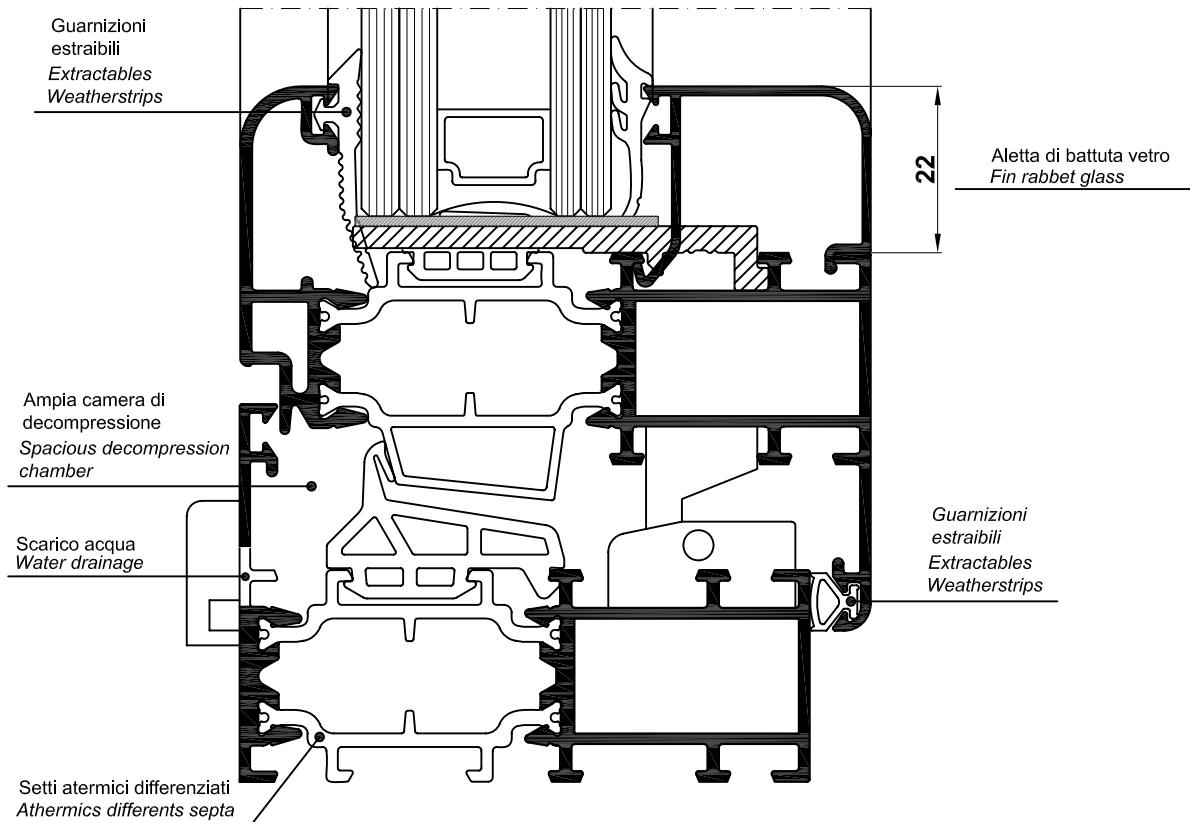
Oggi, per ridurre il problema, si possono adottare accorgimenti da valutare di volta in volta.

### Attention

In case of sensitive variations of temperature in the Thermal break door solution, deformation of the wings can take place due to the diversified expansion of the internal and external profiles. This can bring to a difficult closing of the wing itself.

Deformation takes place because the sun heats the external profile of the window causing a dilatation which is different from the one of the internal profile. This causes tension that curve the wing profile to the external part. As the wing and the frame are no longer aligned there could be some difficulty in closing the doors. In the hottest hours of the day the door could stall, or it could be impossible to lock the door.

This phenomena is more common when the doors have non glass closures. Up to today there are no thermal break door systems which do not present this problem, although we are studying alternative solutions together with the biggest suppliers of polyamide bars.



## ACCESSORI E GUARNIZIONI ACCESSORIES AND PACKING

Originali e marcati Sapa, con corpo in lega di alluminio, perni e viteria in acciaio inox, le boccole e i particolari di scorrimento sono in poliammide rinforzato. Le guarnizioni in EPDM sono state studiate con durezza differenti secondo la funzione che dovranno svolgere all'interno del serramento.

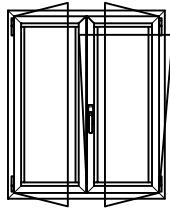
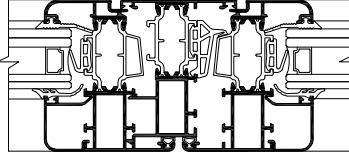
They are original and Sapa marked.

Their features are: core in aluminium alloy, pins and screw in stainless steel, bushings and sliding elements are in reinforced polyamide. The packing in EPDM has been conceived in different hardness according to its functions in the fastening.

## PRESTAZIONI AGLI AGENTI ATMOSFERICI ATMOSPHERIC AGENTS PERFORMANCES

Per garantire il massimo delle prestazioni in funzionalità e durata, il sistema R85TT è stato sottoposto ai collaudi prescritti dalle vigenti Normative europee ottenendo ottimi risultati

*To guarantee the maximum functionality and wear, R85TT system has been tested according to the running european norms.*

CERTIFICATI		CERTIFICATES					
Sistema System	Tipologia Windows and doors	Dimensioni Dimensions L x H mm	Risultati prove Test values			Sezioni Cross section	Laboratorio Certificato N° Laboratory Certificate Nr.
			Aria Air	Acqua Water	Vento Wind		
		1544 x1644	4	E1050	C4		ISTEDIL 0307/2010-F

- Collaudi eseguiti, in conformità alla Norma UNI EN 1026 - UNI EN 1027 - UNI EN 12211
- Collaudi classificati secondo Normative UNI EN 12207 - UNI EN 12208 - UNI EN 12210

- Tests Execute as UNI EN 1026 - UNI EN 1027 - UNI EN 12211 standards
- Tests Classify as UNI EN 12207 - UNI EN 12208 - UNI EN 12210 standards

Tecnicamente, viene definito "a taglio termico" un profilato metallico che, una volta impiegato nella costruzione di un infisso, presenta il lato rivolto all'interno nettamente diviso dal lato esposto all'esterno per impedire lo scambio termico. Le due parti della sezione devono essere perciò separate da un materiale diverso, con bassi valori di conducibilità termica.

Il taglio termico del sistema R, realizzato con barrette in poliammide rinforzato, si colloca su bassi valori di trasmittanza termica, in linea con i sistemi a taglio termico più avanzati.

Per evitare slittamenti dei vari componenti del profilato a taglio termico è prescritta la pre-zigrinatura dei particolari di bloccaggio prima dell'operazione meccanica di accoppiamento.

*A metal section which, when used in the construction of a frame, has the side facing inwards clearly divided from that facing outwards to prevent heat exchange is technically defined "with thermal break". The two parts of the section must therefore be separated by a different material, with low conductivity values.*

*The thermal break of the R system, produced with reinforced polyamide bars, is placed on low k values (heat transmission coefficient), in line with the most advanced systems with thermal break.*

*To prevent the components of the thermal break section from slipping, it is advisable to pre-knurl the blocking parts before carrying out the mechanical coupling operation.*

Tutti i profilati a taglio termico venduti da Sapa sono sempre riconoscibili.

Il marchio, impresso a laser è stato previsto per essere sempre visibile nel profilato assemblato come dalla figura sottostante

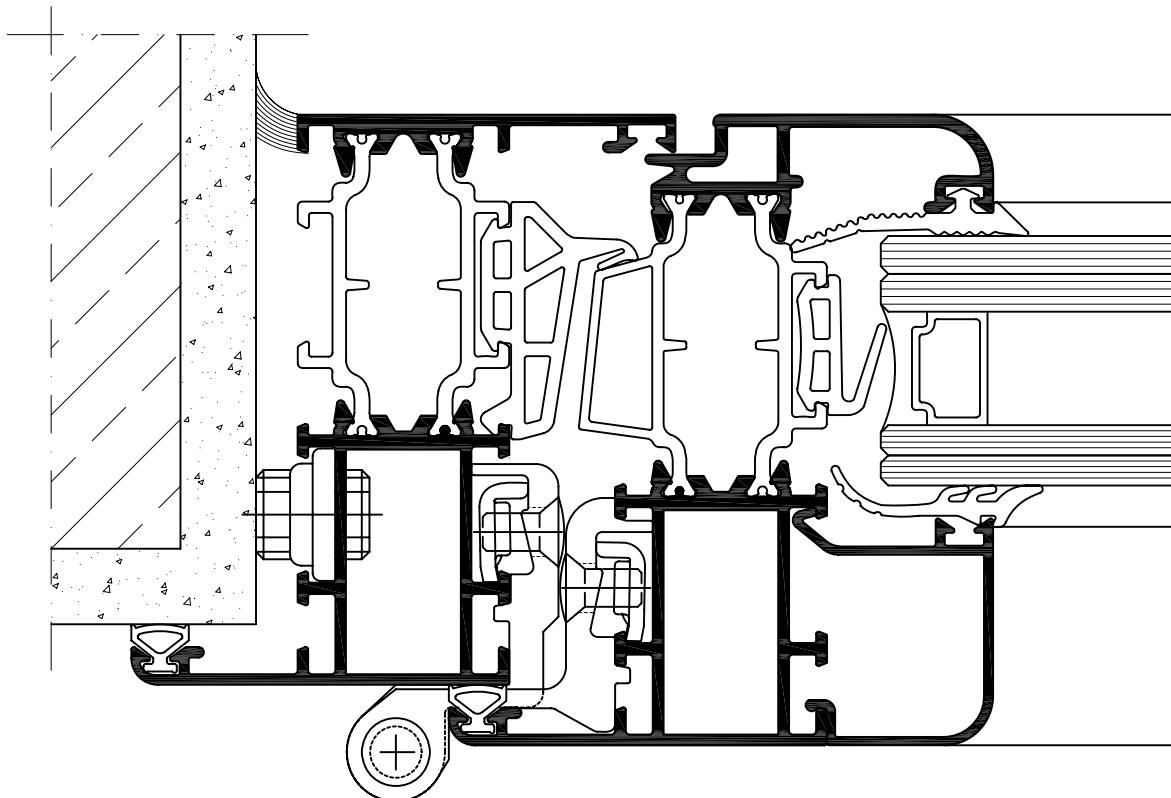
*All thermal break sections are always recognizable. The laser impressed brand is always visible on the assembled sections as you can see in the picture here under*



**Sapa non risponde di eventuali difetti imputabili ad accoppiamenti non eseguiti nei propri stabilimenti e/o dovuti all'utilizzo di macchine non idonee e/o mal regolate.**

**Sapa will not be responsible for any incidental defects due to couplings which have not been carried out in its own premises and/or due to the use of not proper and/or not well-regulated machines.**

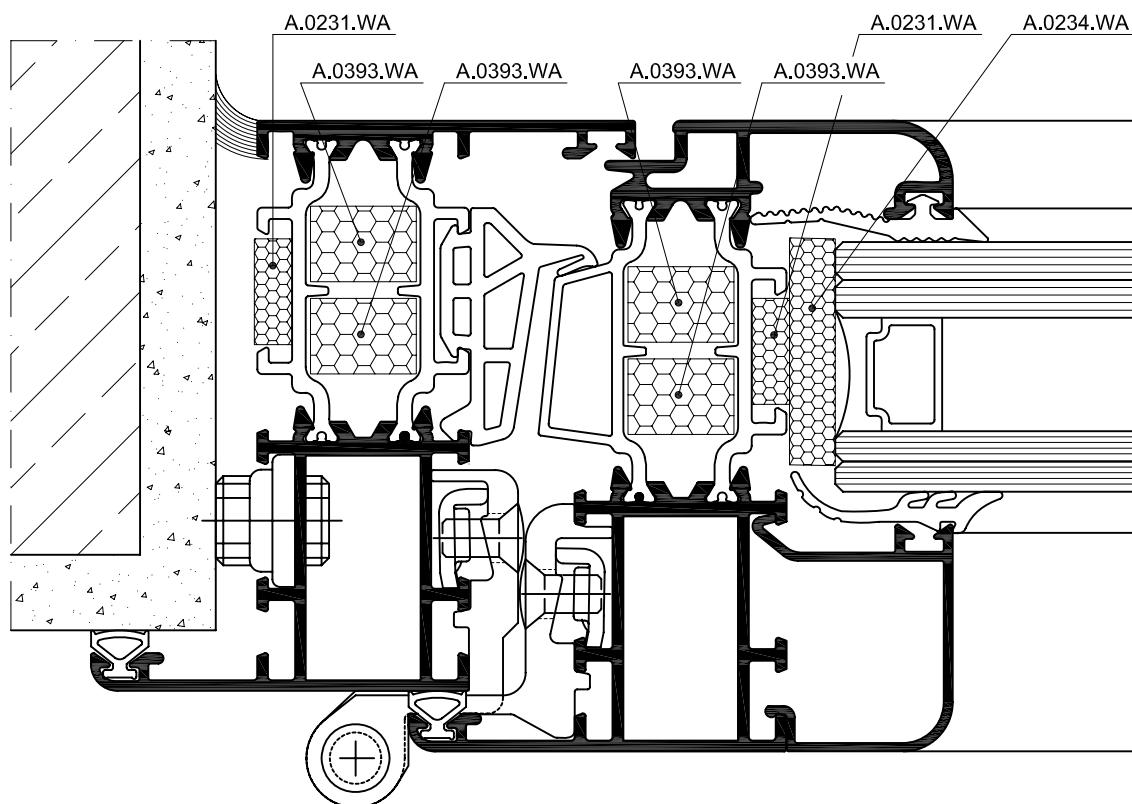
**CONFIGURAZIONE STANDARD**  
**STANDARD CONFIGURATION**



**CONFIGURAZIONE hp**  
**CONFIGURATION hp**

Inserire all'interno delle barrette, sotto il vetro ed a contatto con la muratura, il materiale isolante come indicato nello schema sottostante.

*Insert the isolating material in the poliammide bars, under the glass and in contact with the wall, as indicated in the scheme.*



"Valido solo per il territorio ITALIANO"  
"Applicable only for Italy"

### **Requisiti della prestazione energetica degli edifici**

#### **Decreto legislativo 29 dicembre 2006, n. 311**

Disposizioni correttive ed integrative al decreto legislativo 19 agosto 2005, n. 192, recante attuazione alla direttiva 2002/91/CE, relativa al rendimento energetico nell'edilizia.

Stabilisce i valori massimi della trasmittanza termica dei vetri e delle chiusure trasparenti comprensive di vetri e profilati metallici.

Tabella 4a Valori limite della trasmittanza termica U delle chiusure trasparenti comprensive degli infissi espressa in W/m <sup>2</sup> K			
Zona climatica	Dall' 1 gennaio 2006 U (W/m <sup>2</sup> K)	Dall' 1 gennaio 2008 U (W/m <sup>2</sup> K)	Dall' 1 gennaio 2010 U (W/m <sup>2</sup> K)
A	5,5	5,0	4,6
B	4,0	3,6	3,0
C	3,3	3,0	2,6
D	3,1	2,8	2,4
E	2,8	2,4	2,2
F	2,4	2,2	2,0

Tabella 4b Valori limite della trasmittanza U dei vetri espressa in W/m <sup>2</sup> K			
Zona climatica	Dall' 1 gennaio 2006 U (W/m <sup>2</sup> K)	Dall' 1 luglio 2008 U (W/m <sup>2</sup> K)	Dall' 1 gennaio 2011 U (W/m <sup>2</sup> K)
A	5,0	4,5	3,7
B	4,0	3,4	2,7
C	3,0	2,3	2,1
D	2,6	2,1	1,9
E	2,4	1,9	1,7
F	2,3	1,7	1,3

Il territorio nazionale è suddiviso nelle seguenti zone climatiche in funzione dei gradi-giorno, indipendentemente dalla ubicazione geografica:

**Zona A** - Comuni che presentano un numero di gradi-giorno non superiore a 600;

**Zona B** - Comuni che presentano un numero di gradi-giorno maggiore di 600 e non superiore a 900;

**Zona C** - Comuni che presentano un numero di gradi-giorno maggiore di 900 e non superiore a 1400;

**Zona D** - Comuni che presentano un numero di gradi-giorno maggiore di 1400 e non superiore a 2100;

**Zona E** - Comuni che presentano un numero di gradi-giorno maggiore di 2100 e non superiore a 3000;

**Zona F** - Comuni che presentano un numero di gradi-giorno maggiore di 3000.

## PRESTAZIONI TERMICHE THERMAL PERFORMANCES

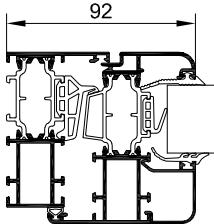
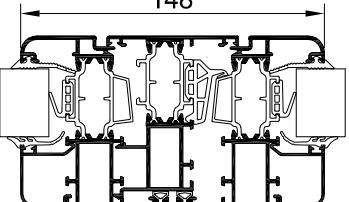
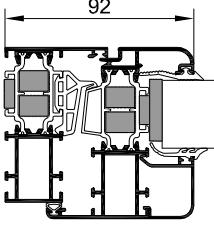
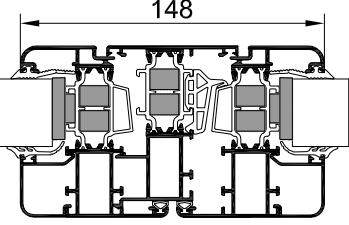
**R** 85<sup>TT</sup> 1.0  
SYSTEM

I valori di trasmittanza termica Uf sotto riportati sono i risultati di calcolo eseguiti dall'Istituto IRcCOS di Legnano (Milano), secondo la normativa UNI EN ISO 10077-2 e dall'Istituto ISTEDIL secondo la normativa UNI EN 12412-2

Nella porzione di tubolarità delimitata dalle barrette del taglio termico si assume:  
 - Il valore pari a 0,90 per l'emissività dell'alluminio verniciato  
 - Il valore pari a 0,30 per l'emissività dell'alluminio non verniciato

The thermal performance values Uf hereunder reported are calculation results from the Institute IRcCOS of Legnano (Milan), in accordance with the norm UNI EN ISO 10077-2 and the Institute ISTEDIL, in accordance with the norm UNI EN 12412-2

The equivalent thermal conductivity of the cavity between aluminium and polyamide bars is:  
 - 0,90 If the aluminium is painted  
 - 0,30 If the aluminium is mill finish

CERTIFICATI		CERTIFICATES				
Sistema System	Sezioni Cross section	Profilati Section	Risultati calcolo Calculus values	Laboratorio Certificato N°. Laboratory Certificate Nr.	Risultati test in camera calda Hot box test values	Laboratorio Certificato N°. Laboratory Certificate Nr.
<b>R</b> 85 <sup>TT</sup> 1.0 SYSTEM		R85C44 R85C42	Uf = W/m <sup>2</sup> °K $\varepsilon=0.9 \quad \varepsilon=0.3$	2.21 1.96 IRcCOS N° 0068/RP/09	1.80 *	Istedil 675/2010-I
<b>R</b> 85 <sup>TT</sup> 1.0 SYSTEM		R85C42 R85C43 R85C42	2.27 2.02 IRcCOS N° 0069/RP/09	1.86 *	Istedil 675/2010-M	
<b>R</b> 85 <sup>TT</sup> 1.0 hp SYSTEM		R85C44 R85C42	1.68 1.66 IRcCOS N° 0120/RP/10	1.54 *	Istedil 675/2010-L	
<b>R</b> 85 <sup>TT</sup> 1.0 hp SYSTEM		R85C42 R85C43 R85C42	1.75 1.73 IRcCOS N° 0121/RP/10			

\* I valori indicati sono stati ottenuti con:

- profili verniciati

The values have been obtained with:

-painted profiles

## INSTALLAZIONE E MANUTENZIONE INSTALLATION AND MAINTENANCE

Una corretta posa in opera, evita spesso il decadimento delle prestazioni ottenute in laboratorio, curare in maniera appropriata la posa valorizza tutto il processo produttivo dalla progettazione all'installazione.

Fare una pulizia periodica con prodotti neutri riduce notevolmente i rischi di corrosione ed allunga sicuramente la vita dell'infisso. Per una corretta installazione, manutenzione e pulizia dei serramenti, Vi raccomandiamo di consultare le prescrizioni riportate sulle seguenti note tecniche UNCSAAL:

UX42 - "Guida alla posa in opera dei serramenti"

UX10 - "La pulizia delle superfici di serramenti e facciate continue"

*A correct installation, often avoids the decay of the performances obtained in the laboratory. Taking appropriate care of the installation increases the value of the whole production process from the planning to the installation.*

*Cleaning periodically with neutral products reduces remarkably the corrosion risk and extends surely the life of the frame.*

*For a correct installation, maintenance and cleaning of the sections, we recommend you refer to the prescriptions quoted in the following technical notes of UNCSAAL UX42 and UX10*



## LEGHE IN ALLUMINIO DA BONIFICA - PROFILATI ESTRUSI HEAT-TREATABLE ALUMINIUM ALLOYS - EXTRUSION SECTIONS

Leghe / Alloys		6060 UNI EN 573-3				
Composizione chimica normale / Normal chemical compos		% Mg 0,4 Si 0,4 Fe 0,2				
Stato / State		0 T1 T5 T6				
Caratteristiche meccaniche  <i>Mechanical Charatteristics</i>	Carico di rottura a trazione <i>Ultimate tensile stress</i>	R <sub>m</sub> N/mm <sup>2</sup>	140 Max	120	185	205
	Carico al limite di snervamento <i>Yield point</i>	R <sub>p</sub> N/mm <sup>2</sup>	80 Max	50	145	165
	Allungamento <i>Elongation</i>	A %	20	16	11	10
Caratteristiche fisiche  <i>Physical Charatteristics</i>	Peso specifico <i>Specific weight</i>	Kg/dm <sup>3</sup>	2,70			
	Conduttività termica a 20°C <i>Heat conductivity at 20°C</i>	W/ (cm <sup>-3</sup> K)	≈ 2,09		≈ 1,75	
	Resistività elettrica a 20°C <i>Electrical resistivity at 20°C</i>	μΩ · cm	≈ 3,14		≈ 3,25	
	Coef. di dilatazione termica lineare da 20° a 200°C <i>Linear thermal expansion coefficient from 20° to 200° C</i>		24 · 10 <sup>-6</sup> K <sup>-1</sup>			

Gli accessori originali Sapa, specifici del sistema, sono gli unici che garantiscono nel tempo la qualità del prodotto finale

The original Sapa accessories, specifically designed for the system, are the only ones that guarantee quality of end products through time

**AVVERTENZA**  
**NOTE**

Per gli articoli indicati con <sup>(XXX)</sup> è possibile scegliere tra diversi produttori, tali articoli sono comunque forniti da Sapa. Le combinazioni possibili sono le seguenti:

- (ABP) - Prodotti da ALUTEC, BMP e PRODUCTA.
- (AB) - Prodotti da ALUTEC e BMP.
- (AP) - Prodotti da ALUTEC e PRODUCTA.
- (BP) - Prodotti da BMP e PRODUCTA.

Per ordinare tali prodotti, è necessario inserire al termine del codice i seguenti numeri:

- 01 - Per BMP
- 02 - Per ALUTEC
- 03 - Per PRODUCTA

Esempio: Art. G.0135.EN<sup>(ABP)</sup> La scelta può essere fatta tra BMP (ordinando il codice G.0135.EN.01), ALUTEC (codice G.0135.EN.02) e PRODUCTA (codice G.0135.EN.03).

Es.2: Art. G.0135.EN<sup>(AB)</sup> La scelta può essere fatta tra BMP (ordinando il codice G.0135.EN.01) ed ALUTEC (codice G.0135.EN.02).

Il codice di alcuni accessori comprende due lettere tra parentesi (xx) ciò significa che all'atto dell'ordine occorre specificare la finitura spostuendo le xx con i numeri riportati nella seguente tabella.

01=grezzo	{	a richiesta
02=ossidato argento		
03=ossidato bronzo		
04=eletrocolore testa di moro		
05=ossidato nero		
08=ossidato oro lucido		
24=PVD oro		
28=PVD inox satinato		
60=verniciato bianco		
61=verniciato avorio		

For the articles indicating <sup>(XXX)</sup> there is the possibility to choose between different manufacturers although the goods will be supplied by Sapa. Here following the different combinations:

- (ABP) - Produced by ALUTEC, BMP and PRODUCTA.
- (AB) - Produced by ALUTEC and BMP.
- (AP) - Produced by ALUTEC and PRODUCTA.
- (BP) - Produced by BMP and PRODUCTA.

To order the articles you will need to indicate following numbers at the end of the code:

- 01 - For manufacturer BMP
- 02 - For manufacturer ALUTEC
- 03 - For manufacturer PRODUCTA

Example: Article G.0135.EN<sup>(ABP)</sup> the choice may be between BMP (ordering art. G.0135.EN.01), ALUTEC (ordering art. G.0135.EN.02) and PRODUCTA (ordering art. G.0135.EN.03).

Example n°2: Article G.0135.EN<sup>(AB)</sup> the choice may be between BMP (ordering art. G.0135.EN.01) and Alutec (ordering art. G.0135.EN.02)

In some of the accessory codes you will find 2 letters in brackets (xx), this means that when you will order these articles you will have to specify the finishing replacing the xx with the numbers listed here below:

01=raw	{	upon request
02=anodized silver		
03=anodized bronze		
04=eletcrocolor dark brown		
05=anodized black		
08=anodized		
24=PVD gold		
28=PVD glazed steel		
60=white painted RAL 9010		
61=ivory painted RAL 1013		

Esempio:

**A.4003.ZX.(xx)** (Cremonese reversibile per aperture interne) se ordinata **A.4003.ZX.60** verrà fornita verniciata bianco RAL 9010, se invece viene ordinata **A.4003.ZX.69**, verrà fornita Verniciata nero RAL 9005.

For example:

**A.4003.ZX.(xx)** (reversible cremone bolt for internal opening) if you order **A.4003.ZX.60** you will receive it white painted RAL 9010, if instead you order **A.4003.ZX.69** you will receive it black painted RAL 9005

**ACCESSORI UNIVERSALI**  
**UNIVERSAL ACCESSORIES**

Articolo Item	Immagine Picture	Descrizione Description
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**299.703.XX**  
(Alutec)

Cerniera pesante per porta - 3 ali interasse 70 mm  
3 wings heavy hinge for door distance between centers mm 70

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.702.XX**  
(Alutec)

Cerniera pesante per porta - 2 ali interasse 70 mm  
2 wings heavy hinge for door distance between centers mm 70

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.007.XX**  
(Alutec)

Spessore da 7 mm per cerniere pesanti  
7 mm shims for heavy hinges

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.962.XX**  
(Alutec)

Cerniera pesante per porta - 2 ali interasse 96 mm  
2 wings heavy hinge for door distance between centers mm 96

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.963.XX**  
(Alutec)

Cerniera pesante per porta - 3 ali interasse 96 mm  
3 wings heavy hinge for door distance between centers mm 96

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.008.XX**  
(Alutec)

Spessore da 8 mm per cerniere pesanti.  
8 mm shims for heavy hinges.

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.044.00**  
(Alutec)

Kit distanziatori per profili T.T.  
apertura esterna spessore 44mm  
Kit spacers for T.B. profiles  
external opening thickness 44 mm

		R85TT1.0
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**ACCESSORI UNIVERSALI**  
**UNIVERSAL ACCESSORIES**

Articolo Item	Immagine Picture	Descrizione Description
------------------	---------------------	----------------------------



**299.602.XX**  
(Alutec)

Cerniera pesante per porta - 2 ali interasse 60 mm.  
Heavy hinge for door door - 2 wings distance between centers 60 mm

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.603.XX**  
(Alutec)

Cerniera pesante per porta - 3 ali interasse 60 mm.  
Heavy hinge for door door - 3 wings distance between centers mm 60

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.862.XX**  
(Alutec)

Cerniera pesante per porta - 2 ali interasse 86 mm.  
Heavy hinge for door door - 2 wings distance between centers mm 86

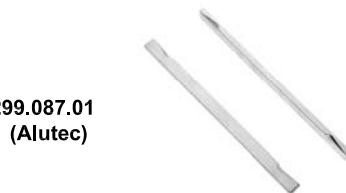
R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.863.XX**  
(Alutec)

Cerniera pesante per porta - 3 ali interasse 86 mm.  
Asse di rotazione a 20 mm.  
Heavy hinge for door door - 3 wings distance between centers mm 86

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**299.087.01**  
(Alutec)

Albero quadro 8 per profilati da 104mm  
Rod square 8 mm for profiles 104mm

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0



**A.4702.ZX**

Kit per maniglia porta doppia  
Double door handle kit

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

**ACCESSORI BREVETTATI**  
**PATENTED ACCESSORIES**

**CERNIERE E CARDINI**  
**HINGES AND PIVOTS**

Articolo Item	Immagine Picture	Descrizione Description
401.024.XX (Alutec)		Cerniera STOPPER portata max. 100Kg <i>Hinge STOPPER capacity max 100Kg</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.013.55 (Alutec)		Rondella spessoramento cerniere sfilabili. <i>Spacing washer for slip off hinges.</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

401.002.XX (Alutec)		Cerniera sfilabile con contropiastre in acciaio inox. <i>Slip-off hinge with stainless steel counterplate.</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.240.XX (Alutec)		Cerniera sfilabile 3a anta con contropiastre in acciaio inox. <i>Slip-off hinge 3rd leaf with stainless steel counterplate.</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.310.XX (Alutec)		Cerniera a pettine <i>Special hinge</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.330.XX (Alutec)		Cerniera sfilabile da 50 mm. <i>Slip-off hinge mm 50</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

**CERNIERE E CARDINI**  
**HINGES AND PIVOTS**

Articolo Item	Immagine Picture	Descrizione Description
501.340.XX (Alutec)		Cerniera sfilabile per 3a anta da 50 mm. <i>Slip-off 3rd leaf hinge mm 50</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.342.XX (Alutec)		Cerniera sfilabile maggiorata con contropiastre in acciaio inox. <i>Slip-off oversized hinge with stainless steel counterplate.</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.349.XX (Alutec)		Cerniera sfilabile su profili complanari I.E. monoblocco a cinghia da 40 mm <i>Slip-off hinge on coplanar profile I.E. beltshutter winding system mm 40</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.370.XX (Alutec)		Cerniera a pettine a 5 ali R50 Special 5 wings hing
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.310.XX (Alutec)		Cerniera a pettine <i>Special hinge</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

501.330.XX (Alutec)		Cerniera sfilabile da 50 mm. <i>Slip-off hinge mm 50</i>
R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

**SQUADRETTE D'ANGOLO**  
CORNER JOINTS

Articolo Item	Immagine Picture	Descrizione Description						
A.2919.NN		Squadretta d'allineamento in nylon su aletta. <i>Nylon alignment corner joint on fin.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.2920.NN		Squadretta d'allineamento in nylon per profili complanari ed arrotondati. <i>Nylon alignment corner joint for coplanar and rounded profiles.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.5624.AA		Squadretta d'allineamento a cianfrinare in alluminio per tubolarità 27x6.8 <i>Aluminium alignment corner joint for caulking for piping 27x6.8</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.5662.AA		Squadretta a cianfrinare per profili con tubolarità 6,7x7,5 <i>Crimped corner joint for profiles piping 6.7x7.5</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
2020 (Monticelli)		Squadretta d'allineamento aletta esterna "FUJI" <i>Alignment corner joint for external rabbet "FUJI"</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
2006 (Monticelli)		Squadretta d'allineamento profilati complanari "FUJI" <i>Alignment corner joint profiles complanarities "FUJI"</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
2013 (Monticelli)		Squadretta d'allineamento aletta interna "FUJI" <i>Alignment corner joint for internal rabbet "FUJI"</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.3102.AA		Squadretta d'allineamento profilati mostra <i>Alignment corner joint profiles cornice</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.4411.AA		Squadretta in alluminio estruso per tubolarità 10,4x42 <i>Extruded aluminium corner joint piping 10,4x42</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

**SQUADRETTE D'ANGOLO**  
CORNER JOINTS

Articolo Item	Immagine Picture	Descrizione Description						
A.5429.AA		Squadretta in alluminio estruso per profili maggiorati 38,8x29,2 <i>Extruded aluminium corner joint for oversized profiles piping 38,8x29,2</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.5411.AA		Squadretta in alluminio estruso per tubolarità 15 x 25 <i>Extruded aluminium corner joint piping 15 x 25</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.5441.AA		Squadretta in alluminio estruso con inserto unificato per tubolarità 15x29,2 <i>Extruded aluminium corner joint with unified ins. piping 15x29,2</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.2921.AA		Squadretta esterna a cianfrinare per tubolarità 16,8x7 <i>External corner joint for crimped 16,8x7</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
A.2906.AA		Squadretta a cianfrinare per profili con tubolarità 15x29,5mm <i>Crimped corner joint for profiles piping 15x29,5mm</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
0133 (Monticelli)		Squadretta a cianfrinare, spinare e avvitare per profili con tubolarità 6,7x7,5mm <i>Corner joint for piping, crimped and screw to profiles 6,7x7,5mm</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
5043 (Monticelli)		Squadretta in alluminio estruso a cianfrinare, spinare e avvitare per profili maggiorati 38,8x29,2mm <i>Extruded aluminium corner joint for piping, crimped and screw to profiles 38,8x29,2mm</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
VILM 5x14_D8 (Monticelli)		Vite per squadrette 5033,5043,5044 <i>Screw for corner joint 5033,5043,5044</i>						
VILM 5x14_0088 (Monticelli)		Spina per squadrette 5033,5043,5044 <i>Pinned for corner joint 5033,5043,5044</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

**SQUADRETTE D'ANGOLO**  
CORNER JOINTS

Articolo Item	Immagine Picture	Descrizione Description
0092 (Monticelli)		Spina in acciaio inox per squadrette <i>Pinned stainless to corner joints</i>

**GIUNTI**  
JOINTS

Articolo Item	Immagine Picture	Descrizione Description
505.267.01 (Alutec)		Giunto in alluminio estruso. <i>Extruded aluminium joint.</i>

Articolo Item	Immagine Picture	Descrizione Description
A.3204.ZA		Cavallotto di giunzione telai-traversi. <i>T-joint for frames and transoms</i>

**ACCESSORI COMPLEMENTARI**  
COMPLEMENTARY ACCESSORIES

Articolo Item	Immagine Picture	Descrizione Description
502.002.XX (Alutec)		Angolo stampato per fermavetro arrotondato. <i>Moulded corner for snap-on rounded glass beading.</i>

Articolo Item	Immagine Picture	Descrizione Description
R950.001		Aggiaccio fermavetri arrotondati. <i>Rounded glass beading coupling.</i>

**MANIGLIE, CREMONESI, ETC.**  
HANDLES, CREMONE BOLTS, ETC.

Articolo Item	Immagine Picture	Descrizione Description
A.4003.ZX.(xx)		Cremonese reversibile per aperture interne interasse 84-100 <i>Reversible cremone bolt for internal opening distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4004.ZX.(xx)		Cremonese reversibile per anta ribalta interasse 84-100 <i>Reversible cremone bolt for tilt and turn distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4005.ZX.(xx)		Cremonese reversibile con chiave per apertura interna interasse 84-100 <i>Reversible cremone bolt with key for internal opening distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4006.ZX.(xx)		Cremonese reversibile per apertura esterna interasse 84-100 <i>Reversible cremone bolt for external opening distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4008.ZX.(xx)		Cremonese reversibile senza manico per apertura interna interasse 84-100 <i>Reversible cremone bolt without handle for internal opening distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4009.ZX.(xx)		Cremonese reversibile per anta ribalta interasse 84-100 senza manico <i>Reversible cremone bolt for tilt and turn without handle distance between centers 84-100</i>

Articolo Item	Immagine Picture	Descrizione Description
A.4010.ZN		Manico estraibile per cremonese <i>Detachable handle cremone bolt</i>

**ACCESSORI BREVETTATI**  
**PATENTED ACCESSORIES**

**MANIGLIE, CREMONESI, ETC.**  
**HANDLES, CREMONE BOLTS, ETC.**

Articolo Item	Immagine Picture	Descrizione Description
A.4011.ZX.(xx)		Cremonese reversibile con chiave per anta ribalta interasse 84-100 <i>Reversible cremone bolt with key for tilt and turn distance between centers 84-100</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

**MANIGLIE, CREMONESI, ETC.**  
**HANDLES, CREMONE BOLTS, ETC.**

Articolo Item	Immagine Picture	Descrizione Description
503.464.XX (Alutec)		Maniglia a tavellino VELA reversibile, per apertura esterna con battuta 8 mm, manico smontabile e meccanismo a scatto a 90°. Manico in zama VELA flat catch, reversible, for external opening with mm 8 rabbet and removable handle and snap mechanism at 90°. Zamak handle

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

503.963.XX (Alutec)		Maniglia a tavellino linea "600" per sporgere e bilico. <i>"600" flatcatch handle for projecting and pivoting windows.</i>
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R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

280.002.XX (Alutec)		Cricchetto universale UNIV. carter, gancio e riscontrino in alluminio, particolari di scorrimento in nylon caricato <i>Universal spring latch aluminium carter, hook and striker, nylon sliding parts</i>
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R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

503.641.XX (Alutec)		Chiusura a cricchetto regolabile per vasistas <i>Adjustable spring catch for hopper windows</i>
------------------------	--	--

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

503.642.XX (Alutec)		Chiusura a cricchetto per vasistas. <i>Spring latch locking for hopper windows.</i>
------------------------	--	--

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

**ACCESSORI BREVETTATI  
PATENTED ACCESSORIES**
**CHIUSURE  
LOCKINGS**

Articolo Item	Immagine Picture	Descrizione Description						
A.4308.ZA		<p>Meccanismo interno per maniglia martellina interasse 43 quadro 7 mm  <i>Internal mechanism for marteline handle distance between centers 43 square 7 mm</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

A.4309.ZA		<p>Meccanismo interno per anta ribalta e maniglia martellina interasse 43 quadro 7 mm  <i>Internal mechanism for tilt ant turn and marteline handle distance between centers 43 square 7 mm</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

403.801.55 (Alutec)		<p>Manovra per puntali 404.145.05 - 404.141.55 in abbinamento all'asta 900221  <i>Deadlatch for terminals 404.145.05 - 404.141.55 to pair with rod 900221</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

403.806.05 (Alutec)		<p>Manovra a leva con blocchetto di collegamento per puntali 404.145.05 - 404.141.55  <i>Lever deadlatch with junction block for terminals 404.145.05 - 404.141.55</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

403.852.05 (Alutec)		<p>Asta di prolunga  <i>Extension rod</i>  L = 1000 mm</p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

503.094.55 (Alutec)		<p>Chiusura a scatto per anta semifissa.  <i>Snap release locking for semi-fixed leaf.</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

503.160.69 (Alutec)		<p>Serratura con cilindro in zama con perno in acciaio inox.  <i>Locking with zamak cylinder with stainless steel pivot.</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

**INCONTRI SERRATURA  
LOCK JUNCTION**

Articolo Item	Immagine Picture	Descrizione Description						
417.250.55 (Alutec)		<p>Incontro serratura.  <i>Lock junction.</i></p> <table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
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		<table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

		<table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT						
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R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

		<table border="1"> <tr> <td>R50TT</td> <td>R62TT</td> <td>R72TT</td> </tr> <tr> <td>R72TT1.3</td> <td>R85TT1.0</td> <td></td> </tr> </table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
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R72TT1.3	R85TT1.0							

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R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

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R50TT	R62TT	R72TT						
R72TT1.3	R85TT1.0							

**ACCESSORI BREVETTATI  
PATENTED ACCESSORIES**
**INNESTI - PUNTALI - RISCONTRI  
COUPLINGS - TERMINALS - STRIKERS**

Articolo Item	Immagine Picture	Descrizione Description	Articolo Item	Immagine Picture	Descrizione Description												
A.3501.TA		Coppia innesti cremonese apertura interna su profilo 900221 <i>Pair of couplings internal opening for profile 900221</i>	504.081.55 <i>(Alutec)</i>		Riscontro in nylon con rullino per puntali <i>Nylon striker with roller for terminals</i>												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
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R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
A.4016.IA A.4017.IA A.4018.IA A.4019.IA		Perno di collegamento per aperture esterne lunghezza: <i>Pin for external opening lenght:</i> 17 mm 22 mm 25 mm 30 mm	504.091.05 <i>(Alutec)</i>		Riscontro regolabile per puntali: <i>Adjustable striker for terminals:</i>												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
404.100.02 <i>(Alutec)</i>		Nottolino di chiusura supplementare su astina <i>Rivetting additional locking point on the rod</i>	504.103.01 <i>(Alutec)</i>		Riscontro per terza chiusura su innesti cremonese: 404.110.55 <i>Striker for 3rd locking on couplings:</i> 404.110.55												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
404.101.02 <i>(Alutec)</i>		Incontro supplementare su telaio <i>Additional locking point on the sash</i>	504.120.01 <i>(Alutec)</i>		Riscontro con rullino in acciaio inox per chiusure supplementari, apertura interna e anta ribalta. <i>Striker with stainless steel roller for additional lockings internal opening and tilt and turn</i>												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT															
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R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
404.141.55 <i>(Alutec)</i>		Coppia puntali in nylon su profilo 900221 <i>Pair of terminals on profile 900221</i>	504.206.05 <i>(Alutec)</i>		Incontro di chiusura supplementare lato cerniere. <i>U-Bolt for additional locking hinge side</i>												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
404.121.05 <i>(Alutec)</i>		Kit chiusura supplementare per apertura interna ed esterna. <i>Additional lock kit for internal and external opening.</i>															
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0										
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																
404.145.05 <i>(Alutec)</i>		Coppia puntali in zama, su profilo 900221 <i>Pair of zamak terminals on profile 900221</i>															
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0										
R50TT	R62TT	R72TT															
R72TT1.3	R85TT1.0																

## ACCESSORI BREVETTATI PATENTED ACCESSORIES

### COMPASSI ARMS

Articolo Item	Immagine Picture	Descrizione Description
A.1812.VV		Braccio limitatore di apertura DX <i>Opening limitator arm DX</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
A.1813.VV		Braccio limitatore di apertura SX <i>Opening limitator arm SX</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
A.3905.IA		Coppia bracci ammortizzati sganciabili in acciaio inox per vasistas <i>Pair of detachable amortized stainless steel arms for hopper windows</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
A.3906.IA		Coppia bracci ammortizzati sganciabili in acciaio inox per vasistas <i>Pair of detachable amortized stainless steel arms for hopper windows</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
A.3907.IA		Coppia bracci ammortizzati sganciabili in acciaio inox per vasistas <i>Pair of detachable amortized stainless steel arms for hopper windows</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
506.300.05 (Alutec)		Gruppo articolazione per sporgere comprensivo di coppie di rinforzo in acciaio inox portata max. kg. 75 <i>Kit for projecting windows inclusive of stiffened stainless steel torques capacity max 75 kg.</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
406.300.05 (Alutec)		Coppia asta a sporgere portata max 50 kg. <i>Pair of projecting rods capacity max 50 kg.</i>

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

**ANTA RIBALTA** **Rbalta 150**

TILT AND TURN

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
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A.1800.VV



Kit base anta ribalta "Rbalta 150" composto da:

- Rinvio d'angolo in zama con perno di chiusura integrale
- Riscontro per chiusura su rinvio d'angolo
- innesto cremonese personalizzato
- Meccanismo anti falsa manovra
- Puntale inferiore dx
- Puntale inferiore sx
- Perno di chiusura per puntale inferiore
- Riscontro per chiusura su puntale
- Riscontro orizzontale per puntale inferiore

"Rbalta 150" tilt and turn basic kit, consisting of :

- with zama corner locking pin integral
- lock striker to corner drive
- custom couplings cremona
- lock movement
- lower terminals dx
- lower terminals sx
- lock pin for lower terminals
- lock striker on terminals
- horizontal striker on lower terminals

**Accessori supplementari**  
**Additional accessories**

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Descrizione Description
------------------	----------------------------

**A.1801.VX.(xx)** Kit cerniere verniciate portata 150 Kg  
Hinges kit painted loaded 150 Kg

**A.1802.VV** Braccio medio (L=550 / 1700mm)  
Standard arm (L=550 / 1700mm)

**A.1803.VV** Braccio corto (L=350 / 549mm)  
Short arm (L=350 / 549mm)

**A.1804.VV** Braccio supplementare (L>1200mm)  
Supplementary arm (>1200mm)

**A.1807.VV** Kit chiusura supplementare su asta  
Supplementary closure point

**A.1808.VV** Rinvio d'angolo supplementare inferiore e superiore  
Supplementary corner drive upper and lower

**ANTA RIBALTA** **Rbalta 150**

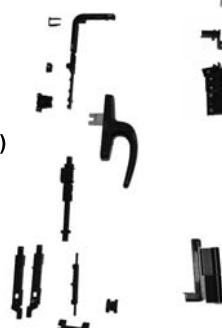
TILT AND TURN

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Immagine Picture	Descrizione Description
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A.1805.VX.(xx)



Kit completo anta ribalta "Rbalta 150" con braccio medio, composto da:

- Kit base - A.1800.VV
- Kit cerniere vernicate - A.1801.VX
- Cremonese anta ribalta - A.4004.ZX
- Braccio medio (L=550 / 1700) - A.1802.VV

"Rbalta 150" tilt and turn complete with standard arm:

- Kit base - A.1800.VV
- Kit hinge painted - A.1801.VX
- Tilt and turn cremona - A.4004.ZX
- Standard arm (L=550/1700) A.1802.VV

Kit completo anta ribalta

"Rbalta 150" con braccio corto, composto da:

- Kit base - A.1800.VV
- Kit cerniere vernicate - A.1801.VX
- Cremonese anta ribalta - A.4004.ZX
- Braccio corto (L=350 / 549) - A.1803.VV

"Rbalta 150" tilt and turn complete with short arm:

- Kit base - A.1800.VV
- Kit hinge painted - A.1801.VX
- Tilt and turn cremona - A.4004.ZX
- Short arm (L=350/549) A.1803.VV

**Accessori supplementari**  
**Additional accessories**

R50TT	R62TT	R72TT
R72TT1.3	R85TT1.0	

Articolo Item	Descrizione Description
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Articolo Item	Descrizione Description
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**A.1809.VX.(xx)** Kit cerniere anta affiancata  
Hinge kit to side leaf

**A.1810.VV** Kit paletti anta semifissa  
Kit of latches for semi-fixed leaf

**A.1811.VV** Kit paletti anta semifissa a manovra e leva  
Kit of latches lever bolt for semi-fixed leaf

**A.1812.VV** Braccio limitatore di apertura DX  
Opening limitator arm DX

**A.1813.VV** Braccio limitatore di apertura SX  
Opening limitator arm SX

**A.4004.ZX.(xx)** Cremonese anta ribalta  
Tilt and turn cremona

## ACCESSORI BREVETTATI PATENTED ACCESSORIES

### TAPPI PLUGS

Articolo Item	Immagine Picture	Descrizione Description
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A.2126.EN<sup>(AP)</sup>

Coppi tappi battuta centrale su  
R85C43

Pair of plugs on profile R85C43

		R85TT1.0

### SCARICHI ACQUA WATER DRAINAGES

Articolo Item	Immagine Picture	Descrizione Description
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509.270.55  
(Alutec)

Valvola scarico acqua in nylon.  
Nylon water drainage valve.

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

A.2143.NN<sup>(AP)</sup>



Tappo aggiuntivo in nylon per  
profilo R85C76 in abbinamento  
con i tappi cod. A.2126.EN  
Nylon additional plug for section  
R85C76 to combine to cod.  
A.2126.EN

509.260.55  
(Alutec)

Paratempsta in nylon.  
Water drain cover of nylon.

509.260.60  
(Alutec)

- nero - black
- bianco - white

A.2143.NB<sup>(AP)</sup>

Nero RAL 9005 / Black RAL 9005  
Bianco RAL 9010/ White RAL 9010

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

A.2116.TN



Tappo aggiuntivo in nylon per  
profilo R85C84 in abbinamento  
con i tappi cod. A.2126.EN  
Nylon additional plug for section  
R85C84 to combine to cod.  
A.2126.EN

509.261.55  
(Alutec)

Paratempsta in nylon.  
Water drain cover of nylon.

509.261.60  
(Alutec)

- nero - black
- bianco - white

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

509.264.55  
(Alutec)

Paratempsta in nylon.  
Water drain cover of nylon.

509.265.55  
(Alutec)

- nero - black
- bianco - white

R50TT	R62TT	R72TT
R72TTCE	R72TT1.3	R85TT1.0

### SPESSORAMENTO VETRI SHIM FOR GLASSES

Articolo Item	Immagine Picture	Descrizione Description
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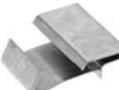


A.2833.AA

Supporto ed appoggio vetro  
Glass support

	R72TT1.3	R85TT1.0

**ATTACCHI ALLA MURATURA**  
WALL FASTENERS

Articolo Item	Immagine Picture	Descrizione Description
<b>410.100.00</b> <b>(Alutec)</b>		Molla in acciaio zincato per coprifilo angolare <i>Galvanized steel spring for angular coverwire</i>

<b>410.330.55</b> <b>(Alutec)</b>		Clip ad infilare per profili angolari. <i>Insert clip for angular profiles.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>410.405.01</b> <b>(Alutec)</b>		Basetta unificata per regolo mobile in zama pressofusa. <i>Unified plate for adjustable block made of die-casting zamak.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.480.01</b> <b>(Alutec)</b>		Fissaggio a muro laterale in alluminio estruso. <i>Extruded aluminium lateral wall fastener.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.491.55</b> <b>(Alutec)</b>		Tappo rotondo copriforo Ø 12 mm in polietilene. <i>Circular coverhole plug Ø mm 12 made of polyethylene.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.415.01</b> <b>(Alutec)</b>		Regolo mobile. <i>Adjustable block.</i>
		L = mm 15

<b>510.420.01</b> <b>(Alutec)</b>		L = mm 20

<b>510.430.01</b> <b>(Alutec)</b>		L = mm 30

<b>510.445.01</b> <b>(Alutec)</b>		L = mm 45

<b>510.460.01</b> <b>(Alutec)</b>		L = mm 60

	<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT					
	R72TT1.3	R85TT1.0					

**ATTACCHI ALLA MURATURA**  
WALL FASTENERS

Articolo Item	Immagine Picture	Descrizione Description
<b>510.490.55</b> <b>(Alutec)</b>		Tappo rettangolare copriforo Ø 12 mm in polietilene <i>Rectangular coverhole plug Ø mm 12 made of polyethylene</i>
<b>510.490.60</b> <b>(Alutec)</b>		- colore nero - black color - colore bianco - white color

<b>R50TT</b>	<b>R62TT</b>	<b>R72TT</b>
	R72TT1.3	R85TT1.0

<b>410.330.55</b> <b>(Alutec)</b>		Clip ad infilare per profili angolari. <i>Insert clip for angular profiles.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>410.405.01</b> <b>(Alutec)</b>		Basetta unificata per regolo mobile in zama pressofusa. <i>Unified plate for adjustable block made of die-casting zamak.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.480.01</b> <b>(Alutec)</b>		Fissaggio a muro laterale in alluminio estruso. <i>Extruded aluminium lateral wall fastener.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.491.55</b> <b>(Alutec)</b>		Tappo rotondo copriforo Ø 12 mm in polietilene. <i>Circular coverhole plug Ø mm 12 made of polyethylene.</i>						
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td></td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT		R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
	R72TT1.3	R85TT1.0						

<b>510.415.01</b> <b>(Alutec)</b>		Regolo mobile. <i>Adjustable block.</i>
		L = mm 15

<b>510.420.01</b> <b>(Alutec)</b>		L = mm 20

<b>510.430.01</b> <b>(Alutec)</b>		L = mm 30

<b>510.445.01</b> <b>(Alutec)</b>		L = mm 45

<b>510.460.01</b> <b>(Alutec)</b>		L = mm 60

**ACCESSORI BREVETTATI**  
**PATENTED ACCESSORIES**

**ATTREZZATURE**  
**TOOLS**

Articolo Item	Immagine Picture	Descrizione Description	Articolo Item	Immagine Picture	Descrizione Description												
581.021.00 (Alutec)		Attrezzo per posizionamento contropiasta cerniere pesanti e cardini Tool for positioning counterplate for heavy hinges and cardini	581.034.00 (Alutec)		Punzonatrice lavorazione astine Punching machine for rods processing												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
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R72TT1.3	R85TT1.0																
581.023.00 (Alutec)		Boccola per foratura con impugnatura Drilling bushing with handgrip	581.037.00 (Alutec)		Dima foratura per cerniere ad elevata portata Drilling template for heavy hinges												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0	
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R72TT1.3	R85TT1.0																
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R72TT1.3	R85TT1.0																
581.024.00 (Alutec)		Maschera piazzamento slitta rientro anta Leaf retracting slide positioning template	581.171.00 (Alutec)		Cesoia taglia guarnizioni in metallo UNIV. Metal shear for weatherstrips cutting												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
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R72TTCE	R72TT1.3	R85TT1.0															
581.025.00 (Alutec)		Morsetto di piazzamento guide scorrevoli Sliding guides positioning clamp	M.2001.00		Cianfrinatrice manuale Manual crimping tool												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
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R72TTCE	R72TT1.3	R85TT1.0															
581.026.00 (Alutec)		Maschera di foratura piazzamento carrelli Rollers positioning drilling template	U.9801.VV		Chiave esagonale doppia da 4-5-6 UNIV. Double hexagonal wrench of 4-5-6												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
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R50TT	R62TT	R72TT															
R72TTCE	R72TT1.3	R85TT1.0															
581.030.00 (Alutec)		Dima foratura per cerniere pesanti per montante ridotto interasse 60 mm Drilling template for heavy hinges for small stile distance between centers mm 60	U.9802.VV		Chiave esagonale doppia da 2.5-3 UNIV. Double hexagonal wrench of 2.5-3												
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0				<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
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R50TT	R62TT	R72TT															
R72TTCE	R72TT1.3	R85TT1.0															
581.033.00 (Alutec)		Dima universale per tavellino. Universal template for flat catch.															
		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TT1.3</td><td>R85TT1.0</td><td></td></tr></table>	R50TT	R62TT	R72TT	R72TT1.3	R85TT1.0										
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R72TT1.3	R85TT1.0																

**ACCESSORI BREVETTATI  
PATENTED ACCESSORIES**
**GUARNIZIONI  
WEATHERSTRIPS**

Articolo Item	Immagine Picture	Descrizione Description			
G.0122.EN		Guarnizione di precamera. <i>Central weatherstrip.</i> E.P.D.M <table border="1"><tr><td></td><td></td><td>R85TT1.0</td></tr></table>			R85TT1.0
		R85TT1.0			

G.0123.EN		Guarnizione da 4-6 mm su f.vetro <i>mm 4-6 glass support weatherstrip</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
G.0124.EN		Guarnizione su fermavetro da 2,5-3,5 mm <i>mm 2,5-3,5 glass support weatherstrip</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0126.EN <sup>(ABP)</sup>		Guarnizione di battuta <i>Weatherstrip of rabbet</i> EN = E.P.D.M  RN = PVC coestruso <i>Coextruded P.V.C.</i>						
G.0138.RN <sup>(ABP)</sup>		TN = T.P.E. <i>T.P.R</i>						
G.0155.TN <sup>(BP)</sup>		EN = E.P.D.M coestruso <i>Coextruded E.P.D.M</i>						
G.0156.FN <sup>(BP)</sup>		<table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0127.EN <sup>(ABP)</sup>		Guarnizione su fermavetro spessore 2 mm <i>Weatherstrip on glazing bead shim mm 2</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0128.EN <sup>(ABP)</sup>		Guarnizione su fermavetro spessore 3 mm <i>Weatherstrip on glazing bead shim mm 3</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0129.EN <sup>(ABP)</sup>		Guarnizione su fermavetro spessore 6 mm <i>Weatherstrip on glazing bead shim mm 6</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0131.EN <sup>(ABP)</sup>		Guarnizione di battuta inserimento a scatto <i>Released insertion weatherstrip of rabbet</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0134.EN <sup>(ABP)</sup>		Guarnizione appoggio esterno vetri da 3 mm <i>mm 3 glass support weatherstrip</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

**GUARNIZIONI  
WEATHERSTRIPS**

Articolo Item	Immagine Picture	Descrizione Description						
G.0139.RN <sup>(ABP)</sup>		Guarnizione appoggio vetri 1.5 mm <i>Weatherstrip on glass support mm 1,5</i> P.V.C. Coestruso <i>Coextruded P.V.C.</i> <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0140.RN <sup>(ABP)</sup>		Guarnizione appoggio vetri da 3 mm <i>mm 3 glass support weatherstrip</i> P.V.C. Coestruso <i>Coextruded P.V.C.</i> <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
G.0149.EN <sup>(BP)</sup>		Guarnizione su fermavetro spessore 4 mm <i>Weatherstrip on glazing bead shim mm 4</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0150.EN <sup>(BP)</sup>		Guarnizione su fermavetro spessore 5 mm <i>Weatherstrip on glazing bead shim mm 5</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						
G.0152.EN		Guarnizione appoggio esterno vetri da 3 mm <i>mm 3 glass support weatherstrip</i> E.P.D.M <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0159.EN		Guarnizione sotto vetro <i>Weatherstrips under glass</i> E.P.D.M <table border="1"><tr><td></td><td></td><td>R85TT1.0</td></tr></table>			R85TT1.0
		R85TT1.0			

G.0314.RN <sup>(AP)</sup>		Guarnizione di tenuta su profili 800780 <i>Sealing weatherstrip on profile 800780</i> P.V.C. Coestruso <i>Coextruded P.V.C.</i> <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

G.0316.QN		Guarnizione porta spazzolino <i>Weatherstrip woolpile holder</i> P.V.C. rigid <i>Rigid P.V.C.</i> <table border="1"><tr><td>R50TT</td><td>R62TT</td><td>R72TT</td></tr><tr><td>R72TTCE</td><td>R72TT1.3</td><td>R85TT1.0</td></tr></table>	R50TT	R62TT	R72TT	R72TTCE	R72TT1.3	R85TT1.0
R50TT	R62TT	R72TT						
R72TTCE	R72TT1.3	R85TT1.0						

**ANGOLI STAMPATI IN EPDM  
EPDM MOULDED CORNERS**

Articolo Item	Immagine Picture	Descrizione Description			
A.0226.EN		Angolo stampato per guarnizione G.0122.EN <i>Moulded corner for weatherstrip G.0122.EN</i> E.P.D.M <table border="1"><tr><td></td><td></td><td>R85TT1.0</td></tr></table>			R85TT1.0
		R85TT1.0			

**ACCESSORI BREVETTATI**  
**PATENTED ACCESSORIES**

**ISOLANTE TERMICO**  
**THERMIC INSULATION**

Articolo Item	Immagine Picture	Descrizione Description	Articolo Item	Immagine Picture	Descrizione Description
A.0393.WA (*)		Isolante per profilati con tubolare da 28 mm <i>Insulation for profile piping 28 mm</i>			
A.0394.WA (*)		Isolante per profilati R72C688/707 <i>Insulation for sections R72C688/707</i>			
A.0395.WA (*)		Isolante per profilati con tubolare da 52 mm <i>Insulation for profile piping 52 mm</i>			
A.0396.WA (*)		Isolante per profilati R72C646/647 <i>Insulation for sections R72C646/647</i>			
A.0231.WA (°)		Isolante adesivo per sottovetro e telaio 14x5 mm <i>underglass Insulation</i>			
A.0234.WA (°)		Isolante adesivo per sottovetro 30x6 mm <i>underglass Insulation</i>			

(\*) = Accessori forniti in barre con lunghezza 1 m  
(\*) = Accessories are supplied bars with lenght of 1 m

(°) = Accessori forniti in bobine da 25 m  
(°) = Accessories are supplied in coils of 25 m

# DIAGRAMMI PER IL DIMENSIONAMENTO STATICO DELLE ANTE STATIC WING-SIZING DIAGRAMS

I grafici di seguito riportati sono stati ottenuti con la seguente formula:

The graphs below were created using the following formula:

$$J(cm^4) = \frac{q(Kgf/cm^2) \times H^4(cm) \times A(cm)}{1920 \times E(Kgf/cm^2) \times f(cm)} \times \left[ 25-40 \times \left( \frac{A}{H} \right)^2 + 16 \times \left( \frac{A}{H} \right)^4 \right]$$

Dove:

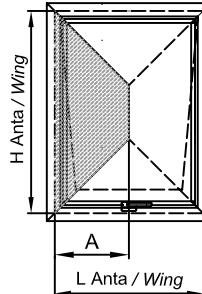
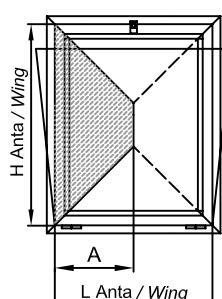
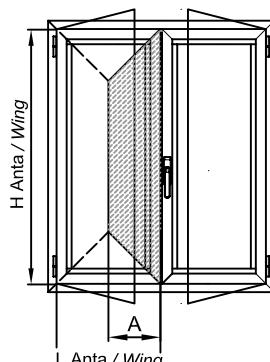
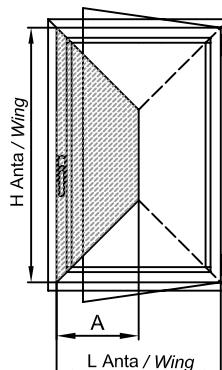
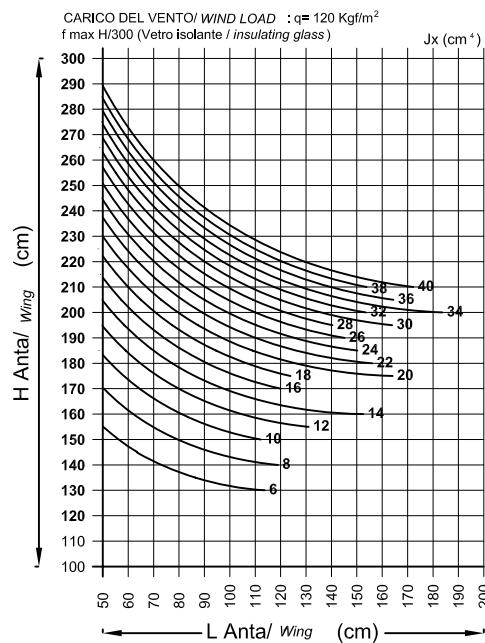
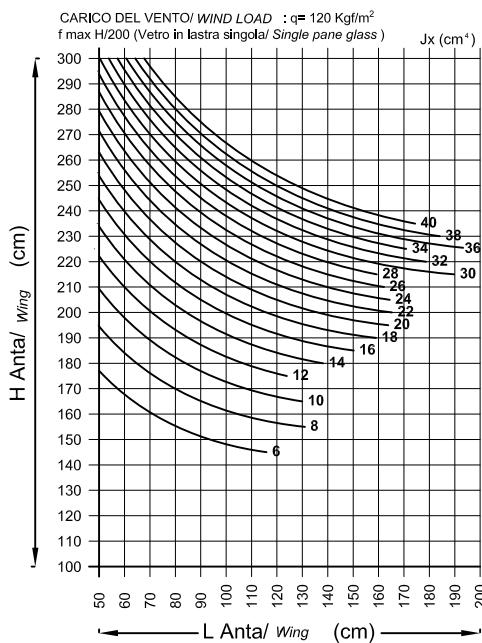
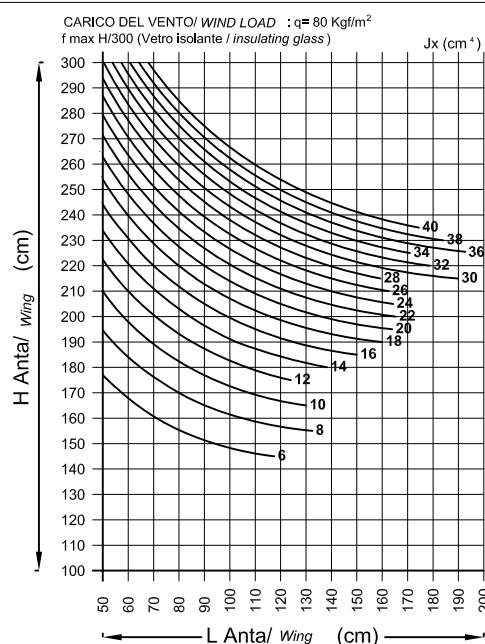
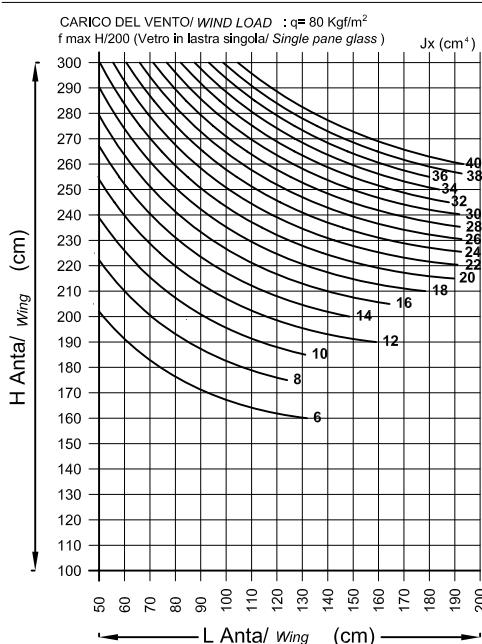
$J_x$  = Momento d'inerzia (cm<sup>4</sup>)      A = Larghezza anta : 2 (cm)  
 q = Carico del vento (Kgf/cm<sup>2</sup>)      E = Modulo di elasticità (Kgf/cm<sup>2</sup>)  
 H = Altezza anta (cm)      f = Freccia (cm)

Essa è riferita al dimensionamento delle ante rispetto all'inerzia del profilato, per cui verificare sempre che il peso delle ante sia compatibile con la portata degli accessori impiegati, cerniere ecc. Inoltre verificare, sempre che la freccia dei profilati sia compatibile con il vetro impiegato.

Were:

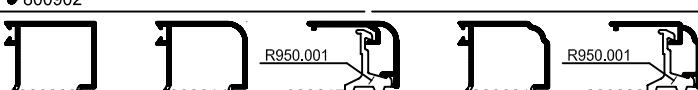
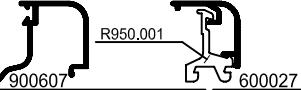
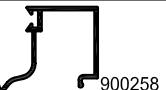
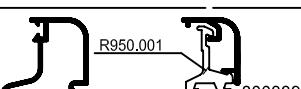
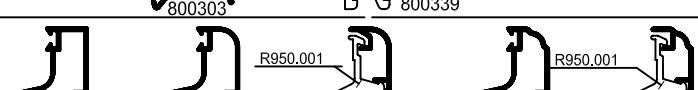
$J_x$  = Moment of inertia (cm<sup>4</sup>)      A = Wing/2 width (cm)  
 q = Wind load (Kgf/cm<sup>2</sup>)      E = Coefficient of elasticity (Kgf/cm<sup>2</sup>)  
 H = Wing height (cm)      f = Camber (cm)

This refers to the size of the wings compared with the section inertia so always make sure the weight of the wings is compatible with the load of accessories hinge etc. used.  
 Also always check that the section camber is suitable for the glass used.



**INSERIMENTO GUARNIZIONI, VETRI E FERMAVETRI**  
**WEATHERSTRIPS. GLASS AND GLASS BEADINGS INSERTION**

**R** **85 TT 1.0**  
 SYSTEM

Articolo Item	Guarnizioni esterne External weatherstrips	Sezione Section	Articolo Item	Guarnizioni interne Internal weatherstrips	Sezione Section
G.0152.EN	A = 3 mm		G.0124.EN	B = 2,5/3,5 mm	
			G.0123.EN	C = 4/6 mm	
Spessore vetro Glass thickness	Guarnizioni Weatherstrips	Dimensione fermavetri Glass beading size		Vetro ad infilare Glass to insert	
26 - 28 28 - 29	A+C A+B	35 mm		 800902	
31 - 33 33 - 34	A+C A+B	30 mm		 900260 R950.001 900614 R950.001 900617 800681 R950.001 800682	
33 - 35 35 - 36	A+C A+B	28 mm		 800741	
35 - 37 37 - 38	A+C A+B	26 mm		 900259 800812 R950.001 800677 R950.001 800678	
38 - 40 41 - 42	A+C A+B	22,5 mm		 900607 R950.001 600027	
39 - 41 44 - 45	A+C A+B	22 mm		 900258	
42 - 44 44 - 45	A+C A+B	19 mm		 800303 R950.001 800339	
47 - 49 49 - 50	A+C A+B	14 mm		 900256 800307 R950.001 800313 R950.001 800661 R950.001 800662	
50 - 52 52 - 53	A+C A+B	11 mm		 800829	
52 - 54 54 - 55	A+C A+B	9 mm		 800755	
56 - 58 58 - 59	A+C A+B	5 mm		 800873	
59 - 61 61 - 62	A+C A+B	2 mm		 800874	

N.B.: Le combinazioni sopra indicate sono state ottenute considerando le quote teoriche. Si consiglia sempre di verificare le tolleranze per applicare vetri, fermavetri e guarnizioni ottimali.

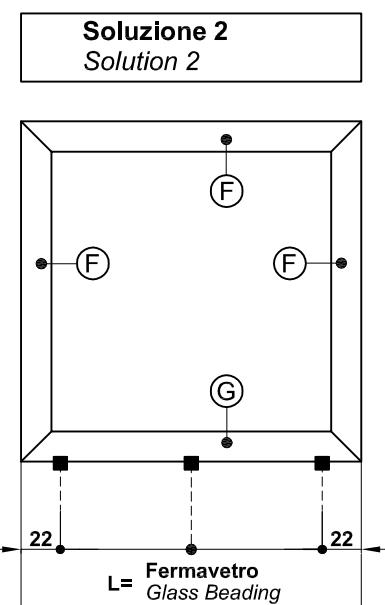
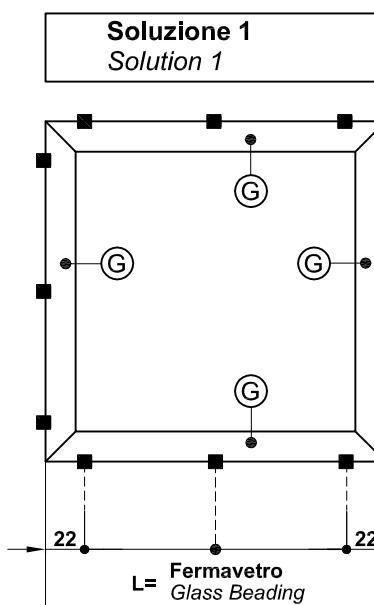
The above combinations were obtained considering the theoretic heights. It is always best to check tolerances to apply correct glass, glass beadings and weatherstrips.

# POSIZIONAMENTO ACCESSORIO FERMAVETRO ARROTONDATO

## ROUNDED GLASSES BEADING ACCESSORY POSITIONING

**R** 85 TT 1.0  
SYSTEM

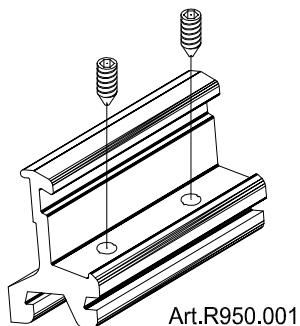
Sezione Fermavetri Glass Beading Section	Dimensione Size	
(F) 900614	(G) 900617	30 mm
800681	800682	30 mm
800677	800678	26 mm
900607	600027	22,5 mm
800303	800339	19 mm
800679	800680	18 mm
800307	800313	14 mm
800661	800662	14 mm



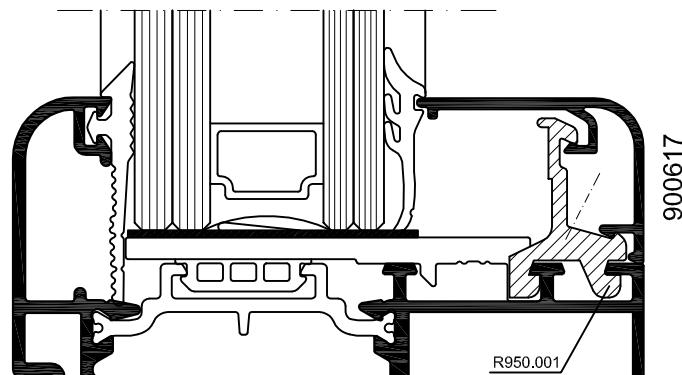
(F) = Fermavetro arr. a scatto  
Radiused glass beading snap

(G) = Fermavetro arr. con accessorio R950.001  
Radiused glass beading with accessory R950.001

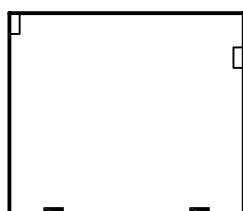
■ =Art. R950.001  
Per L/H ≤ 1000mm n°3pz  
Per L/H < 1000mm ≤ 1500mm n°4pz  
Per L/H > 1500mm n°5pz



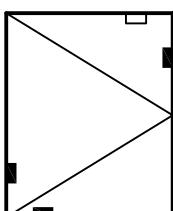
Art.R950.001



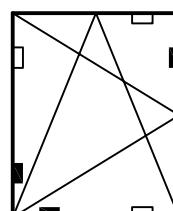
## SPESSORAMENTO VETRI GLASS SHIM



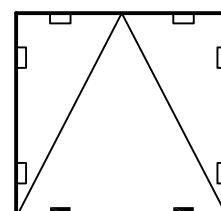
Telaio fisso  
Fixed frame



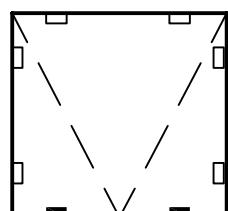
Anta a battente  
Casement wing



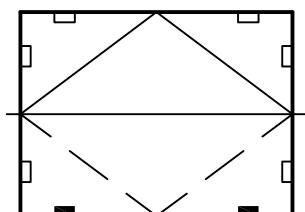
Anta ribalta  
Tilt-and-turn window



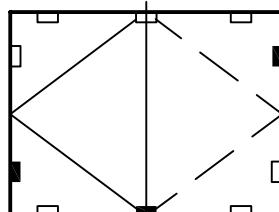
Vasistas  
Hopper window



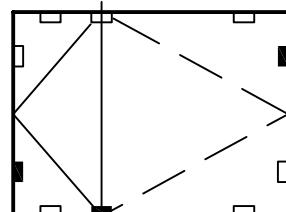
Sporgere  
Projecting window



Bilico orizzontale  
Horizontal pivoting window



Bilico verticale  
Vertical pivoting window

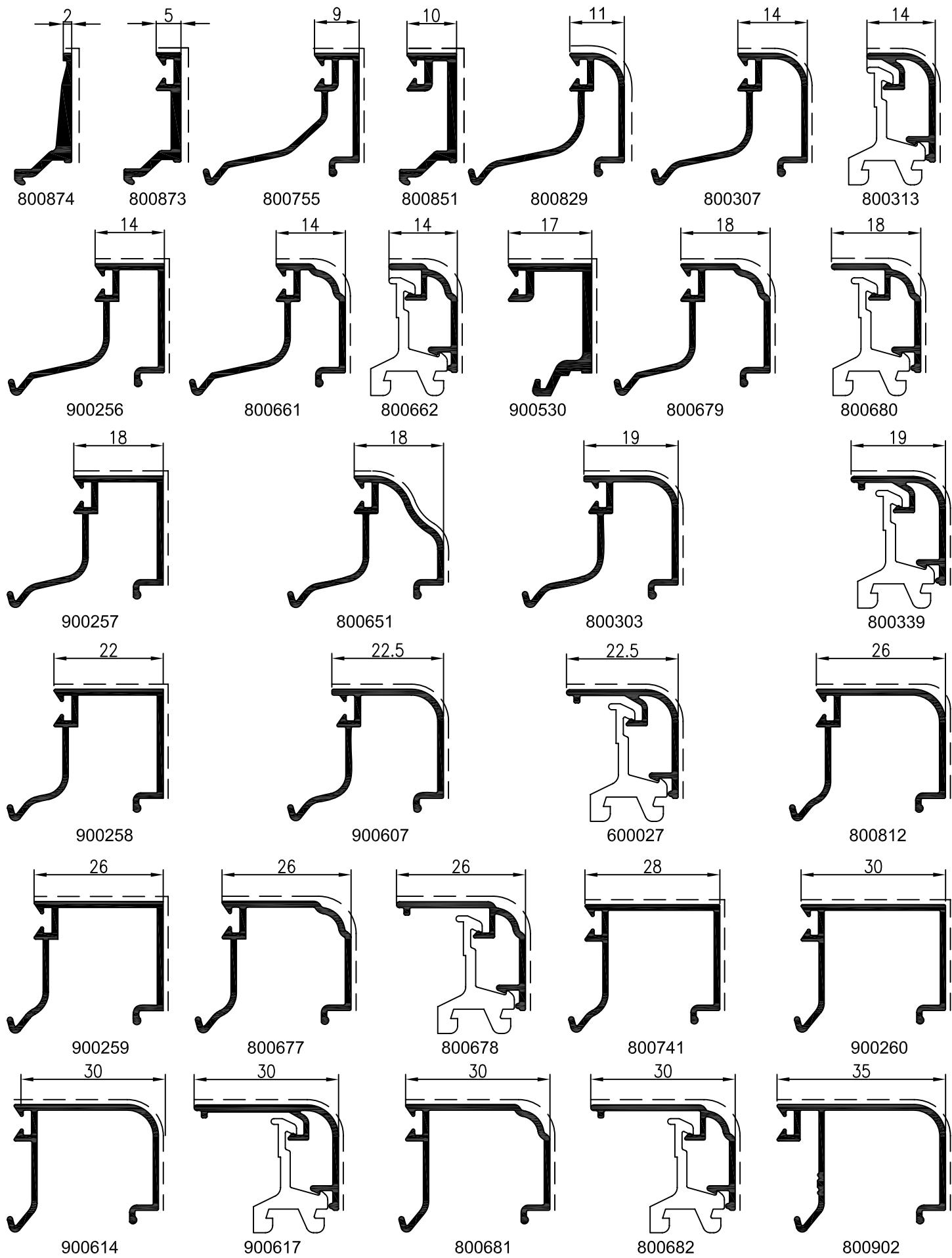


Bilico verticale (asse decentrato)  
Vertical pivoting window (Decentralized axis)

Tassello d'appoggio  
Support block

Tassello periferico  
Peripheral block

Profilato Section	Sezione Cross section	Peso Weight Kg/ml	Perim. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /ml	Profilato Section	Sezione Cross section	Peso Weight Kg/ml	Perim. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /ml
600027		0,181	115	0,042	800829		0,253	167	0,030
800303		0,271	173	0,041	800851		0,231	109	0,035
800307		0,256	169	0,040	800873		0,186	87	0,029
800313		0,145	93	0,040	800874		0,183	71	0,026
800339		0,170	108	0,044	800902		0,322	203	0,056
800651		0,251	161	0,033	900256		0,273	183	0,036
800661		0,259	167	0,032	900257		0,275	177	0,040
800662		0,140	90	0,031	900258		0,278	178	0,044
800677		0,273	173	0,044	900259		0,286	180	0,048
800678		0,184	117	0,044	900260		0,288	182	0,052
800679		0,265	169	0,036	900530		0,276	114	0,039
800680		0,154	99	0,036	900607		0,271	175	0,042
800681		0,281	178	0,048	900614		0,278	180	0,050
800682		0,197	125	0,048	900617		0,219	129	0,052
800741		0,289	183	0,050					
800755		0,262	167	0,032					
800812		0,275	174	0,040					



**ELENCO PROFILATI**  
 LIST OF SECTIONS

**85 TT 1.0**  
 SYSTEM

Profilato Section	Comp.ne Composition	Sezione Cross section	Y X-X Y	Peso Weight Kg/m	Perimetro Perimeter mm	Superficie in vista Exposed surface m <sup>2</sup> /m	Jx cm <sup>4</sup>	Wx cm <sup>3</sup>	Jy cm <sup>4</sup>	Wy cm <sup>3</sup>
R85C39 R85D39	800617 A.0330.LN A.0330.LN 800592			2,489	634	0,258	134,71	20,88	36,13	7,52
R85C41 R85D41	800504 A.0330.LN A.0330.LN 800585			1,438	485	0,109	36,32	9,16	8,83	2,44
R85C42 R85D42	800507 A.0330.LN A.0329.LN 800585			1,565	524	0,114	46,55	10,85	10,53	2,79
R85C43 R85D43	800587 A.0330.LN A.0330.LN 800586			1,461	516	0,107	37,45	8,59	8,23	2,31
R85C44 R85D44	800504 A.0330.LN A.0330.LN 800588			1,326	423	0,083	31,06	7,85	5,43	1,65
R85C45 R85D45	800508 A.0330.LN A.0330.LN 800588			1,442	510	0,110	35,69	8,30	9,08	2,52
R85C46 R85D46	800511 A.0330.LN A.0330.LN 800589			2,733	658	0,282	77,91	19,99	174,15	22,04
R85C47 R85D47	800511 A.0330.LN A.0330.LN 800590			2,851	722	0,309	83,75	22,00	194,59	23,71
R85C48 R85D48	800508 A.0330.LN A.0330.LN 800585			1,554	572	0,136	42,21	10,72	11,88	3,10
R85C49 R85D49	800514 A.0330.LN A.0330.LN 800591			1,738	556	0,156	47,16	12,13	27,23	5,65
R85C50 R85D50	800514 A.0330.LN A.0330.LN 800592			1,625	474	0,131	41,51	10,56	20,38	4,57
R85C51 R85D51	800516 A.0330.LN A.0330.LN 800592			1,742	563	0,158	46,41	11,01	27,67	5,76
R85C52 R85D52	800516 A.0330.LN A.0330.LN 800591			1,855	620	0,183	52,79	13,43	33,52	6,61

 Le lettere C e D presenti nei codici sopra riportati stanno ad indicare rispettivamente:  
 C = profili interno ed esterno più barrette assemblati - es. R85C41

D = profili interno ed esterno più barrette non assemblati - es. R85D41

N.B.: I profilati sono forniti in lunghezza di 6800 mm

 The letters C and D in the above codes indicate respectively:  
 C = Assembled internal and external sections with bars - ex. R85C41  
 D = Non assembled internal and external sections with bars - ex. R85D41

The sections are supplied with length of 6800 mm

**ELENCO PROFILATI**  
 LIST OF SECTIONS

**85 TT 1.0**  
 SYSTEM

Profilato Section	Comp.ne Composition	Sezione Cross section	Y X-X Y	Peso Weight Kg/m	Perimetro Perimeter mm	Superficie in vista Exposed surface m <sup>2</sup> /m	Jx cm <sup>4</sup>	Wx cm <sup>3</sup>	Jy cm <sup>4</sup>	Wy cm <sup>3</sup>
R85C53 R85D53	800517 A.0330.LN A.0329.LN 800591			1,966	543	0,161	63,10	14,83	31,13	6,22
R85C54 R85D54	800514 A.0330.LN A.0330.LN 800593			1,944	493	0,153	49,68	12,05	36,90	7,40
R85C59 R85D59	800538 A.0330.LN A.0330.LN 800608			1,325	423	0,106	29,68	6,76	5,43	1,64
R85C60 R85D60	800597 A.0330.LN A.0330.LN 800538			1,442	487	0,127	33,19	7,08	9,05	2,51
R85C61 R85D61	800504 A.0330.LN A.0330.LN 800597			1,560	574	0,149	41,35	9,67	12,06	3,14
R85C62 R85D62	800504 A.0330.LN A.0330.LN 800598			1,742	563	0,158	44,66	9,97	27,55	5,74
R85C69 R85D69	800516 A.0330.LN A.0330.LN 800603			1,900	563	0,158	48,51	12,05	29,40	6,13
R85C70 R85D70	800504 A.0330.LN A.0330.LN 800604			1,629	576	0,140	43,75	9,86	28,27	4,47
R85C71 R85D71	800575 A.0330.LN A.0330.LN 800605			2,318	702	0,162	159,39	22,17	11,24	3,00
R85C72 R85D72	800504 A.0330.LN A.0330.LN 800607			1,470	494	0,114	37,39	9,28	10,04	2,74
R85C73 R85D73	800618 A.0329.LN A.0330.LN 800585			1,583	467	0,114	46,60	10,92	11,11	2,90
R85C75 R85D75	800621 A.0329.LN A.0330.LN 800585			1,637	490	0,116	49,92	11,79	11,42	2,94
R85C76 R85D76	800622 A.0330.LN A.0330.LN 800586			1,786	524	0,114	54,19	10,32	11,90	3,42

 Le lettere C e D presenti nei codici sopra riportati stanno ad indicare rispettivamente:  
 C = profili interno ed esterno più barrette assemblati - es. R85C41

D = profili interno ed esterno più barrette non assemblati - es. R85D41

N.B.: I profilati sono forniti in lunghezza di 6800 mm

 The letters C and D in the above codes indicate respectively:  
 C = Assembled internal and external sections with bars - ex. R85C41  
 D = Non assembled internal and external sections with bars - ex. R85D41

The sections are supplied with length of 6800 mm

**ELENCO PROFILATI**  
 LIST OF SECTIONS

**85 TT 1.0**  
 SYSTEM

Profilato Section	Comp.ne Composition	Sezione Cross section	Y X-X Y	Peso Weight Kg/m	Perimetro Perimeter mm	Superficie in vista Exposed surface m <sup>2</sup> /m	Jx cm <sup>4</sup>	Wx cm <sup>3</sup>	Jy cm <sup>4</sup>	Wy cm <sup>3</sup>
R85C77 R85D77	800508 A.0330.LN A.0330.LN 800608			1,559	551	0,137	42,49	10,83	12,08	3,14
R85C81 R85D81	800648 A.0330.LN A.0330.LN 800588			1,538	503	0,088	43,73	9,31	7,62	2,38
R85C82 R85D82	800648 A.0330.LN A.0330.LN 800585			1,650	541	0,114	51,63	11,93	11,29	3,01
R85C83 R85D83	800649 A.0329.LN A.0330.LN 800585			1,573	525	0,115	47,04	11,01	10,65	2,81
R85C84 R85D84	800650 A.0330.LN A.0330.LN 800586			1,802	526	0,117	54,78	10,36	12,50	3,60
R85C86 R85D86	800504 A.0330.LN A.0330.LN 800701			1,514	525	0,131	39,74	9,54	15,43	3,02
R85C87 R85D87	800504 A.0330.LN A.0330.LN 800659			1,684	626	0,156	45,58	10,00	40,84	5,59
R85C88 R85D88	800690 A.0330.LN A.0330.LN 800689			2,909	942	0,270	78,07	10,27	258,77	26,64
R85C89 R85D89	800540 A.0330.LN A.0330.LN 800591			1,621	492	0,133	40,55	9,64	19,95	4,46
R85C90 R85D90	800540 A.0330.LN A.0330.LN 800608			1,443	511	0,110	36,32	9,16	8,83	2,44
R85C96 R85D96	800730 A.0330.LN A.0330.LN 800731			0,939	407	0,016	27,25	5,34	0,58	0,40
R85C98 R85D98	800722 A.0329.LN A.0330.LN 800585			1,581	492	0,138	46,37	10,83	10,99	2,87
R85C100 R85D100	800770 A.0329.LN A.0330.LN 800591			2,013	544	0,165	65,72	15,05	32,65	6,44

 Le lettere C e D presenti nei codici sopra riportati stanno ad indicare rispettivamente:  
 C = profili interno ed esterno più barrette assemblati - es. R85C41

D = profili interno ed esterno più barrette non assemblati - es. R85D41

N.B.: I profilati sono forniti in lunghezza di 6800 mm

 The letters C and D in the above codes indicate respectively:  
 C = Assembled internal and external sections with bars - ex. R85C41

D = Non assembled internal and external sections with bars - ex. R85D41

The sections are supplied with length of 6800 mm

**ELENCO PROFILATI**  
 LIST OF SECTIONS

**85 TT 1.0**  
 SYSTEM

Profilato Section	Comp.ne Composition	Sezione Cross section	Y X-X Y	Peso Weight Kg/m	Perimetro Perimeter mm	Superficie in vista Exposed surface m <sup>2</sup> /m	Jx cm <sup>4</sup>	Wx cm <sup>3</sup>	Jy cm <sup>4</sup>	Wy cm <sup>3</sup>
R85C103 R85D103	800788 A.0329.LN A.0330.LN 800591			1,959	557	0,157	63,84	14,94	27,93	5,72
R85C105 R85D105	800802 A.0329.LN A.0330.LN 800585			1,575	523	0,120	47,46	11,17	11,05	2,90
R85C106 R85D106	800805 A.0329.LN A.0330.LN 800591			1,974	572	0,163	63,90	14,90	31,92	6,34
R85C107 R85D107	800806 A.0330.LN A.0330.LN 800689			3,055	963	0,267	82,93	11,00	266,42	26,82
R85C108 R85D108	800504 A.0330.LN A.0330.LN 800825			1,579	573	0,133	45,33	10,26	13,82	3,58
R85C109 R85D109	800827 A.0329.LN A.0330.LN 800591			1,976	548	0,165	63,81	14,88	31,54	6,28
R85C110 R85D110	800828 A.0330.LN A.0330.LN 800727			2,577	791	0,163	30,78	5,85	156,56	20,09
R85C111 R85D111	800830 A.0330.LN A.0330.LN 800830			1,280	488	0,105	8,28	2,26	39,65	9,67
R85C112 R85D112	800832 A.0330.LN A.0330.LN 800593			2,157	509	0,153	69,99	16,26	39,04	7,89
R85C113 R85D113	800831 A.0329.LN A.0330.LN 800585			1,523	478	0,115	45,40	10,34	8,87	2,42
R85C115 R85D115	800504 A.0330.LN A.0330.LN 800835			1,271	425	0,063	27,31	6,56	4,97	1,55
R85C119 R85D119	800789 A.0330.LN A.0330.LN 800603			2,095	577	0,162	65,77	14,19	31,07	6,47
R85C120 R85D120	800828 A.0330.LN A.0330.LN 800591			2,204	724	0,163	32,01	6,19	92,68	14,32

 Le lettere C e D presenti nei codici sopra riportati stanno ad indicare rispettivamente:  
 C = profili interno ed esterno più barrette assemblati - es. R85C41

D = profili interno ed esterno più barrette non assemblati - es. R85D41

N.B.: I profilati sono forniti in lunghezza di 6800 mm

 The letters C and D in the above codes indicate respectively:  
 C = Assembled internal and external sections with bars - ex. R85C41

D = Non assembled internal and external sections with bars - ex. R85D41

The sections are supplied with length of 6800 mm

**ELENCO PROFILATI**  
LIST OF SECTIONS

**R** 85<sup>TT</sup> 1.0  
SYSTEM

Profilato Section	Comp.ne Composition	Sezione Cross section	Y X-X Y	Peso Weight Kg/m	Perimetro Perimeter mm	Superficie in vista Exposed surface m <sup>2</sup> /m	Jx cm <sup>4</sup>	Wx cm <sup>3</sup>	Jy cm <sup>4</sup>	Wy cm <sup>3</sup>
R85C121 R85D121	800508 A.0330.LN A.0330.LN 800852			1,524	510	0,132	36,93	8,87	9,11	2,52
R85C122 R85D122	800504 A.0330.LN A.0330.LN 800852			1,408	447	0,087	31,91	8,33	5,48	1,65
R85C123 R85D123	800859 A.0330.LN A.0330.LN 800591			2,295	667	0,165	114,39	17,15	31,67	6,13
R85C144 R85D144	800917 A.0330.LN A.0330.LN 800588			1,587	508	0,059	46,57	9,62	7,56	2,34
R85C145 R85D145	800917 A.0330.LN A.0330.LN 800585			1,699	570	0,111	55,00	12,29	11,18	3,00
R85C146 R85D146	800918 A.0330.LN A.0330.LN 800592			2,000	546	0,139	63,51	12,93	26,91	6,10
R85C147 R85D147	800918 A.0330.LN A.0330.LN 800591			2,113	608	0,167	72,36	15,64	33,99	6,89
R85C153 R85D153	800690 A.0330.LN A.0330.LN 800925			2,536	775	0,248	76,52	10,00	162,13	23,11

Le lettere C e D presenti nei codici sopra riportati stanno ad indicare rispettivamente:  
 C = profili interno ed esterno più barrette assemblati - es. R85C41  
 D = profili interno ed esterno più barrette non assemblati - es. R85D41  
 N.B.: I profilati sono forniti in lunghezza di 6800 mm

The letters C and D in the above codes indicate respectively:  
 C = Assembled internal and external sections with bars - ex. R85C41  
 D = Non assembled internal and external sections with bars - ex. R85D41  
 The sections are supplied with length of 6800 mm

**PROFILATI**  
**SECTIONS**

**R** 85<sup>TT 1.0</sup>  
SYSTEM

Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m	Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m
100009		0.234	82	0.029	800587		0.461	213	0.073
100342		0.143	64	0.025	800588		0.646	221	0.028
800291		0.629	231	0.080	800589		1.519	395	0.114
800504		0.390	172	0.055	800590		1.637	459	0.141
800507		0.497	193	0.060	800591		0.942	333	0.077
800508		0.506	236	0.082	800592		0.829	271	0.052
800511		0.924	409	0.168	800593		1.148	285	0.074
800514		0.506	221	0.079	800597		0.880	350	0.082
800516		0.623	285	0.106	800598		1.063	399	0.106
800517		0.709	239	0.084	800603		0.987	271	0.052
800538		0.272	108	0.028	800604		0.949	376	0.088
800540		0.389	157	0.052	800605		0.713	258	0.037
800575		1.315	416	0.125	800607		0.790	292	0.059
800585		0.758	284	0.054	800608		0.763	285	0.055
800586		0.710	247	0.034	800617		1,370	381	0,206

N.B.: I profilati sono forniti in lunghezza di 6800 mm

The sections are supplied with length of 6800 mm

Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m	Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m
800618		0,515	163	0.060	800731		0.502	197	0.016
800621		0,569	162	0.062	800737		0.980	333	0.105
800622		0,786	219	0.080	800738		0.170	92	0.027
800648		0,602	229	0.060	800759		1.370	469	0.188
800649		0,505	197	0.061	800760		1.043	354	0.146
800650		0,802	222	0.083	800761		1.193	389	0.165
800659		1,004	518	0.159	800762		1.542	540	0.222
800689		1,188	423	0.071	800770		0.761	210	0.087
800690		1,431	531	0.196	800780		0,432	216	0,027
800701		0.834	324	0.072	800788		0,707	229	0,080
800722		0.513	164	0.061	800789		0,818	300	0,102
800727		1.315	431	0.071	800802		0,507	197	0,065
800728		0.297	122	0.042	800805		0,722	245	0,084
800729		0.383	159	0.058	800806		1,577	518	0,190
800730		0.313	131	0.000	800822		0,228	128	0,062

N.B.: I profilati sono forniti in lunghezza di 6800 mm

The sections are supplied with length of 6800 mm

**PROFILATI**  
**SECTIONS**

**R** **85 TT 1.0**  
SYSTEM

Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m	Profilato Section	Sezione Cross section	Peso Weight Kg/m	Perlm. Perim. mm	Sup. in vista Exposed surface m <sup>2</sup> /m
800825		0,899	349	0,065	900221		0,167	57	0.015
800827		0,724	246	0,084	900362		0,219	124	0.062
800828		0,972	383	0,095	900390		0,286	104	0.030
800830		0,495	221	0,054	900424		0,220	93	0.037
800831		0,455	175	0,055	900600		1,102	441	0.186
800832		0,719	236	0,085	900601		0,820	302	0.136
800835		0,591	201	0,06	900602		0,980	381	0.156
800839		0,498	188	0.080	1F14039		0,411	103	0.000
800852		0,728	222	0,030					
800859		1,063	356	0,110					
800917		0,651	234	0,065					
800918		0,881	283	0,088					
800925		0,815	259	0,052					
900106		0,262	152	0,062					
900162		0,370	202	0,070					

N.B.: I profilati sono forniti in lunghezza di 6800 mm

The sections are supplied with length of 6800 mm

Codice Code	Sezione Cross section	Peso Weight Kg/m
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A.0329.LN



0,175

A.0330.LN



0,145

**Scala 1:1**  
**Scale 1:1**

A.0329.LN



A.0330.LN



N.B.: I profilati sono forniti in lunghezza di 6800 mm

The sections are supplied with length of 6800 mm

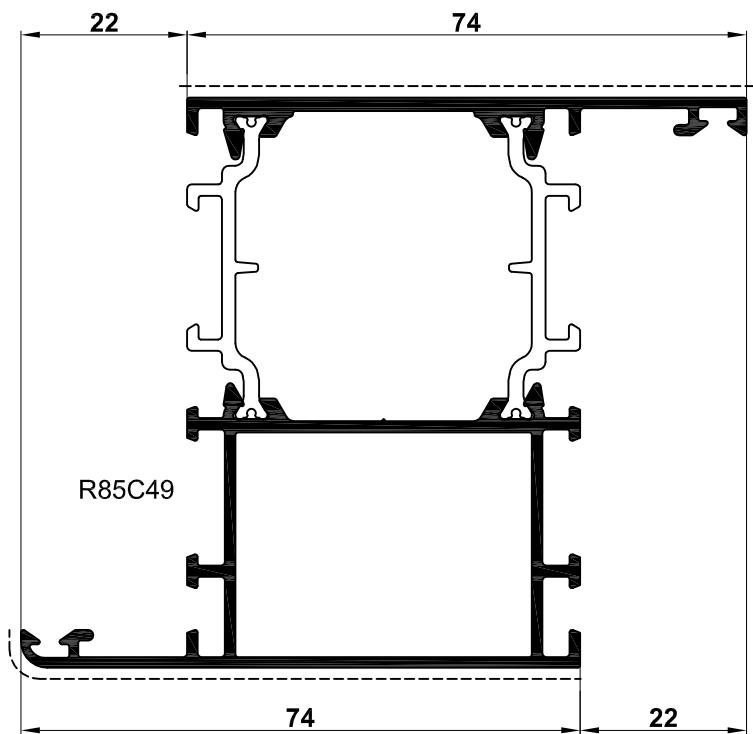
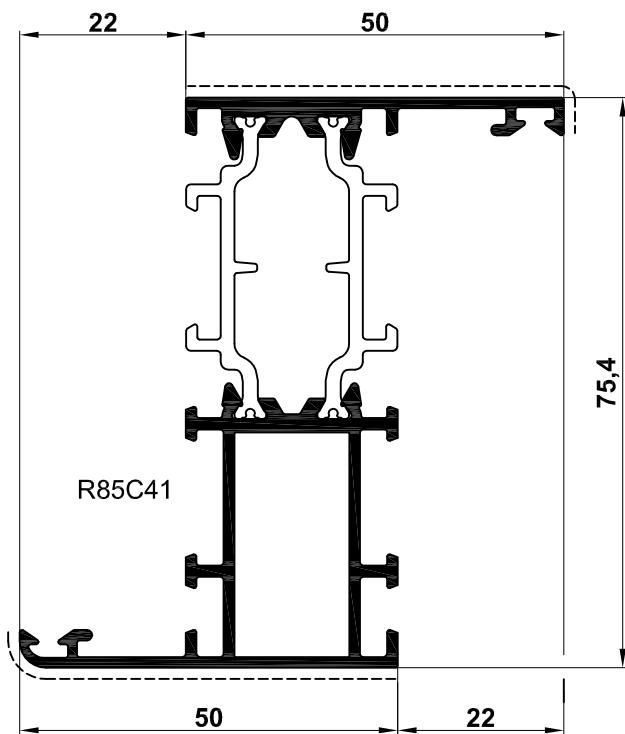
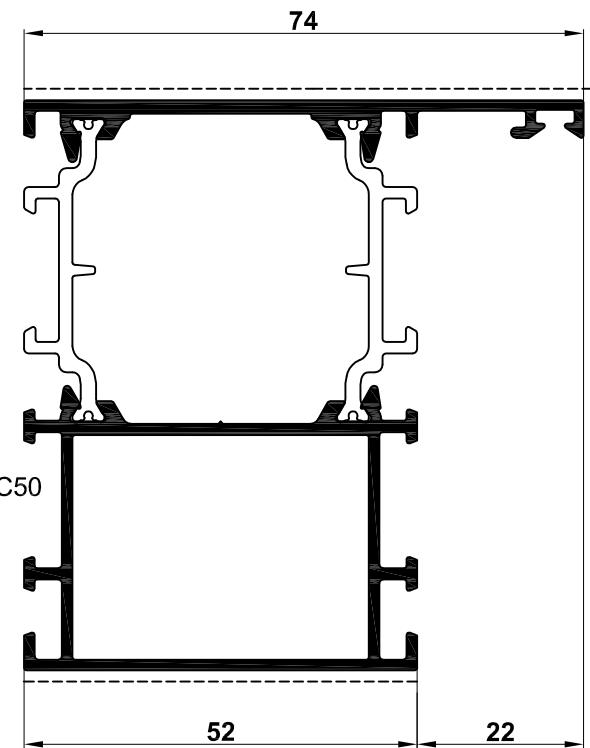
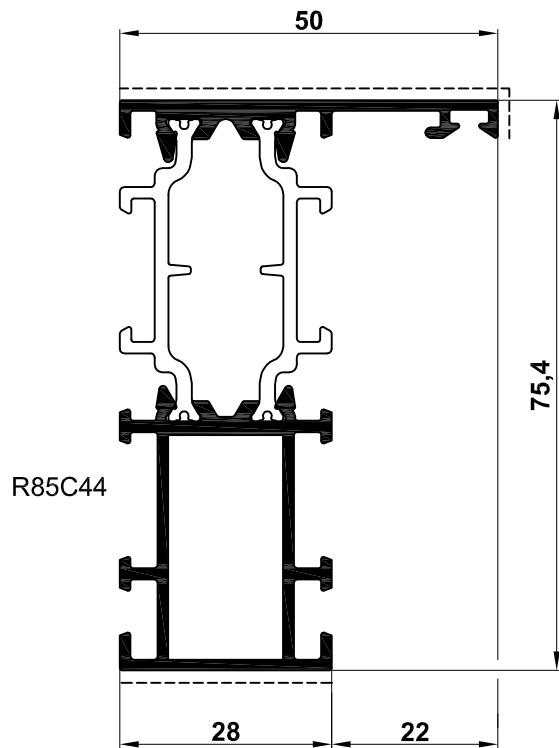
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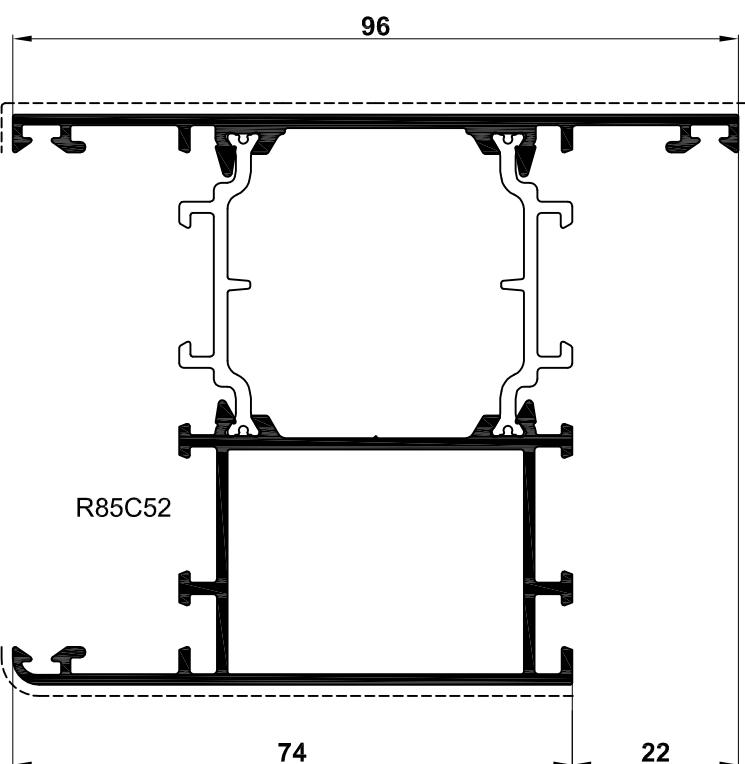
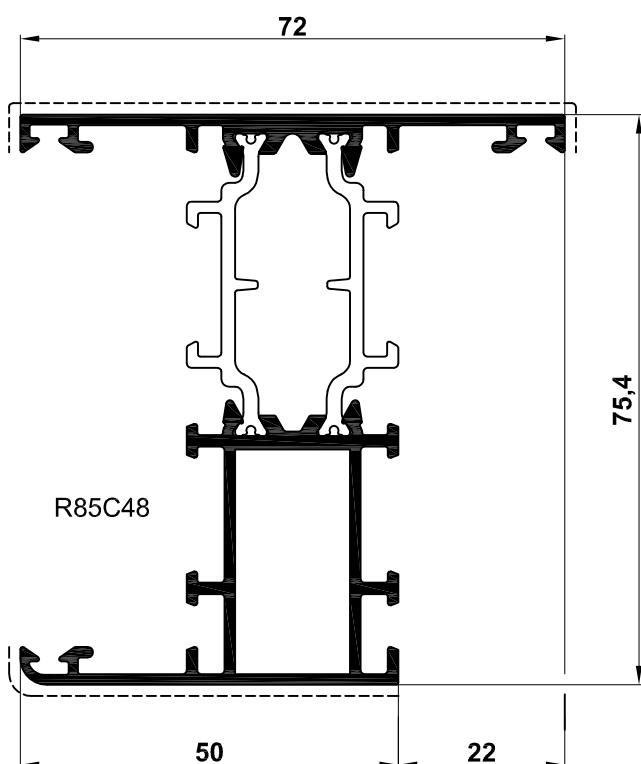
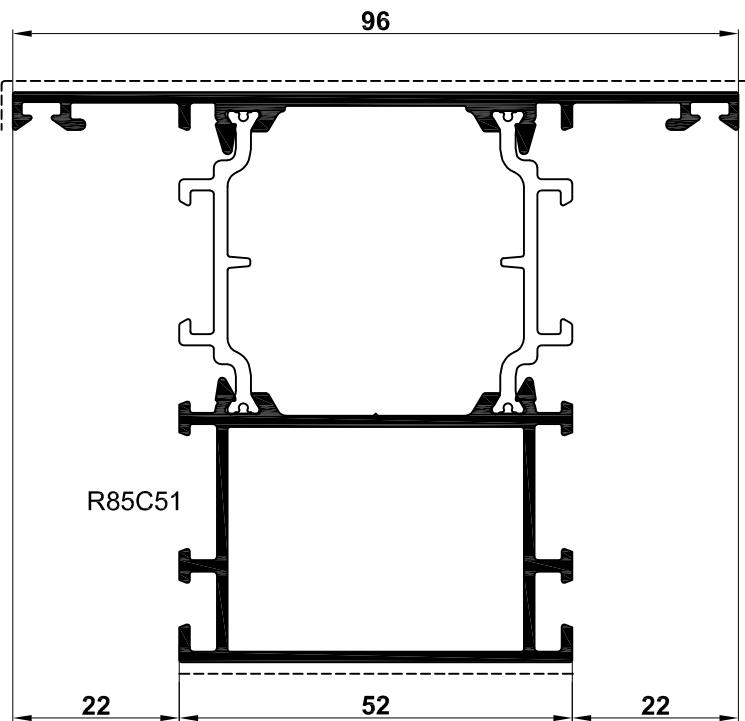
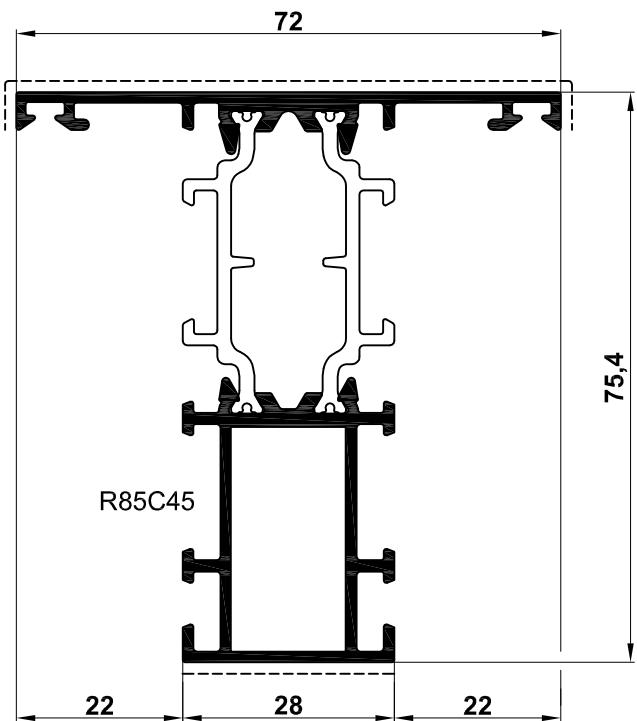
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**Ottobre**  
 October

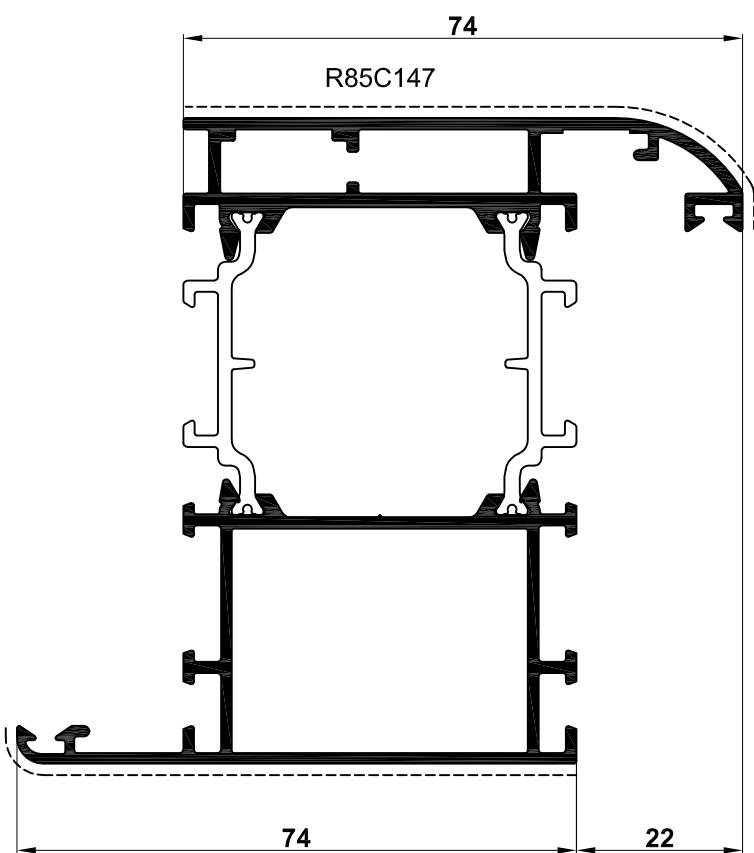
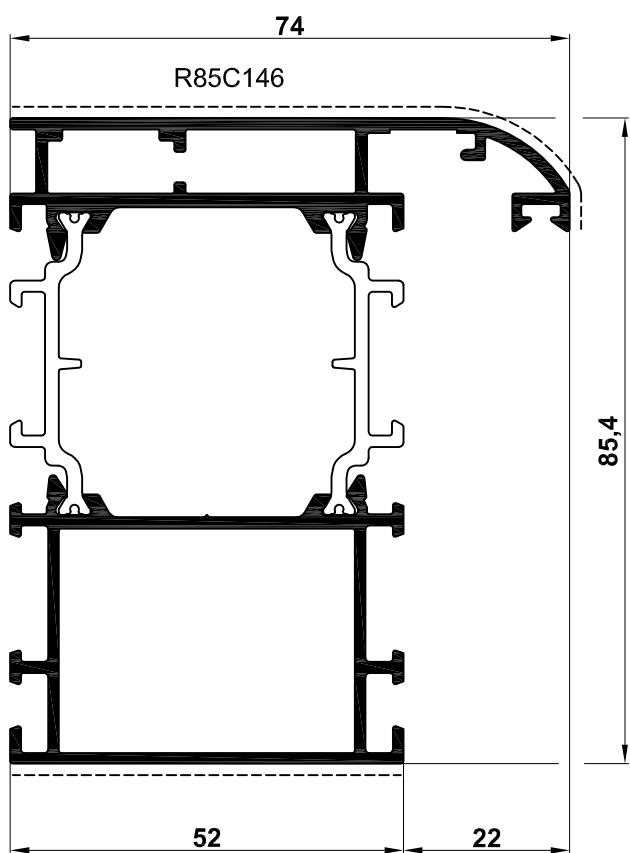
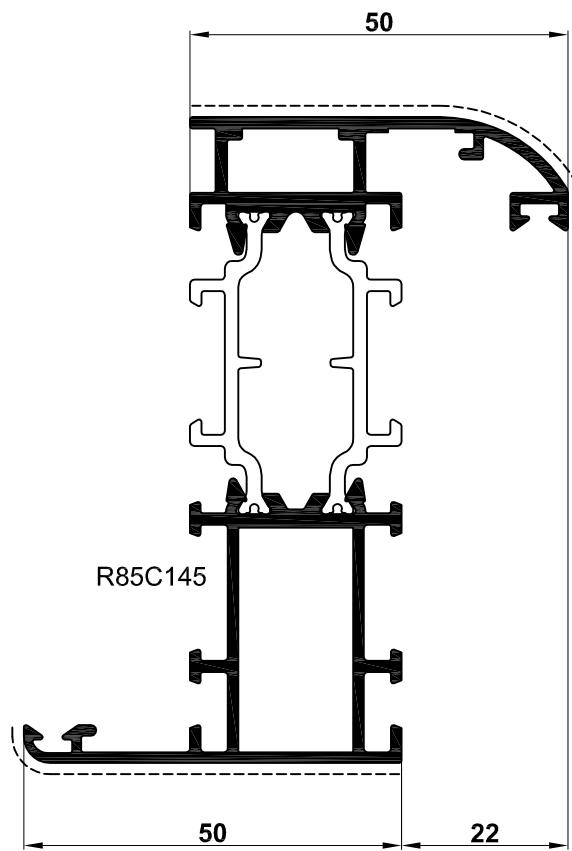
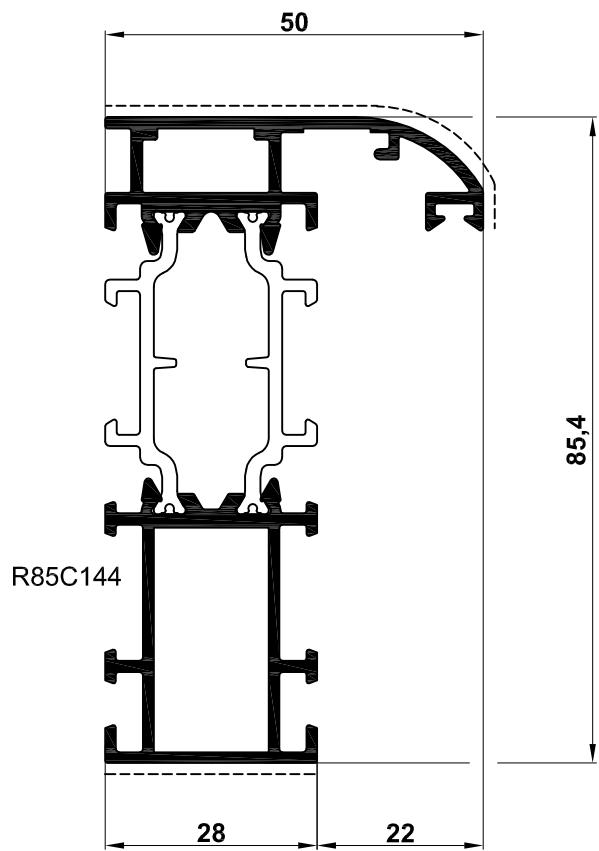
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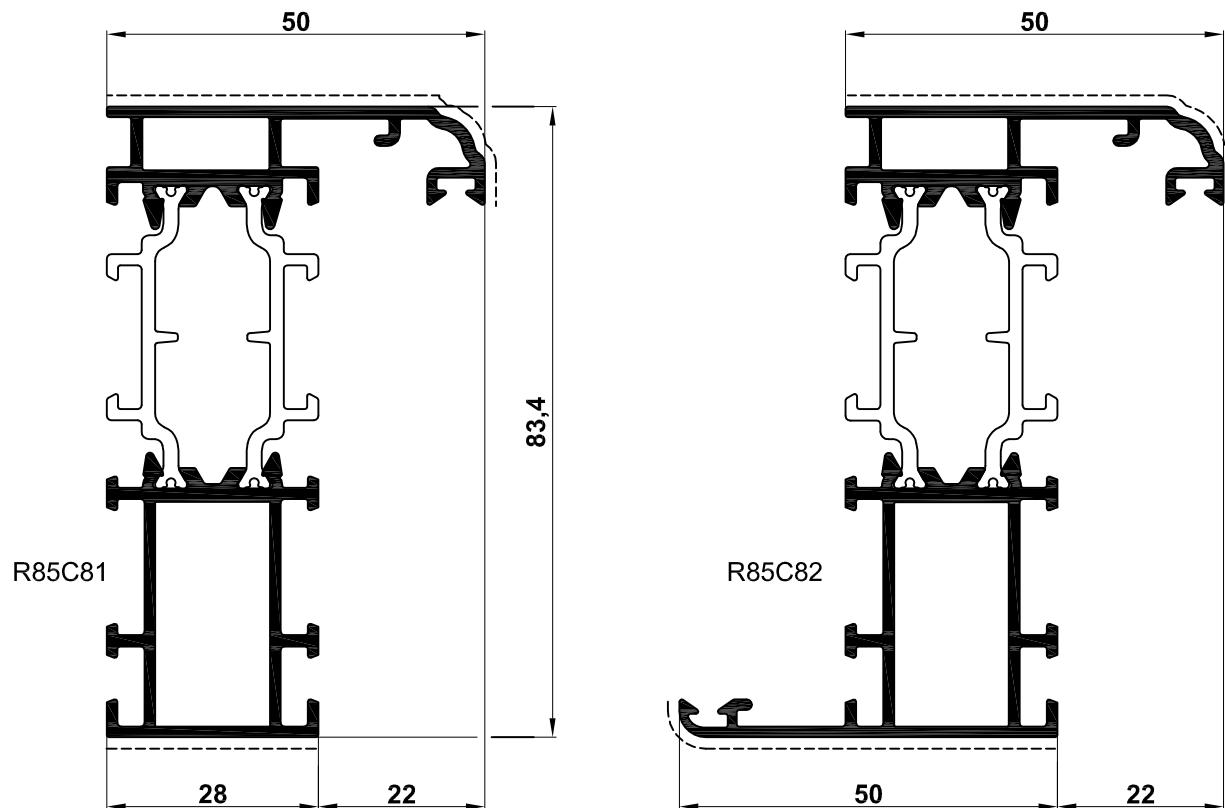
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 as sole patentee.

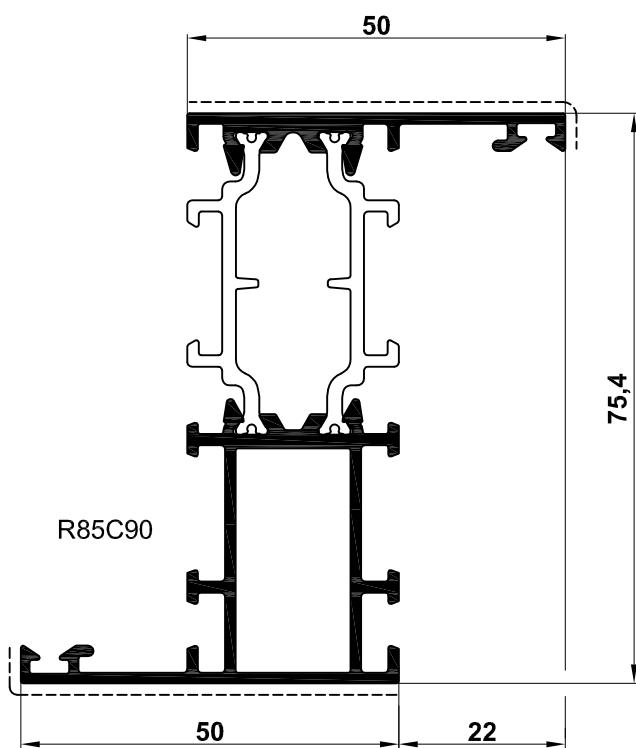
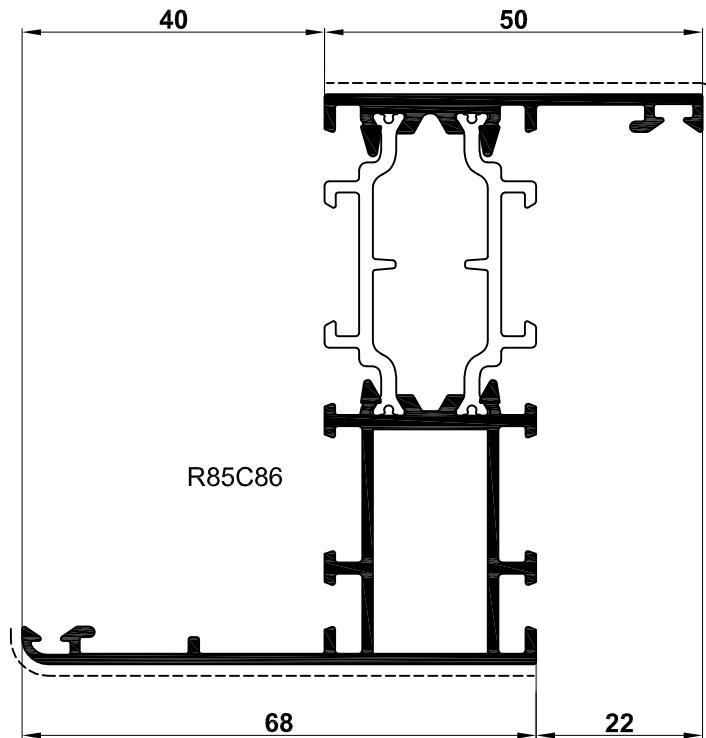
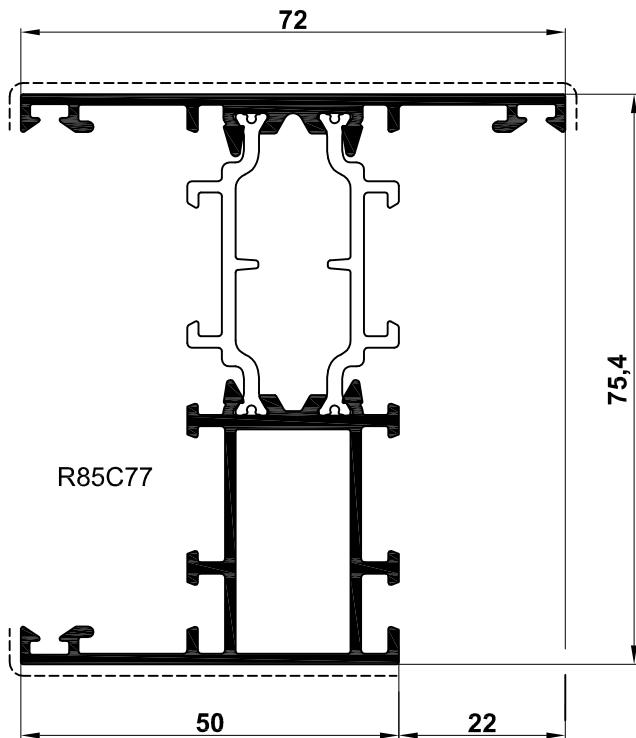
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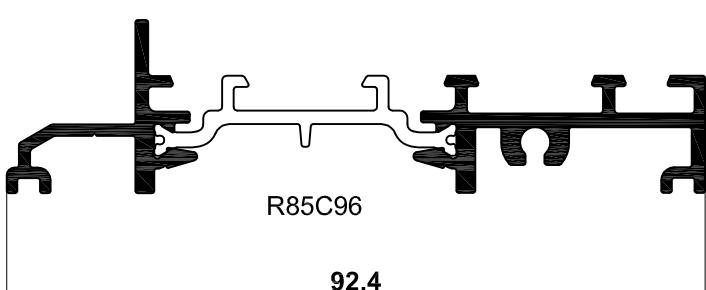
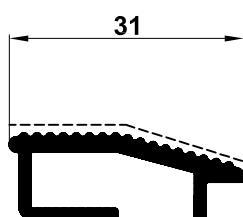
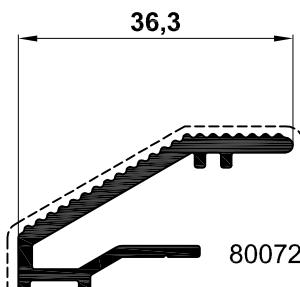


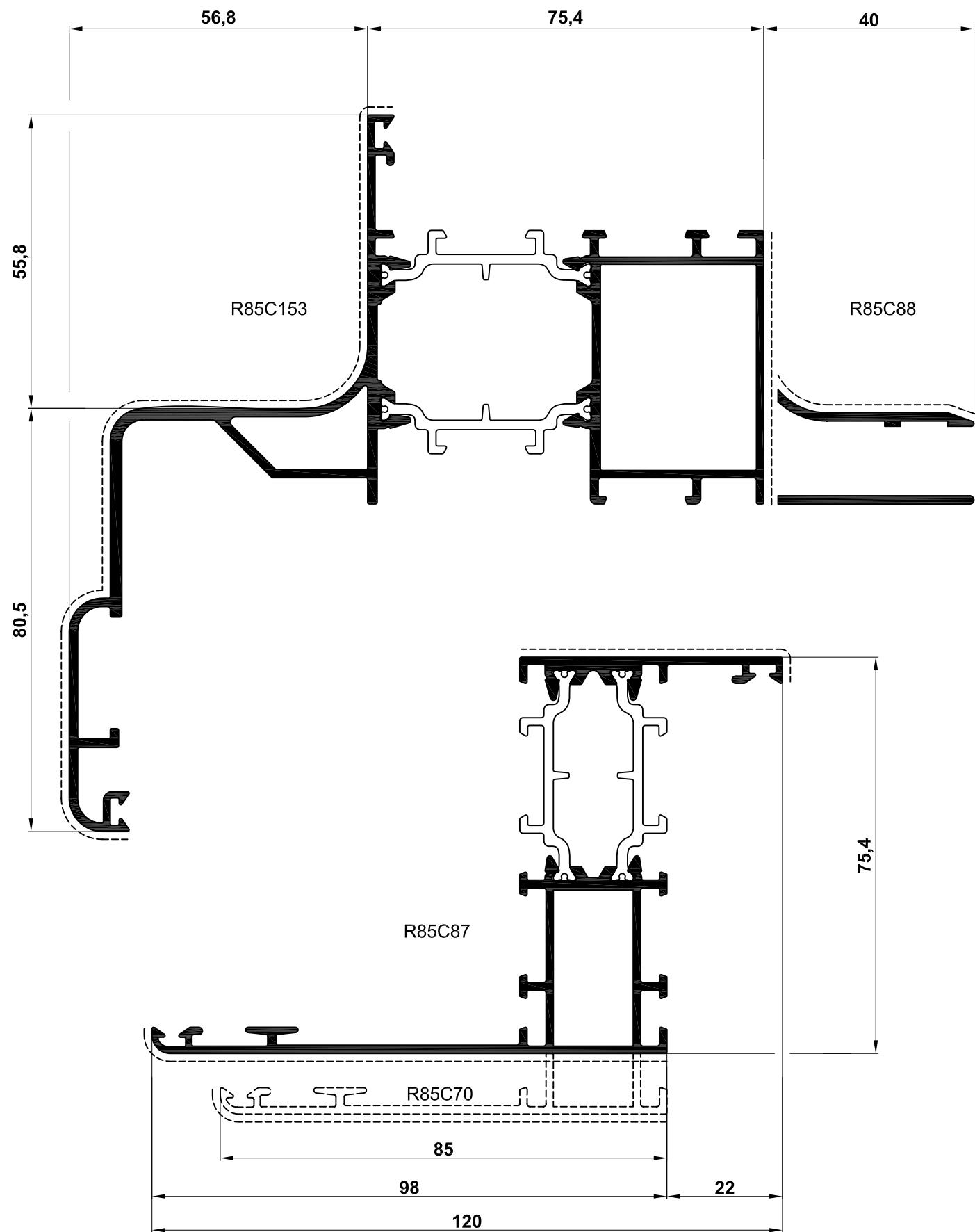


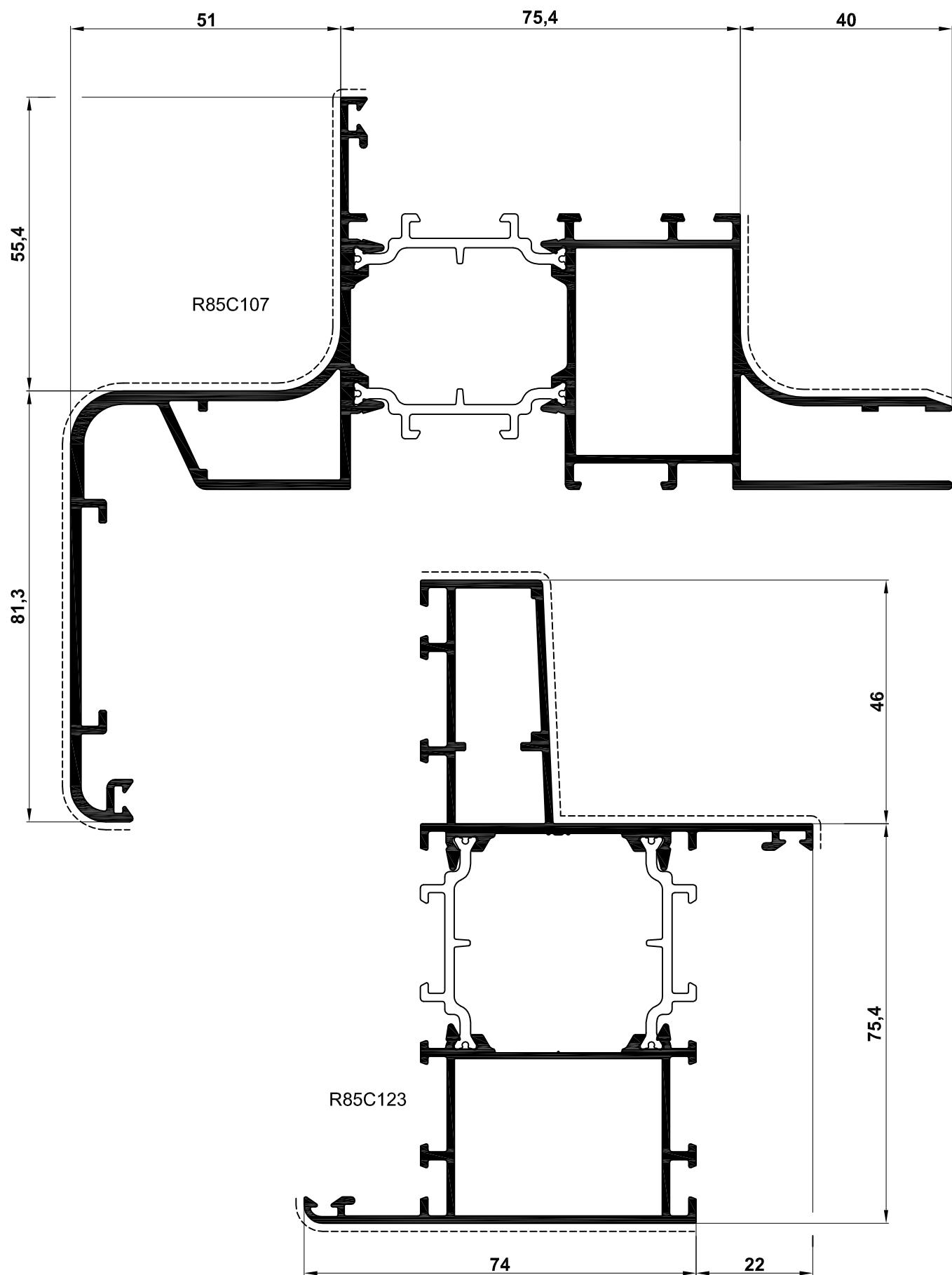


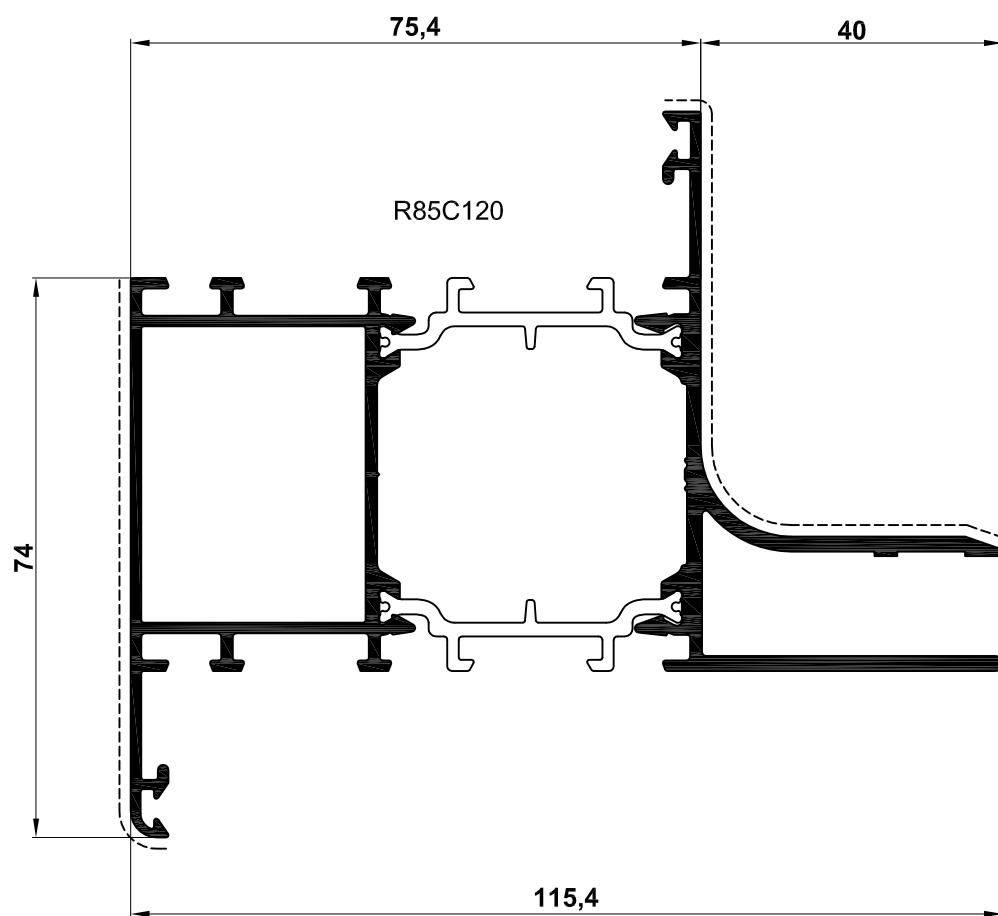
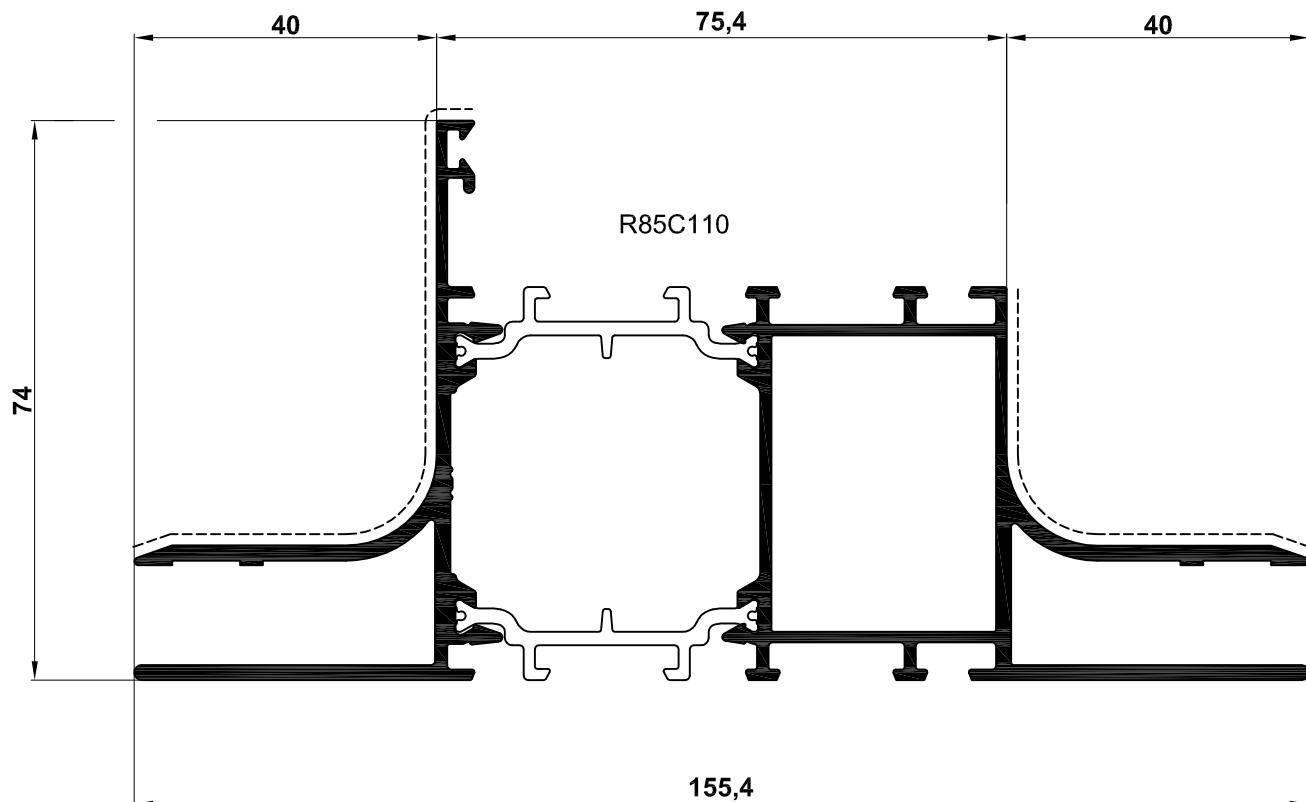


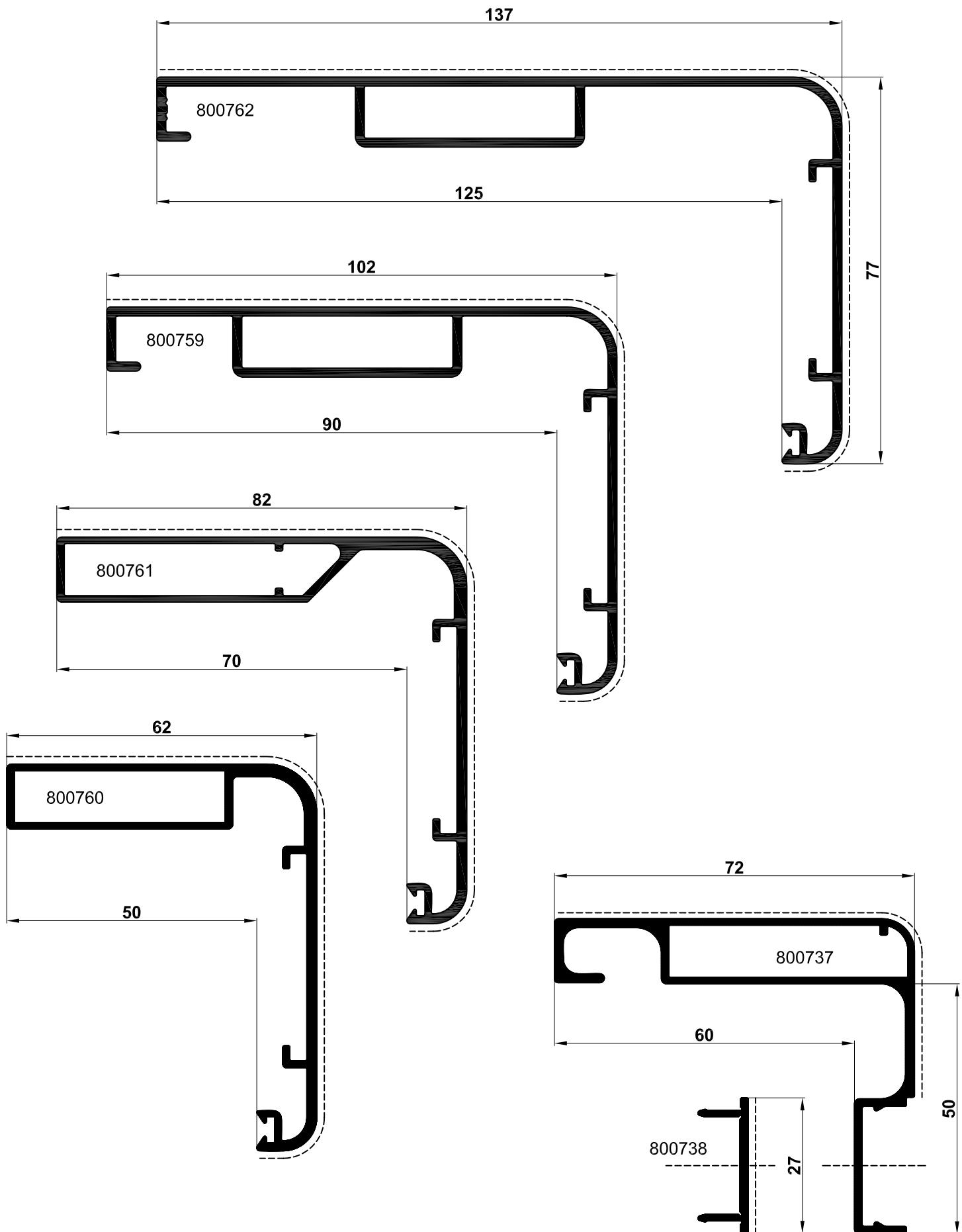
### PROFILATI PER SOGLIA FRAME SECTIONS

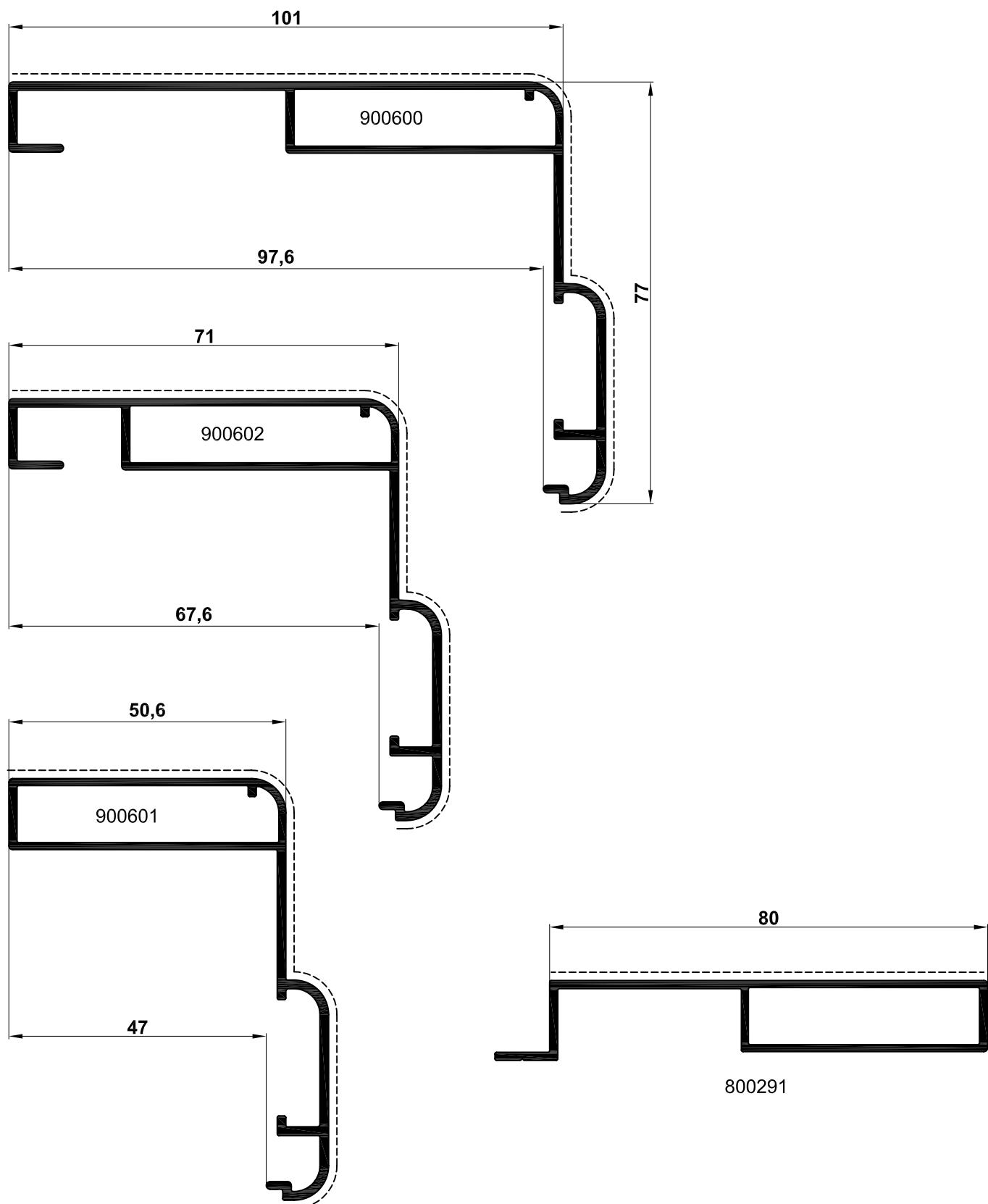


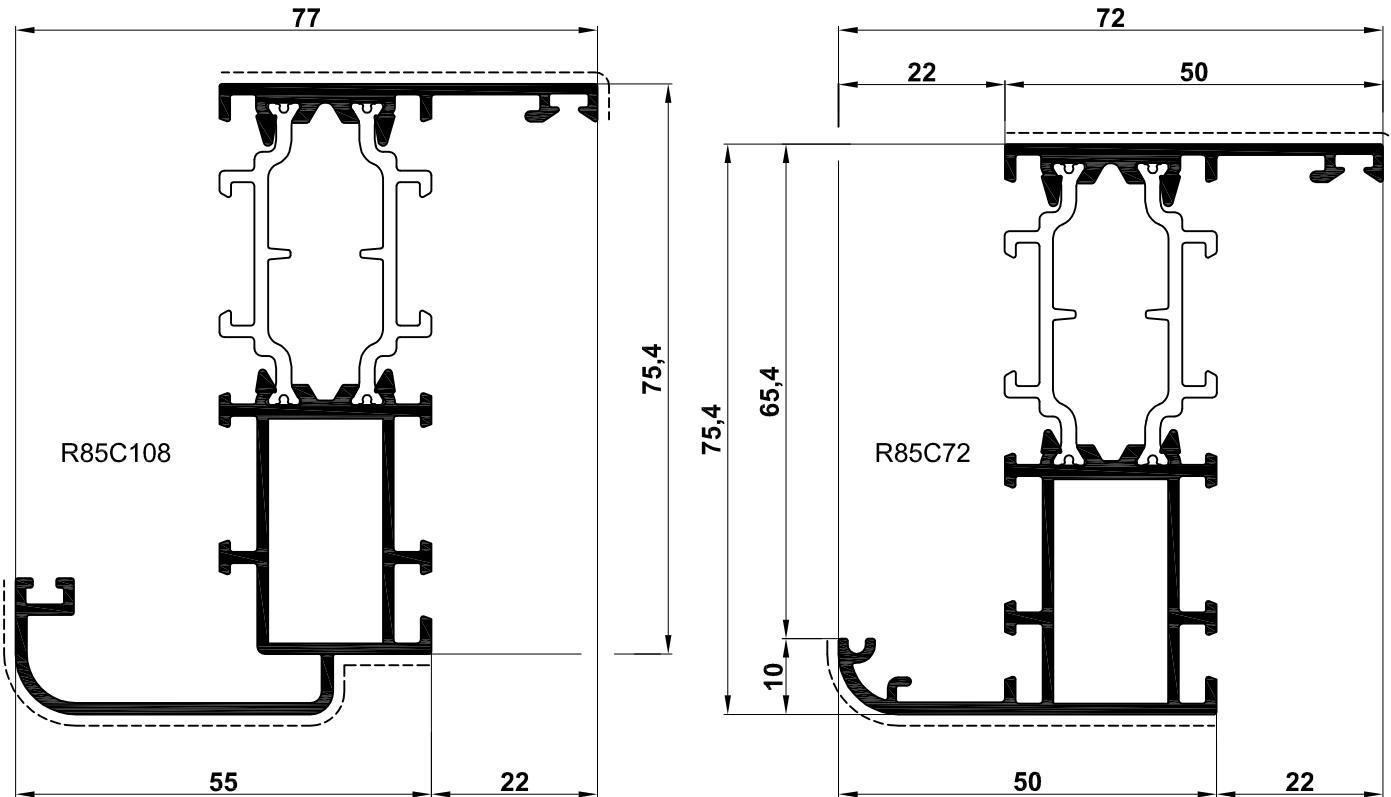




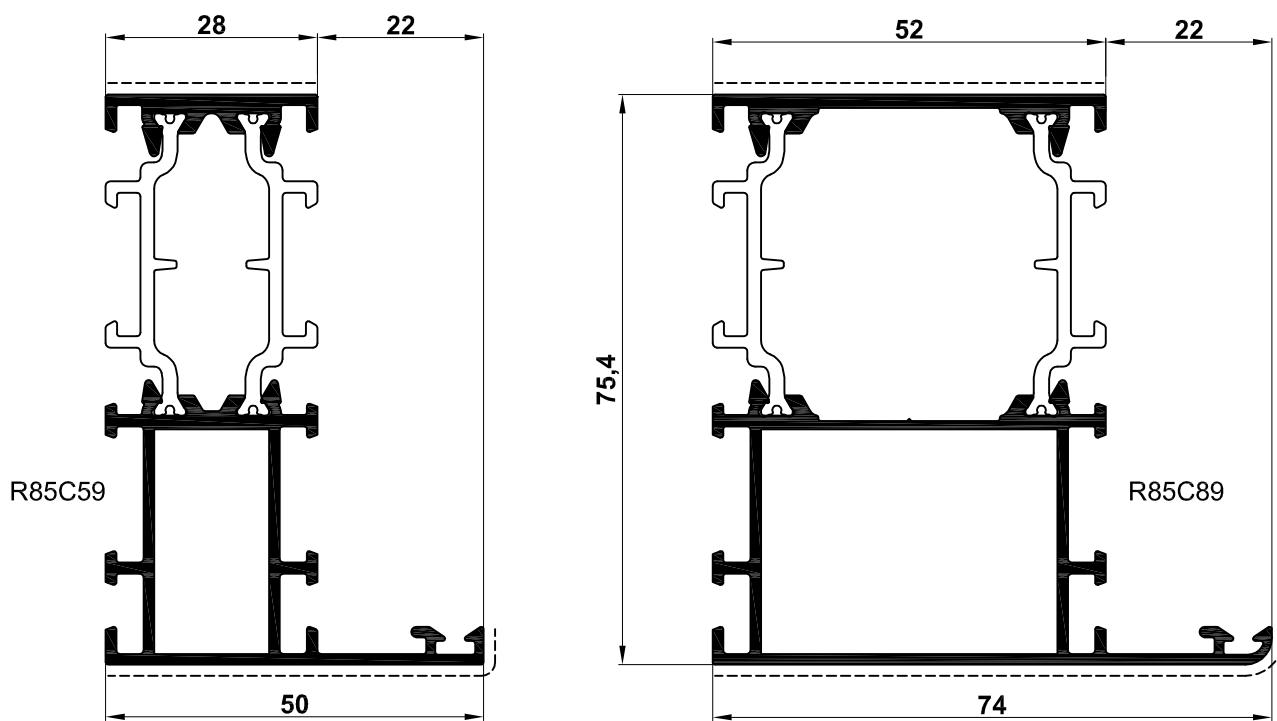


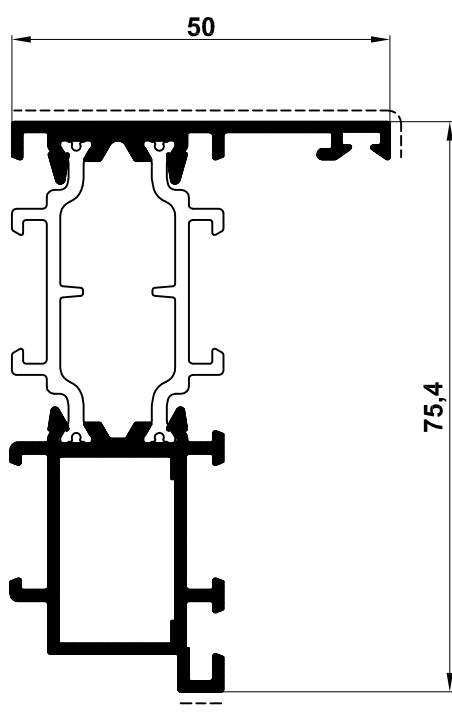
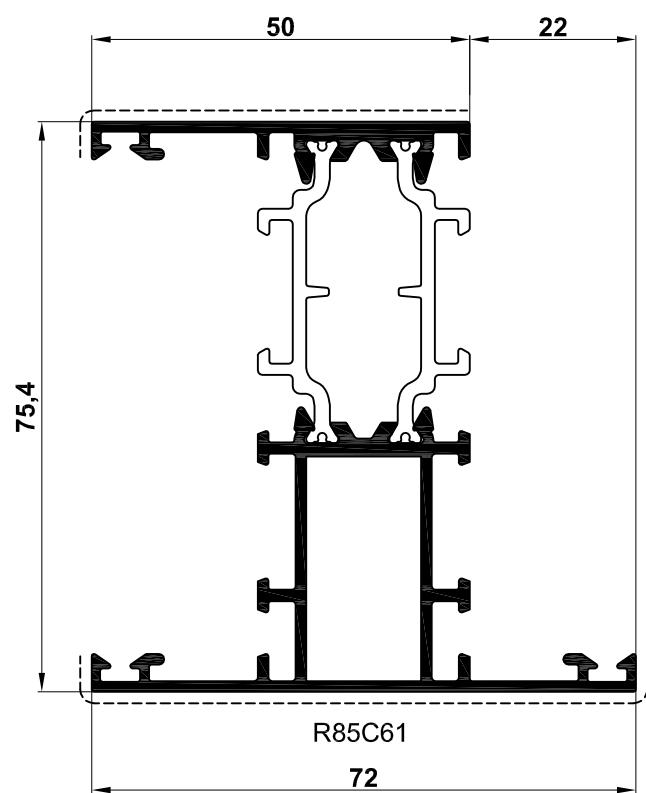
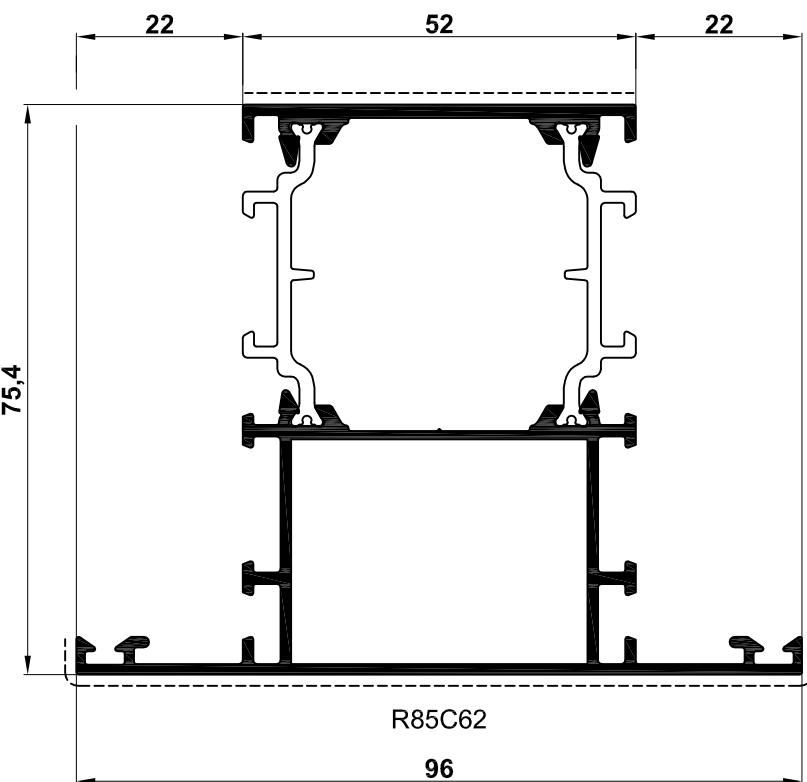
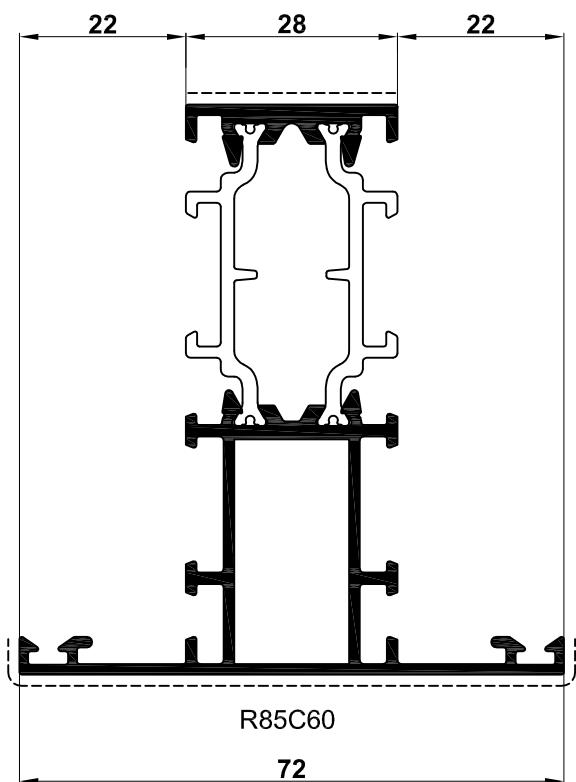


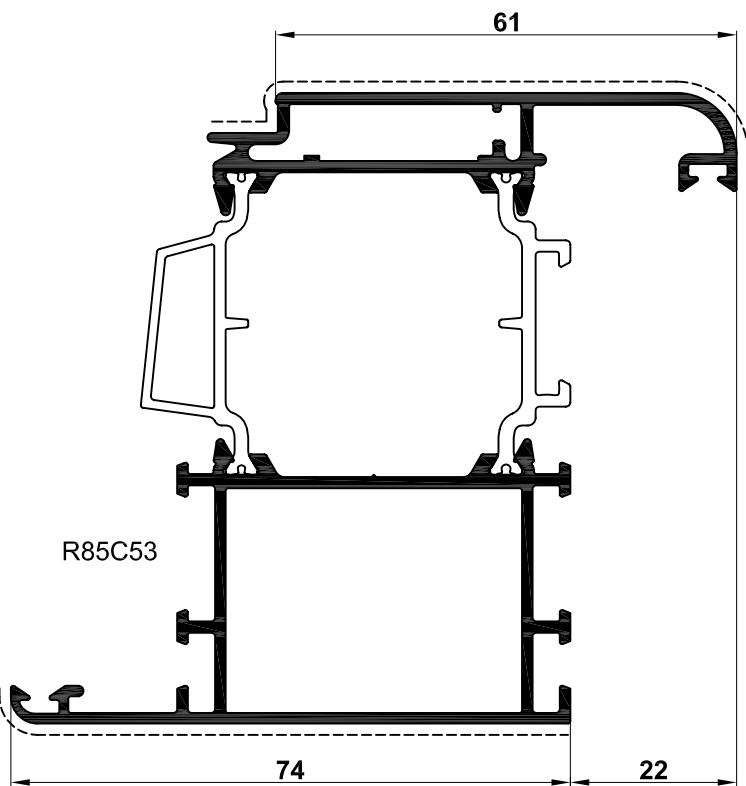
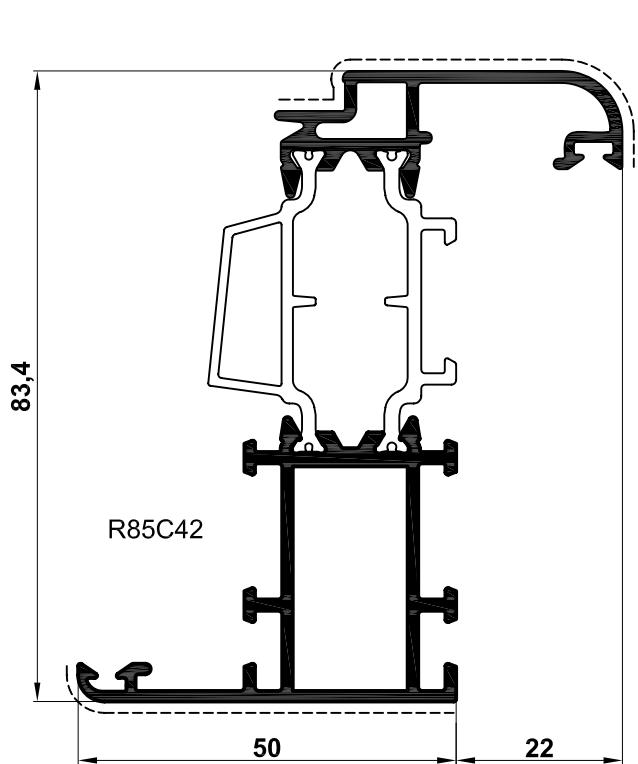
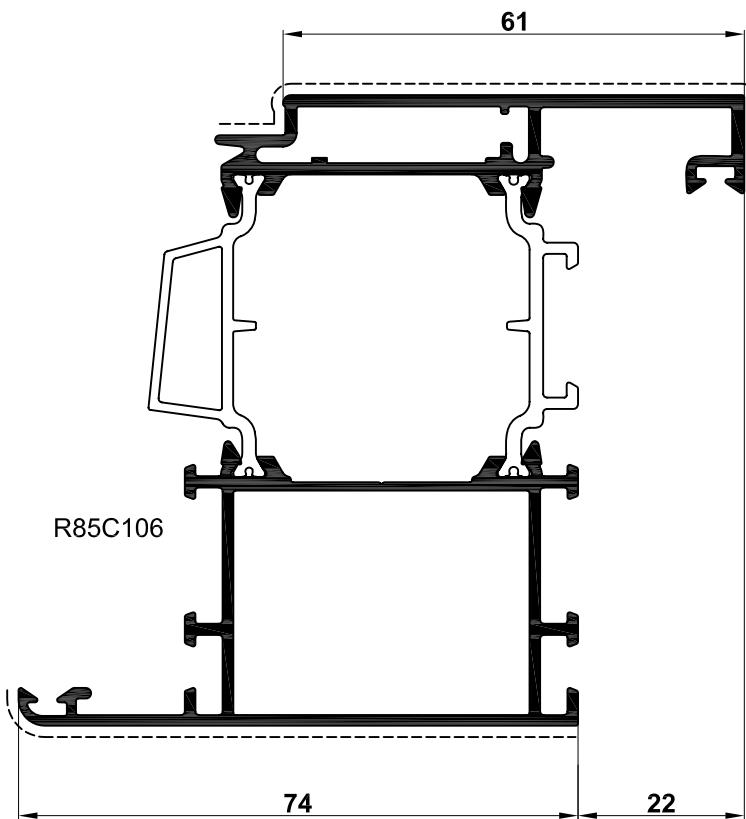
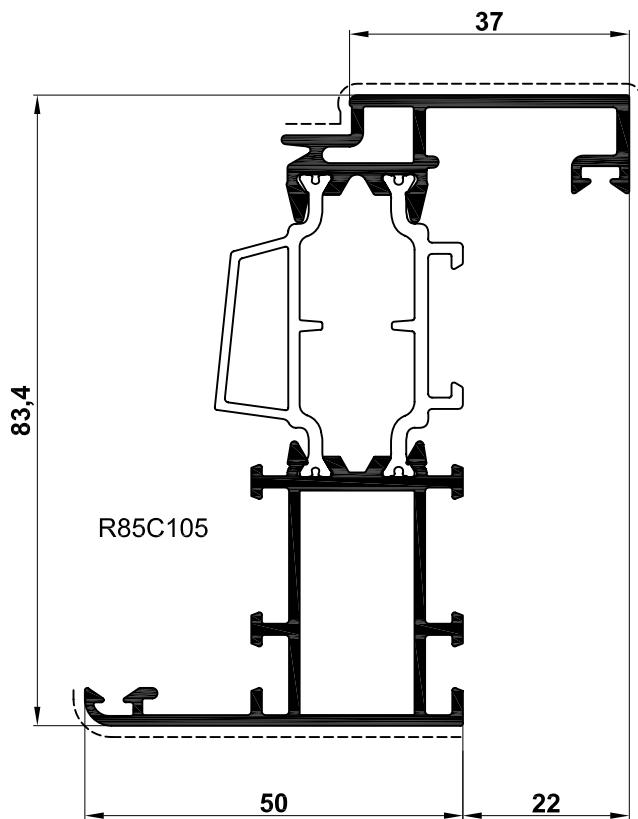


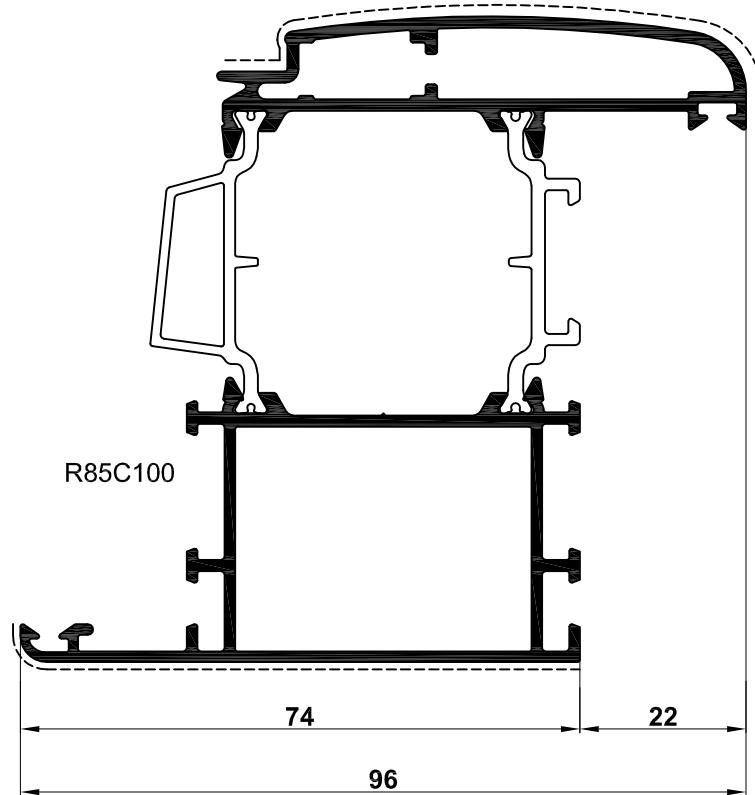
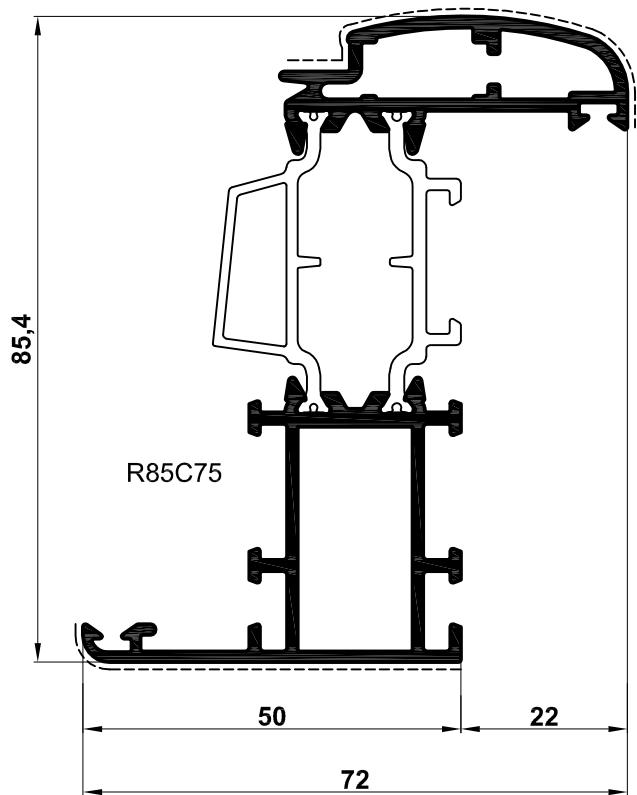
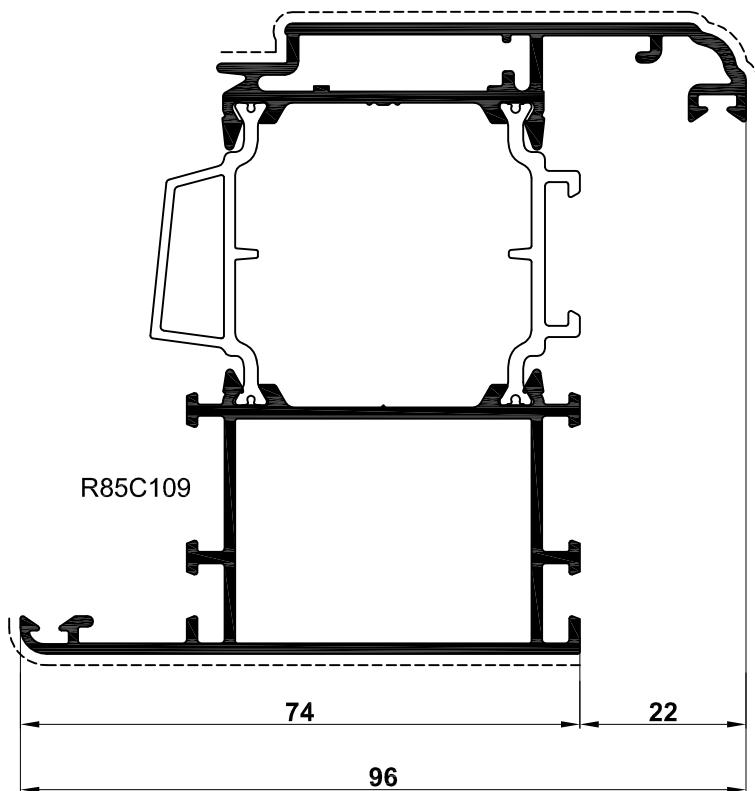
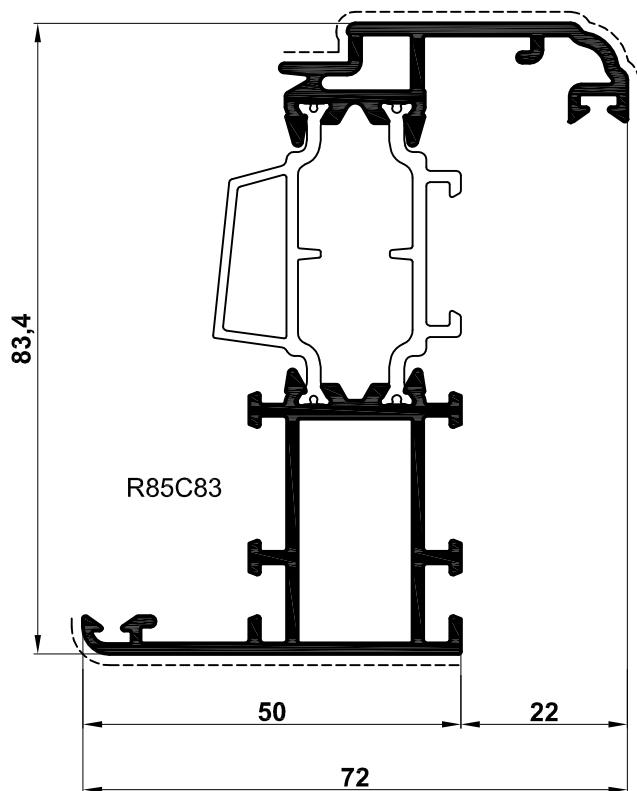


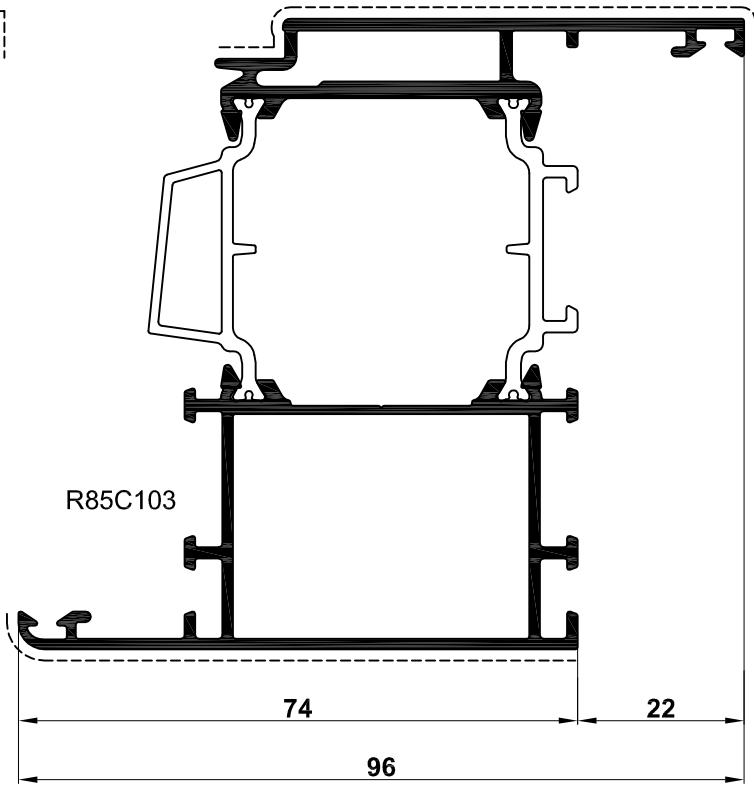
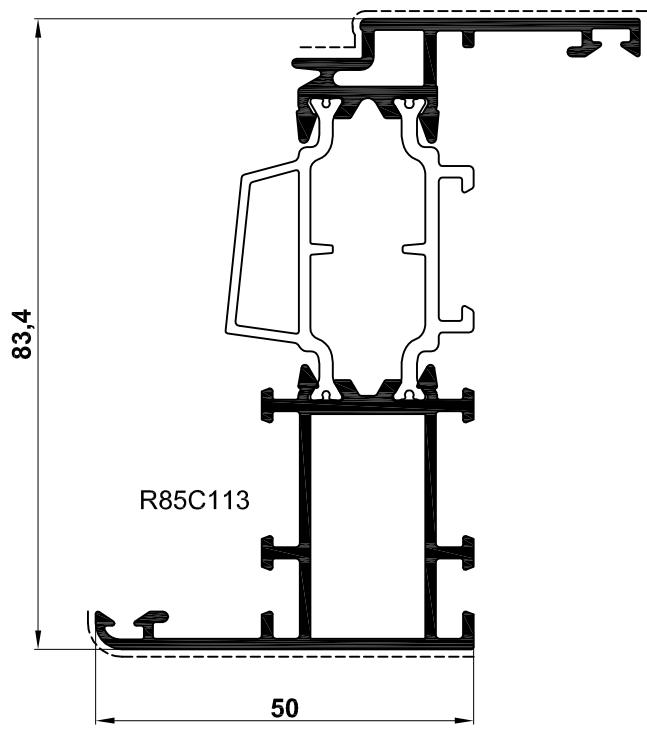
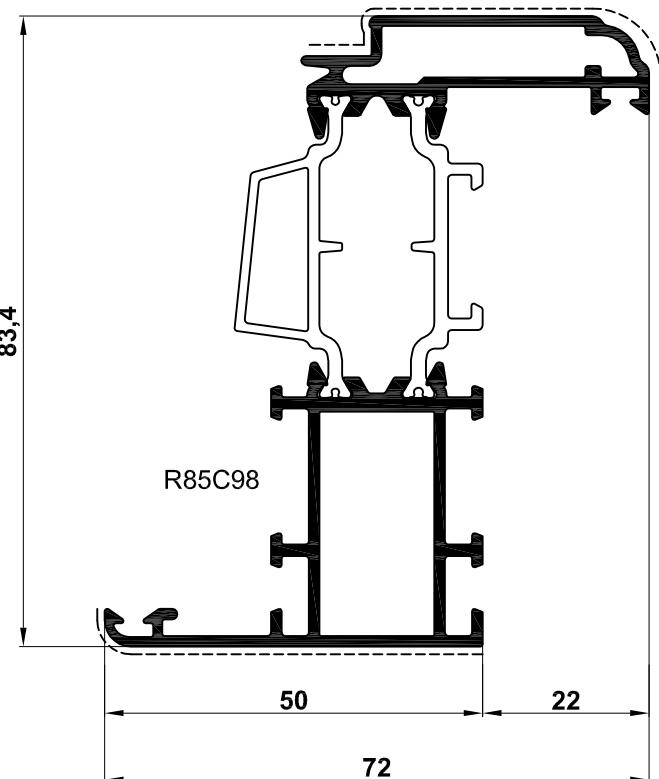
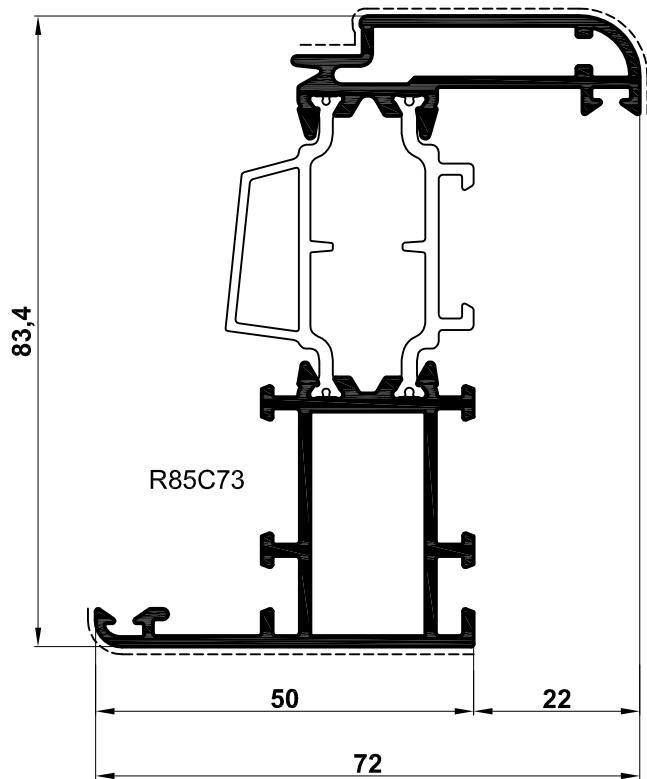
**TELAI - APERTURA ESTERNA**  
**FRAMES - OUTWARD OPENING**

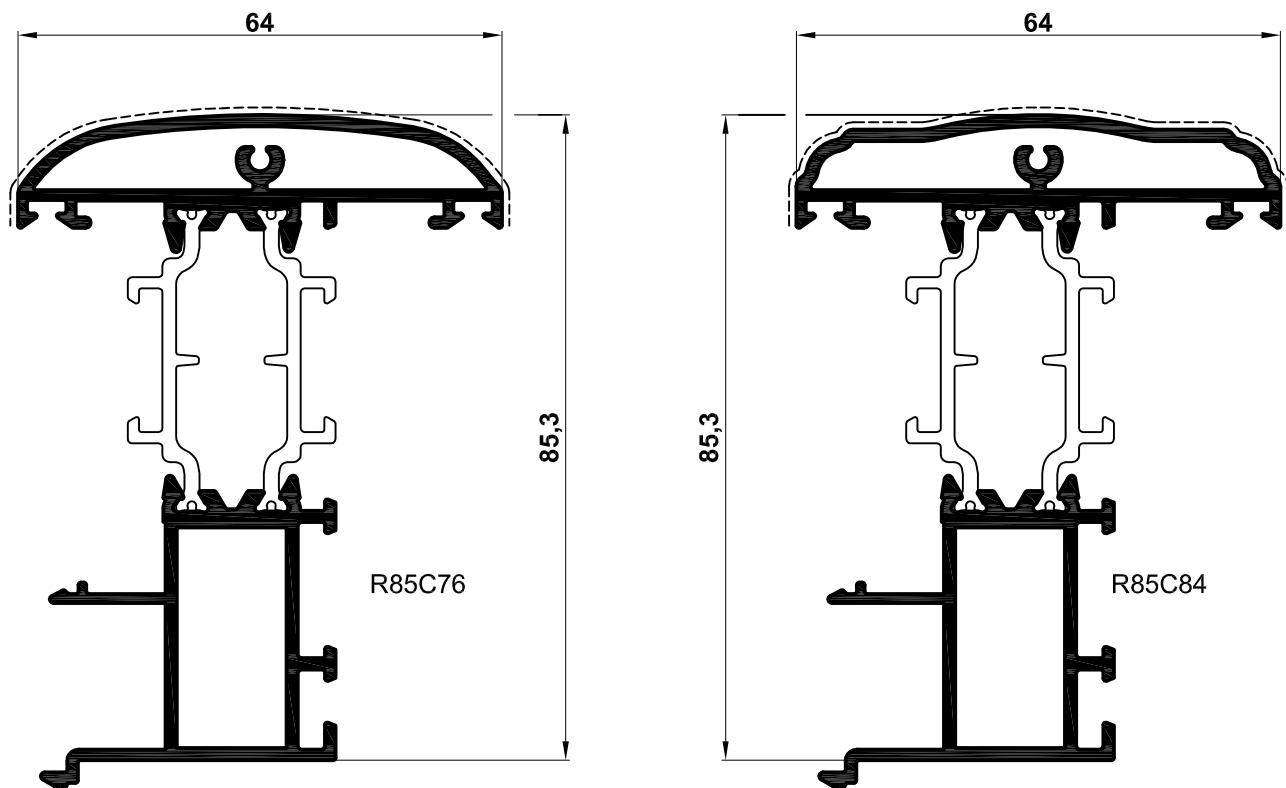
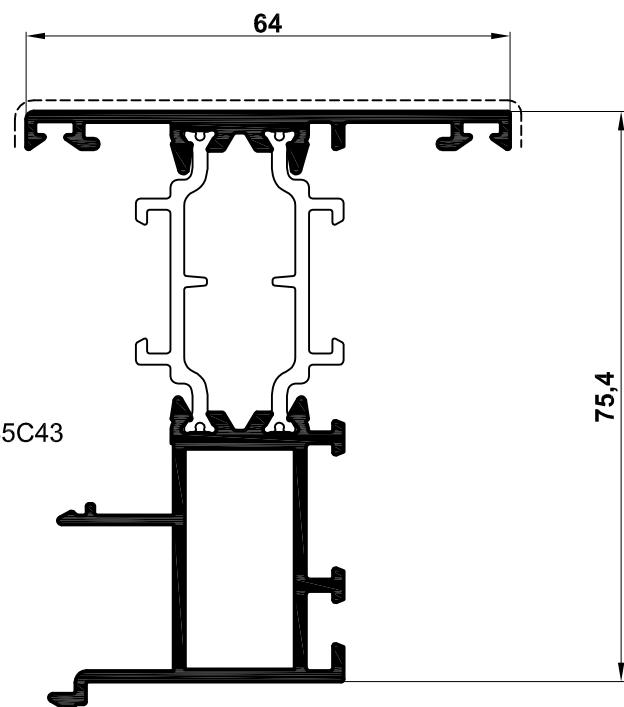


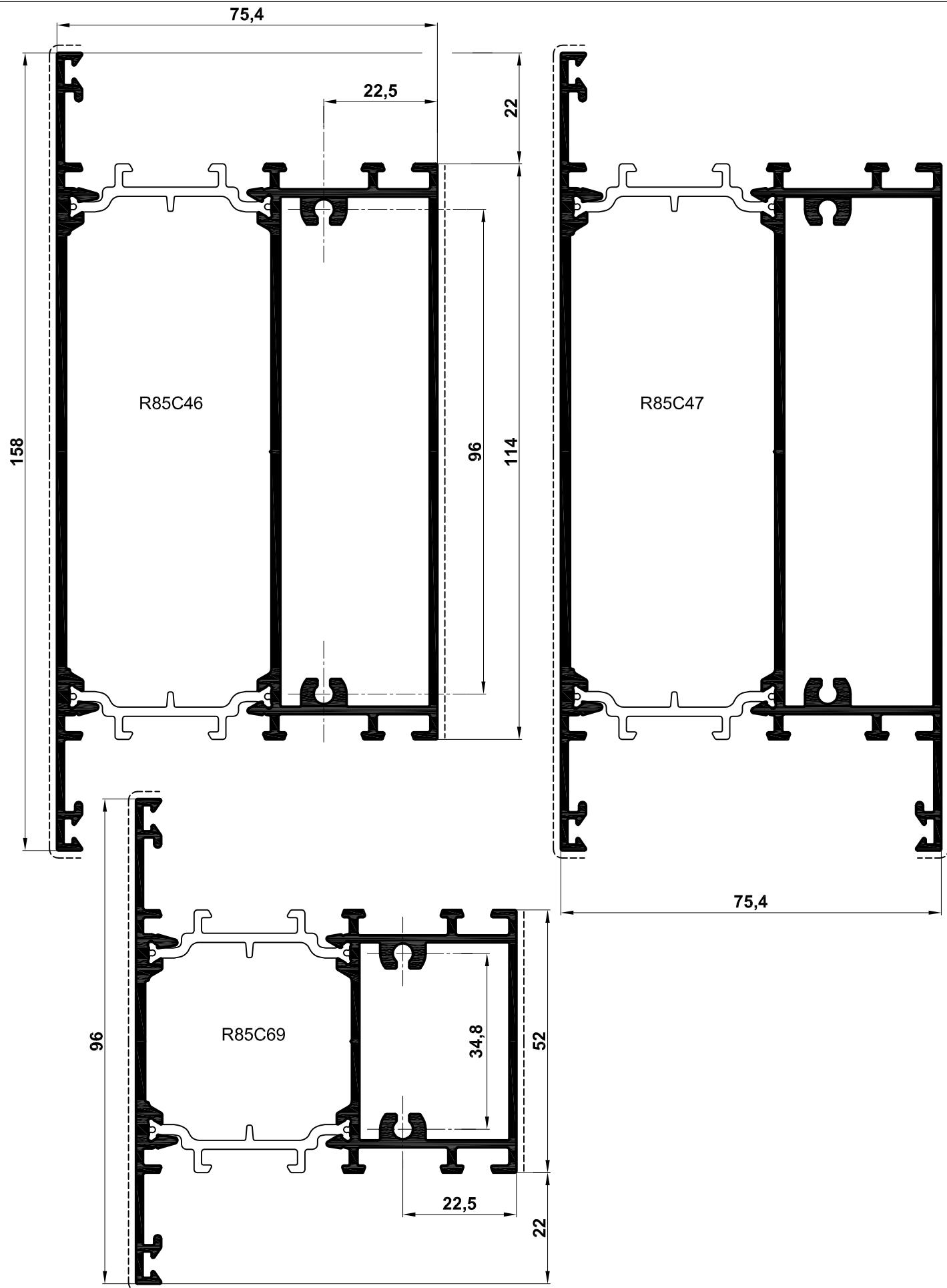


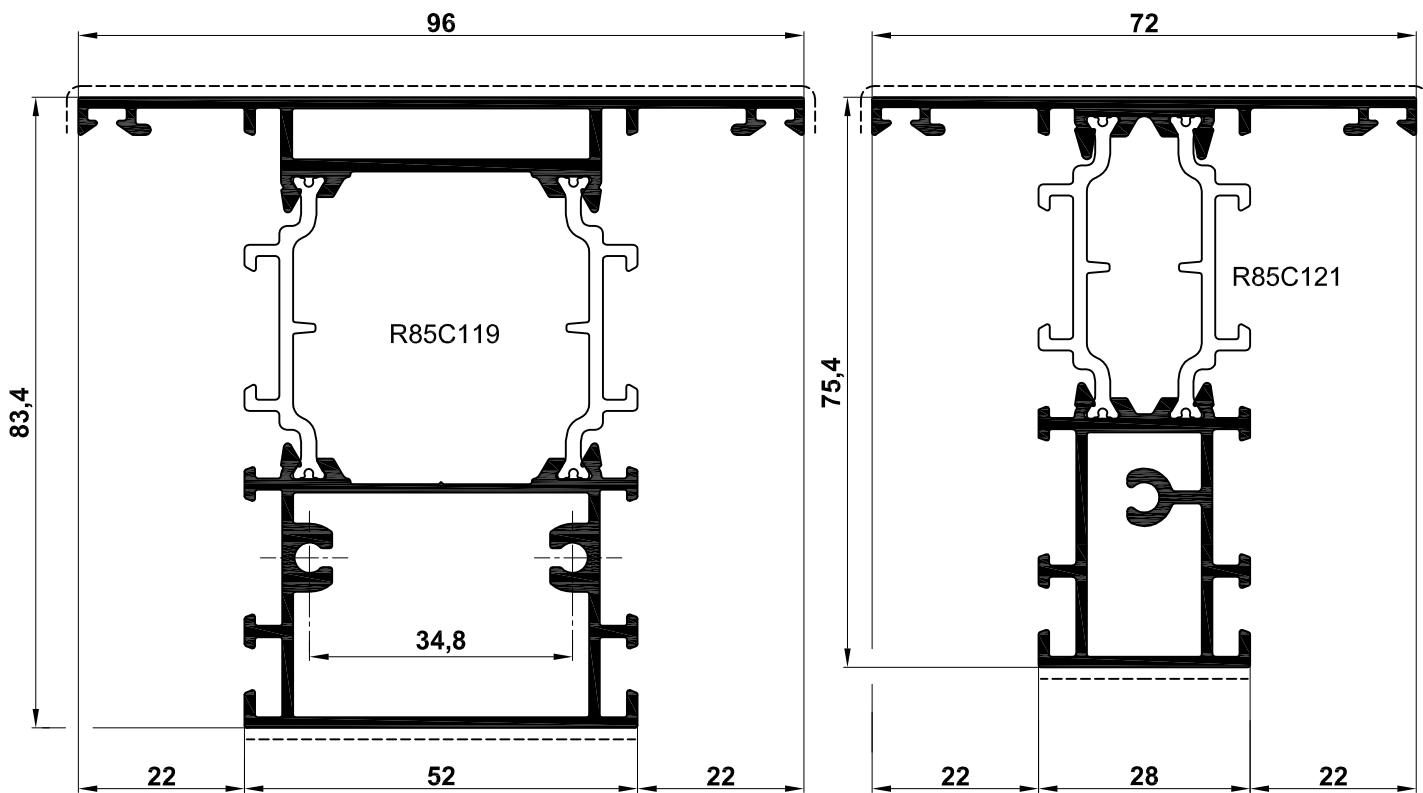


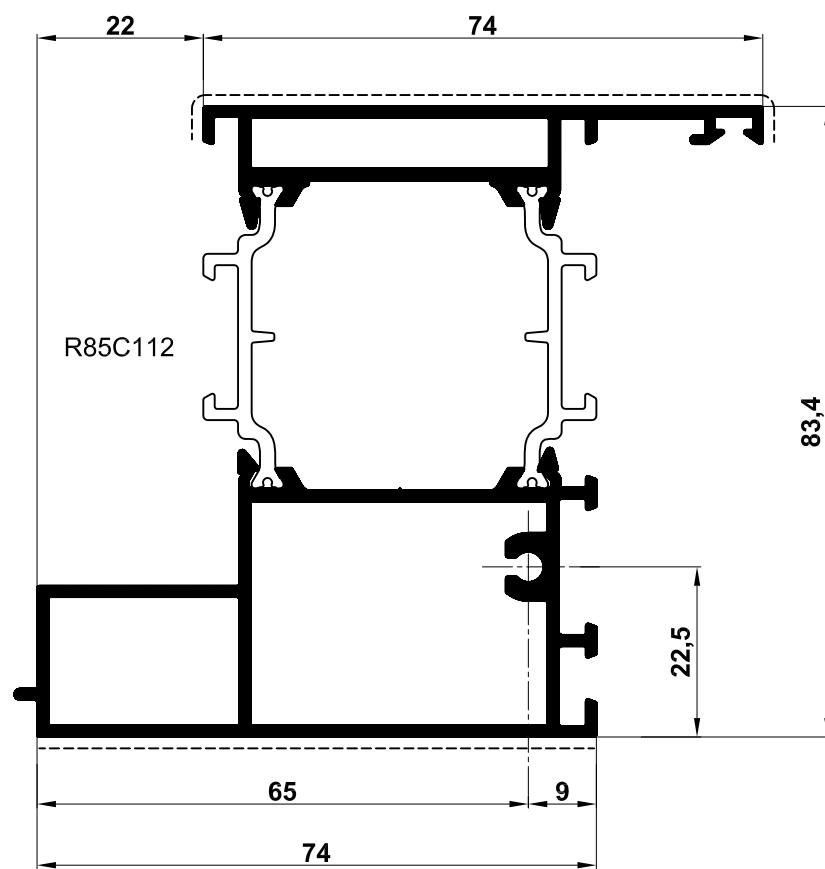
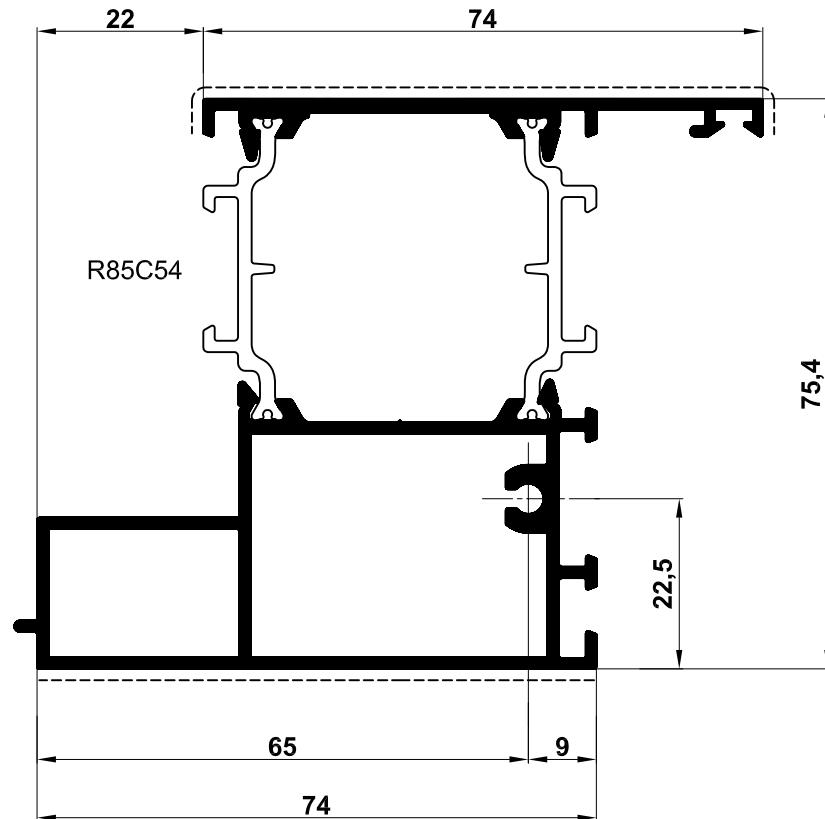


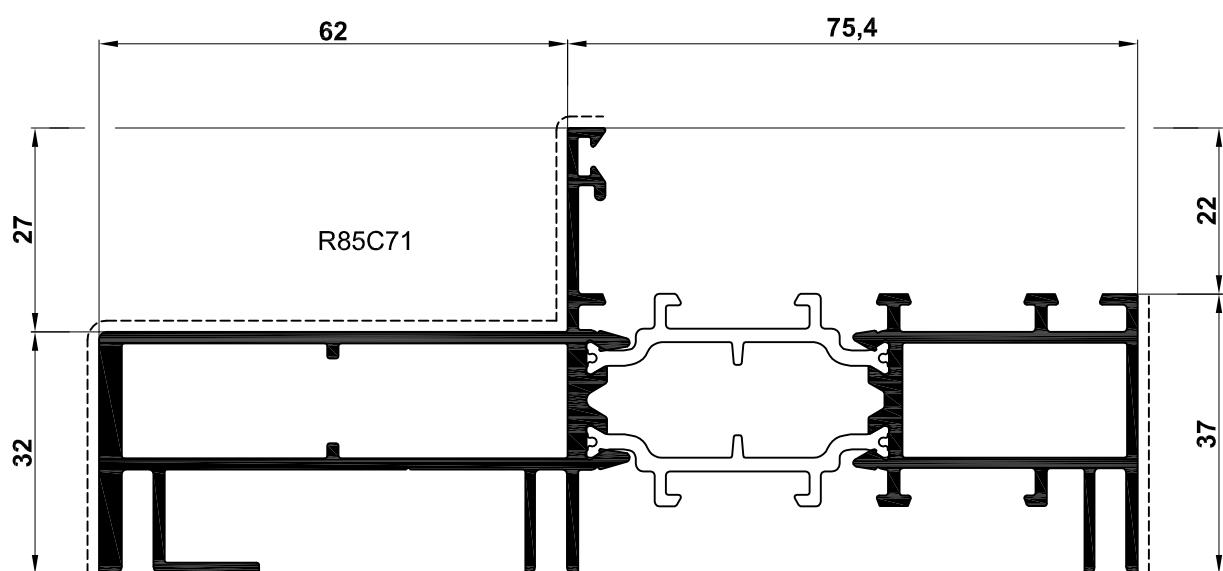
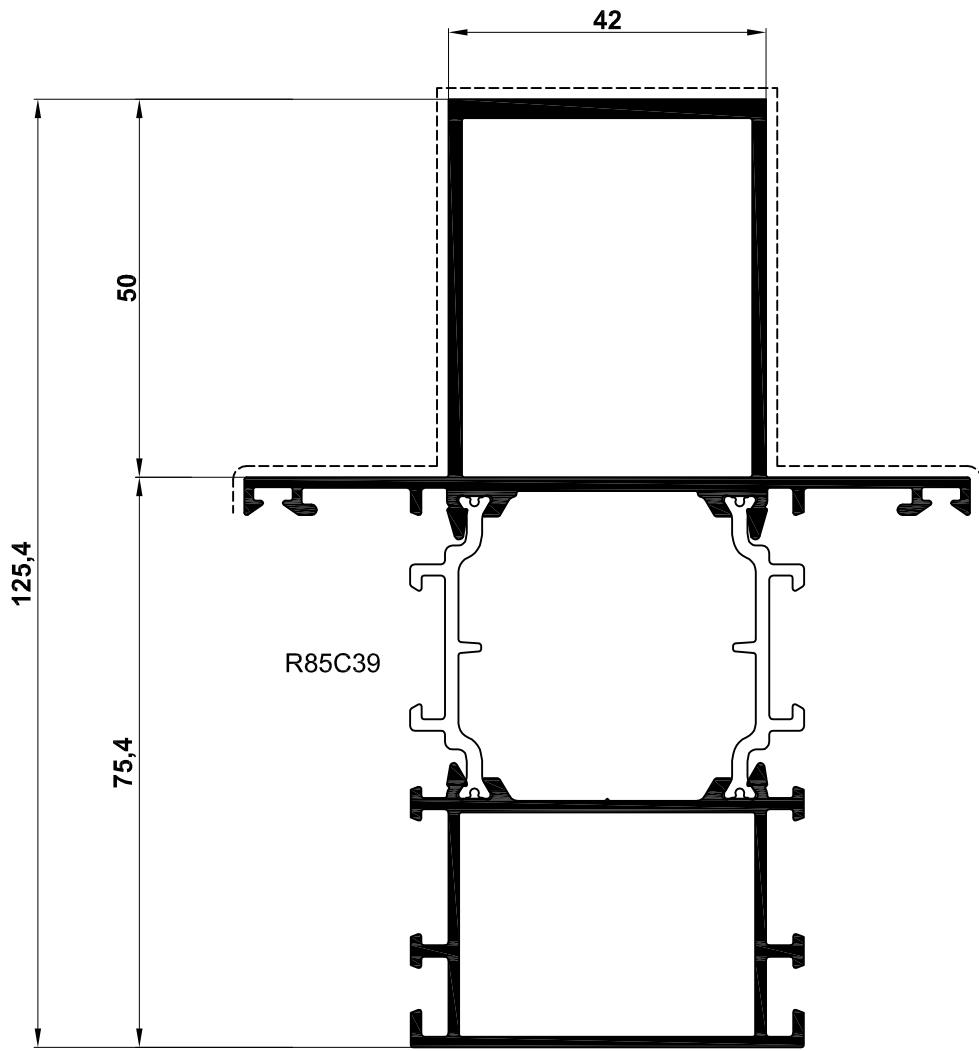


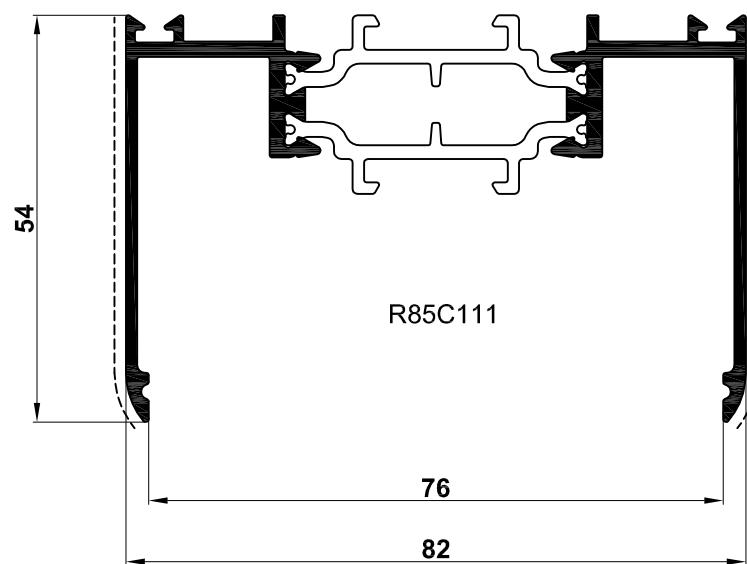


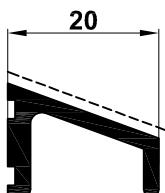




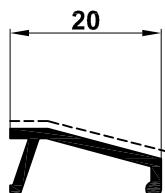




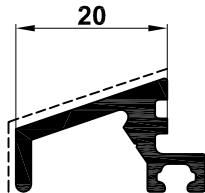




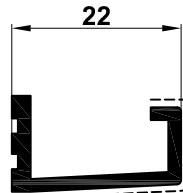
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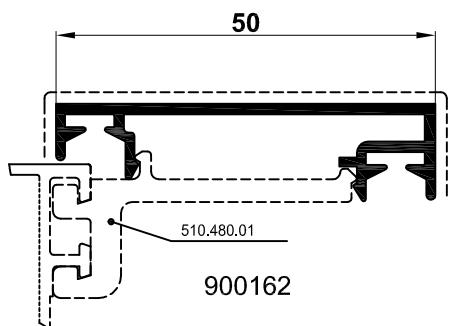
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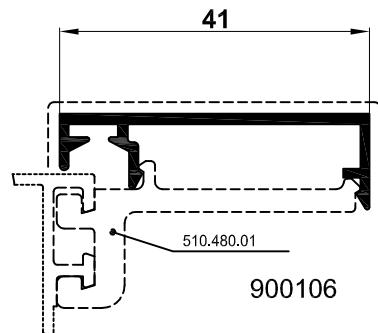
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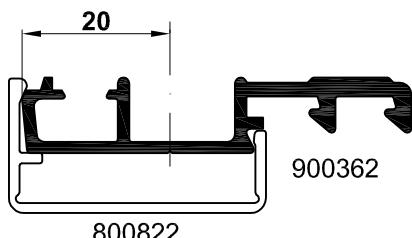
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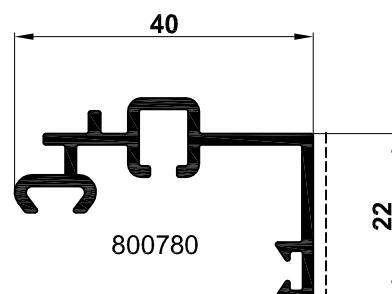


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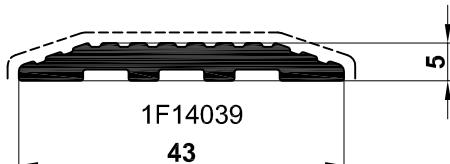


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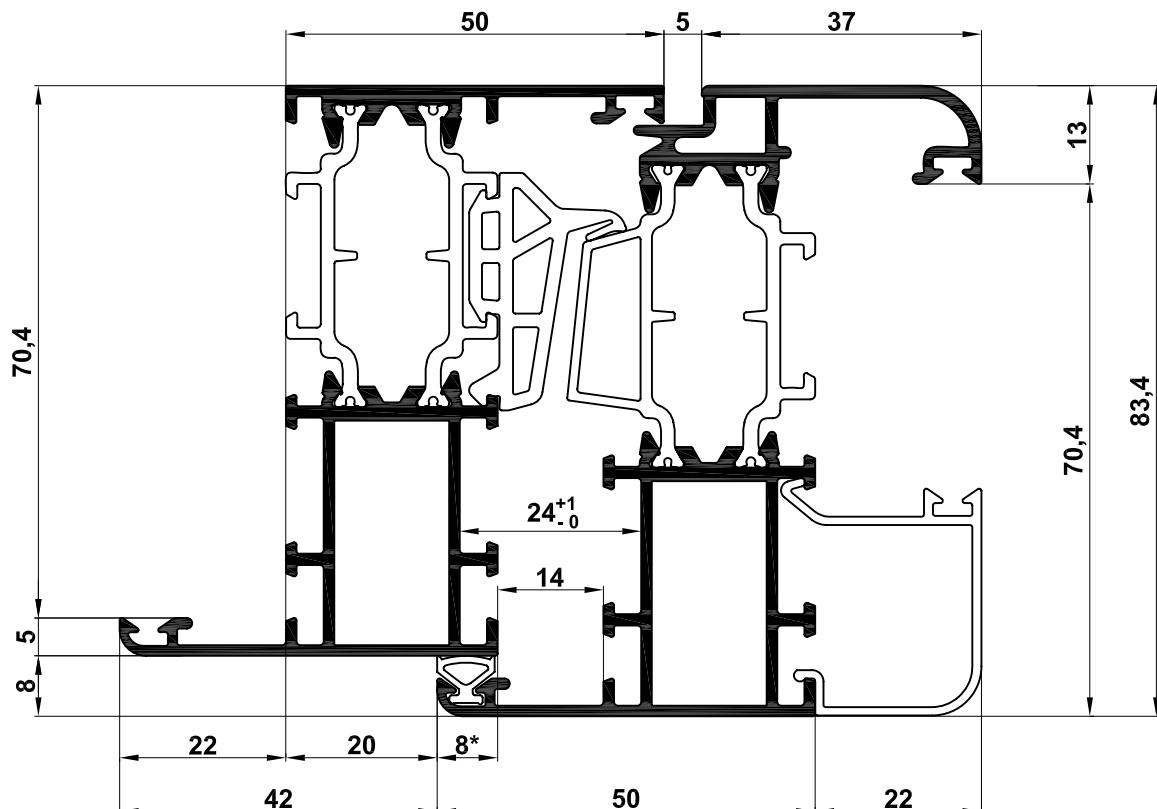
5

### ASTA BAR



900221

Lunghezza Standard Barre = 6500 mm  
Standard lenght = 6500 mm



**Dimensione Minima Larghezza Anta 700mm**

**Nel caso si debbano realizzare ante a venti a dimensioni ridotte (vedi nota riportata) si consiglia di diminuire la quota di battuta da 8 mm a 7,5 mm**

**N.B.:**

- Le dimensioni indicate sono state ottenute considerando le quote teoriche.

**Minimum wing width 700mm**

**In case you need to realize small wings (see note). We suggest to decrease the closure dimension from 8mm to 7,5mm**

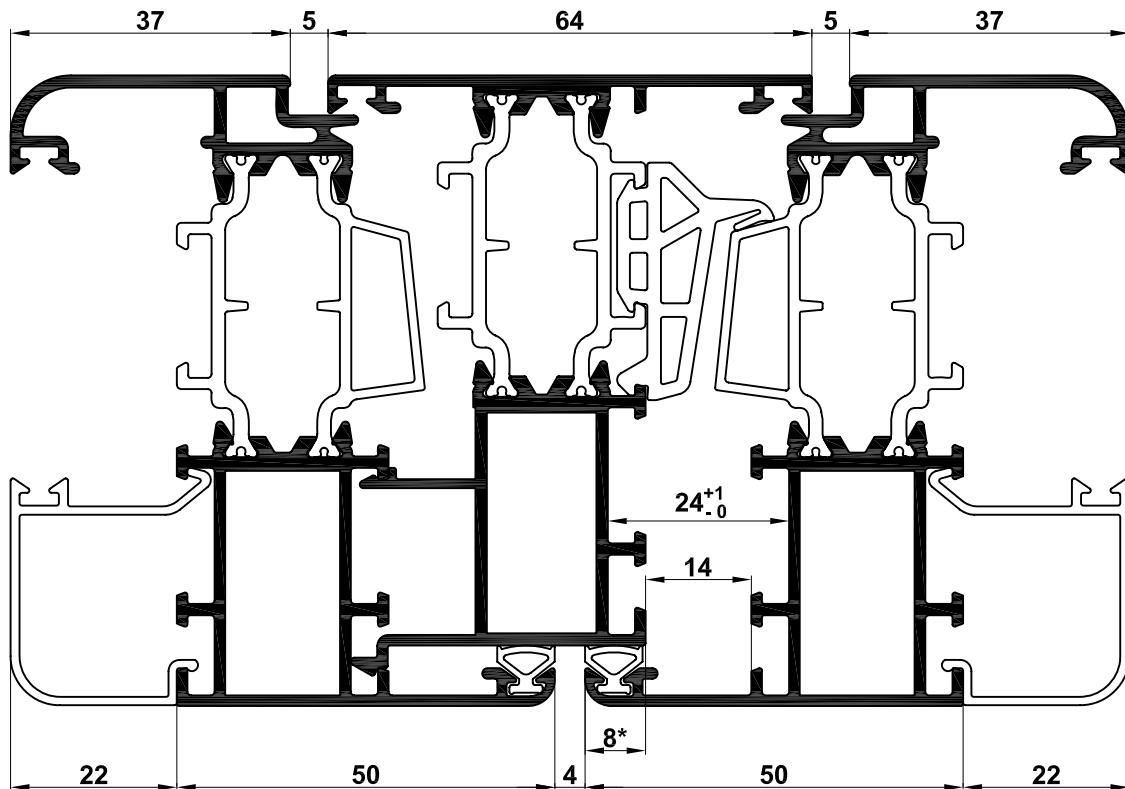
**N.B.:**

- The dimensions indicated, are obtained considering theoretical values.

- Sezioni tipiche finestra, porta a battente e anta ribalta.  
Typical sections of window, door and tilt and turn.

- Per distinte di taglio e inserimento accessori, tenere presente questo schema  
Take this diagram into consideration for cut and accessories

\* Per anta ribalta "Rbalta 150" , considerare 7,5 mm  
For "Rbalta 150" tilt and turn, have to consider 7,5 mm



**Dimensione Minima Larghezza Anta 700mm**

**Nel caso si debbano realizzare ante a vento a dimensioni ridotte (vedi nota riportata) si consiglia di diminuire la quota di battuta da 8 mm a 7,5 mm**

**N.B.:**

- Le dimensioni indicate sono state ottenute considerando le quote teoriche.

**Minimum wing width 700mm**

**In case you need to realize small wings (see note). We suggest to decrease the closure dimension from 8mm to 7,5mm**

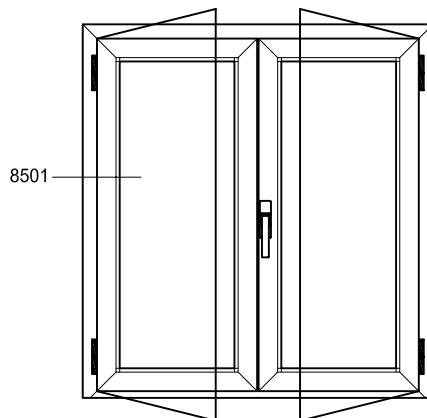
**N.B.:**

- The dimensions indicated, are obtained considering theoretical values.

- Sezioni tipiche finestra, porta a battente e anta ribalta.  
Typical sections of window, door and tilt and turn.

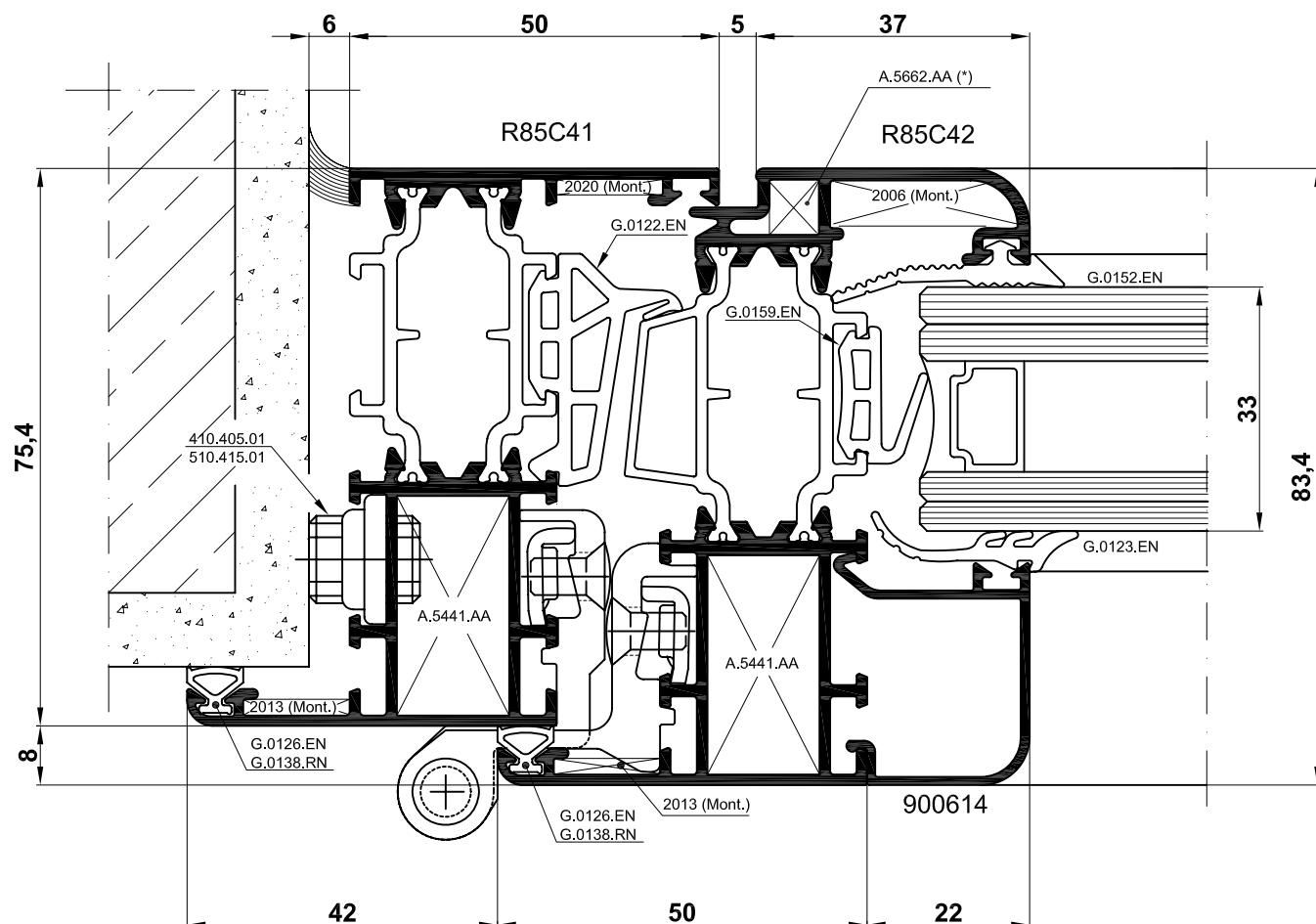
- Per distinte di taglio e inserimento accessori, tenere presente questo schema  
Take this diagram into consideration for cut and accessories

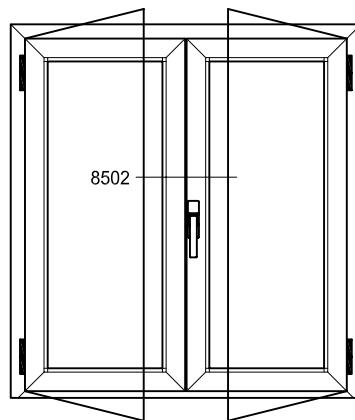
\* Per anta ribalta "Rbalta 150" , considerare 7,5 mm  
For "Rbalta 150" tilt and turn, have to consider 7,5 mm



(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
 Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

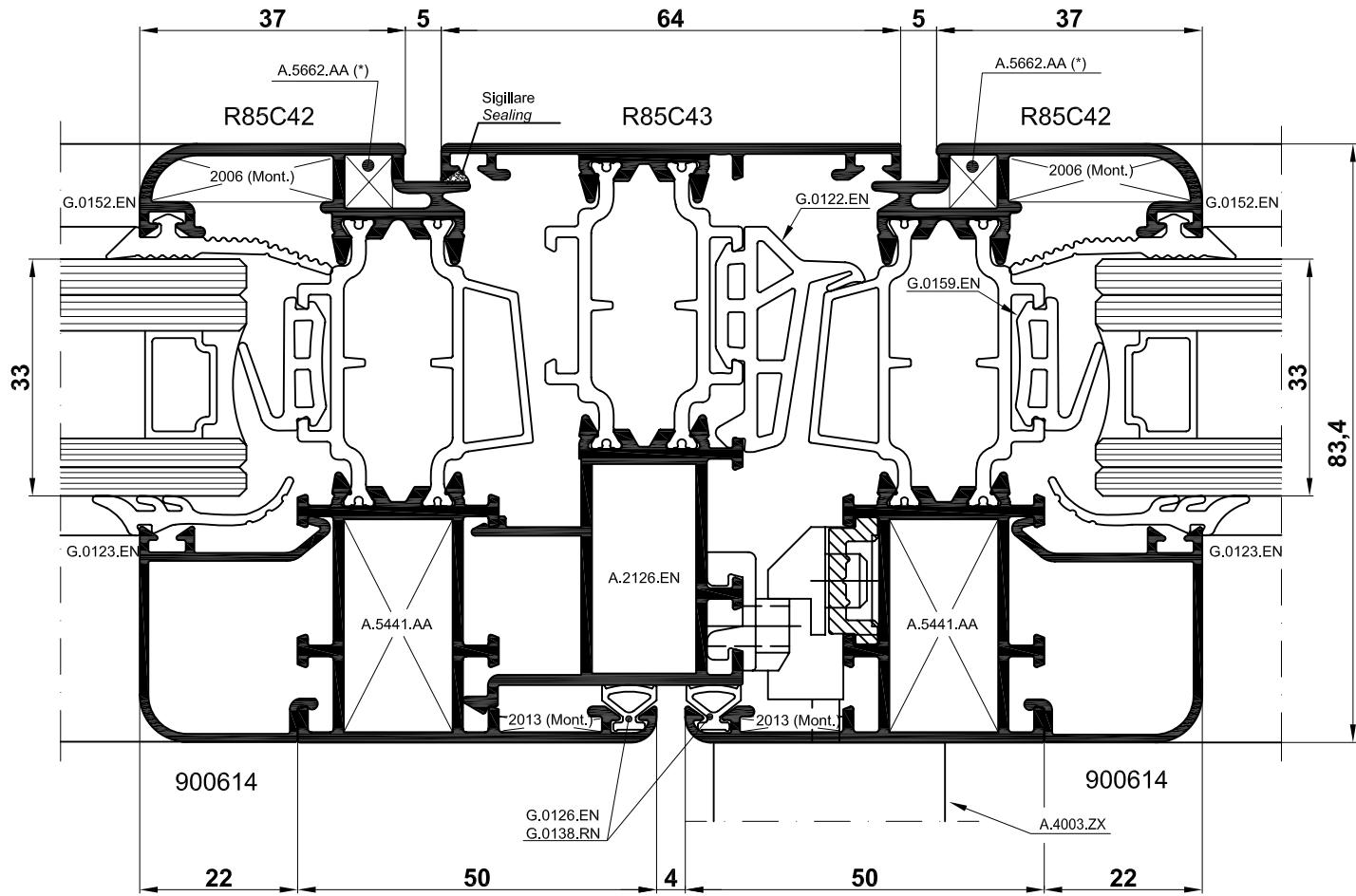
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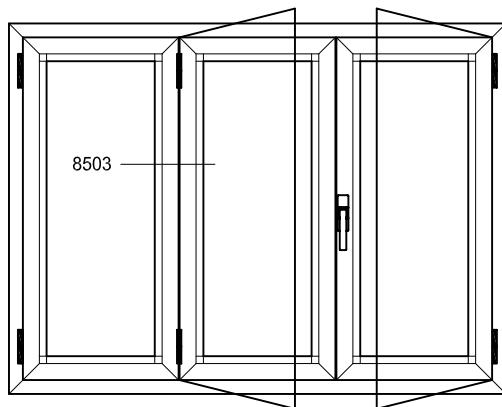




(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

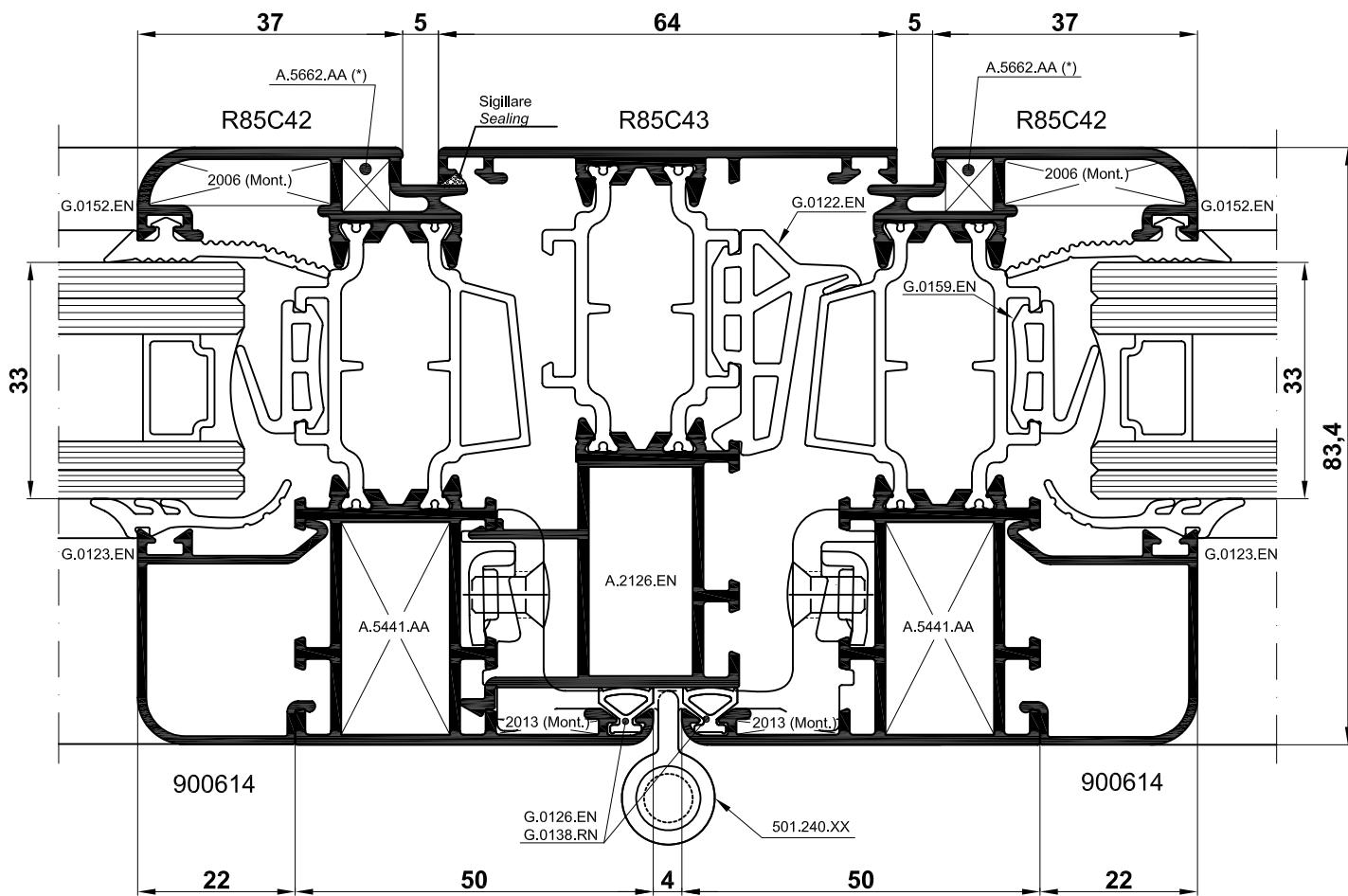
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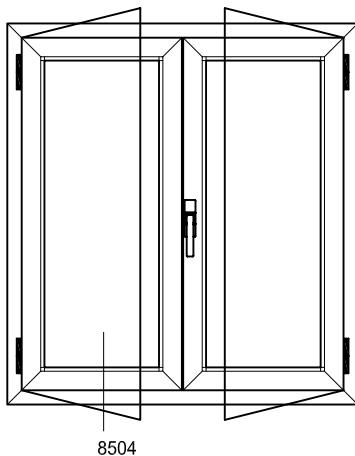




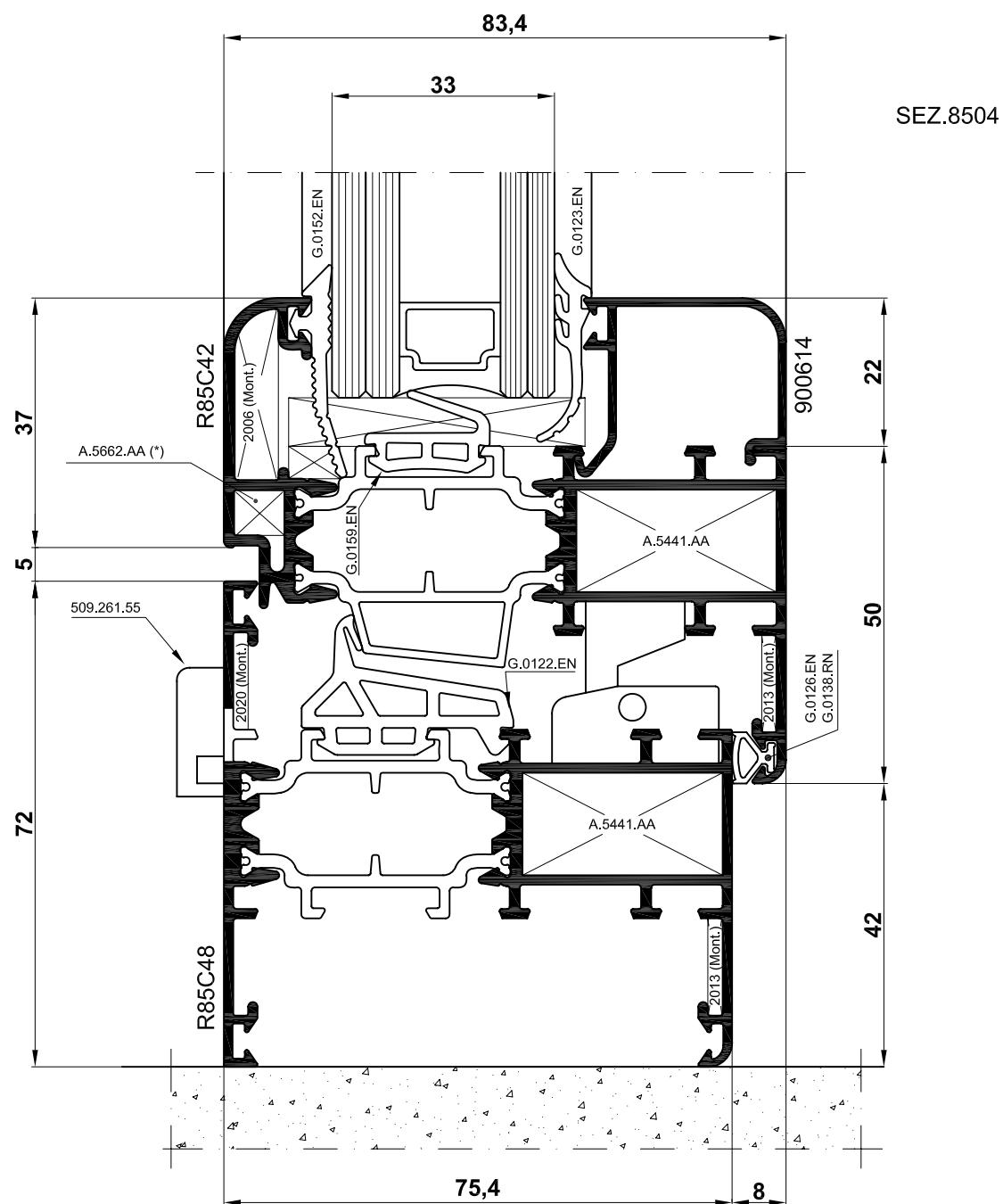
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
 Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
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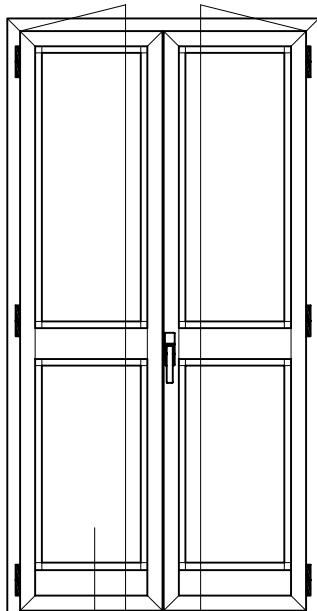
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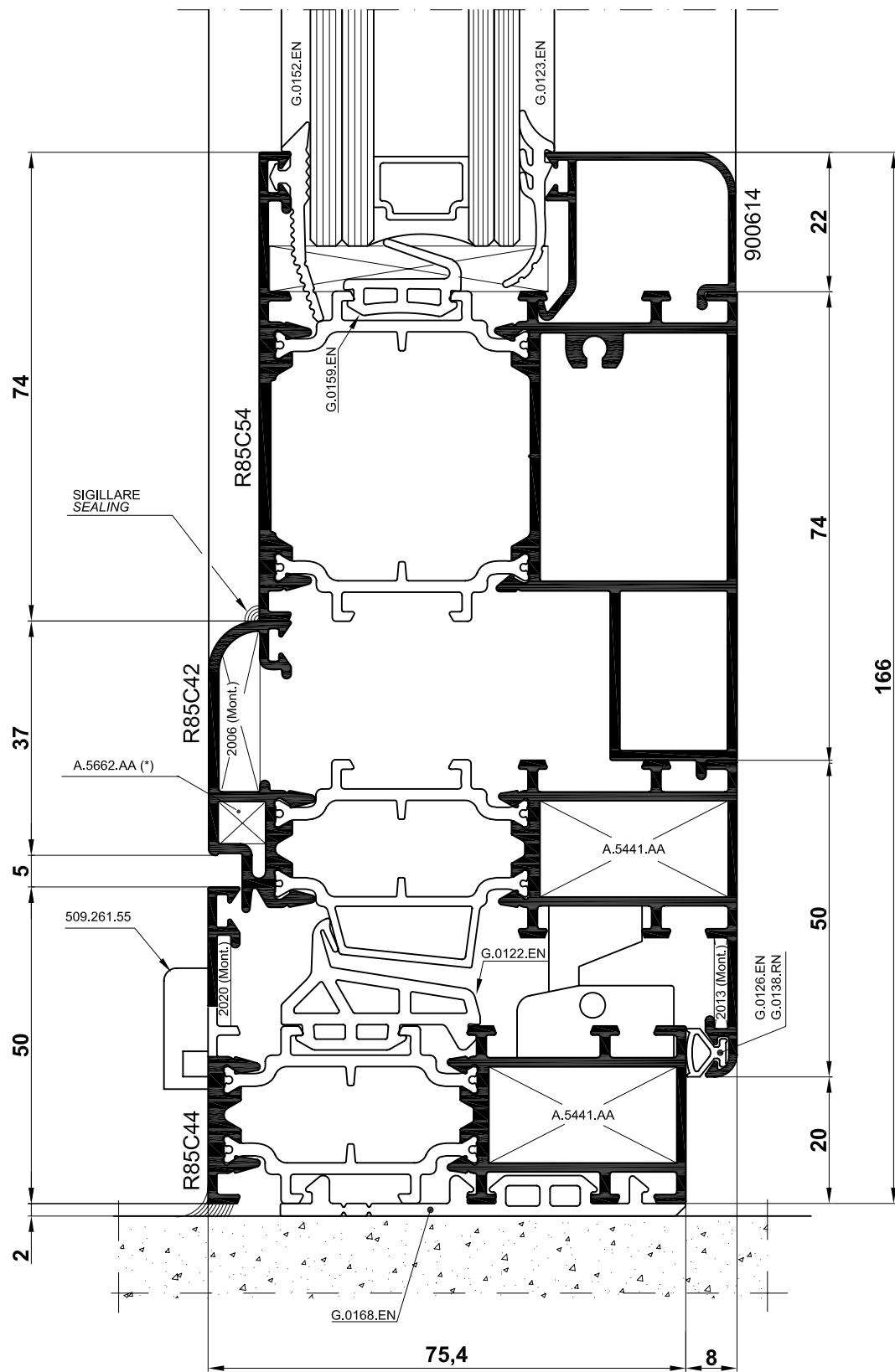
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO

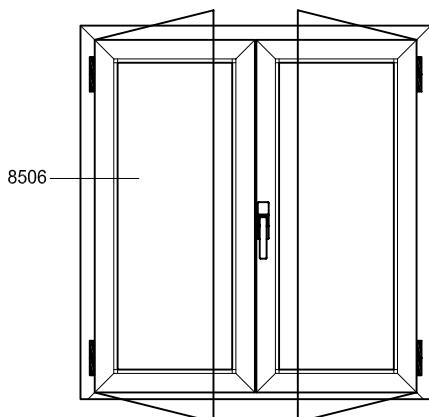




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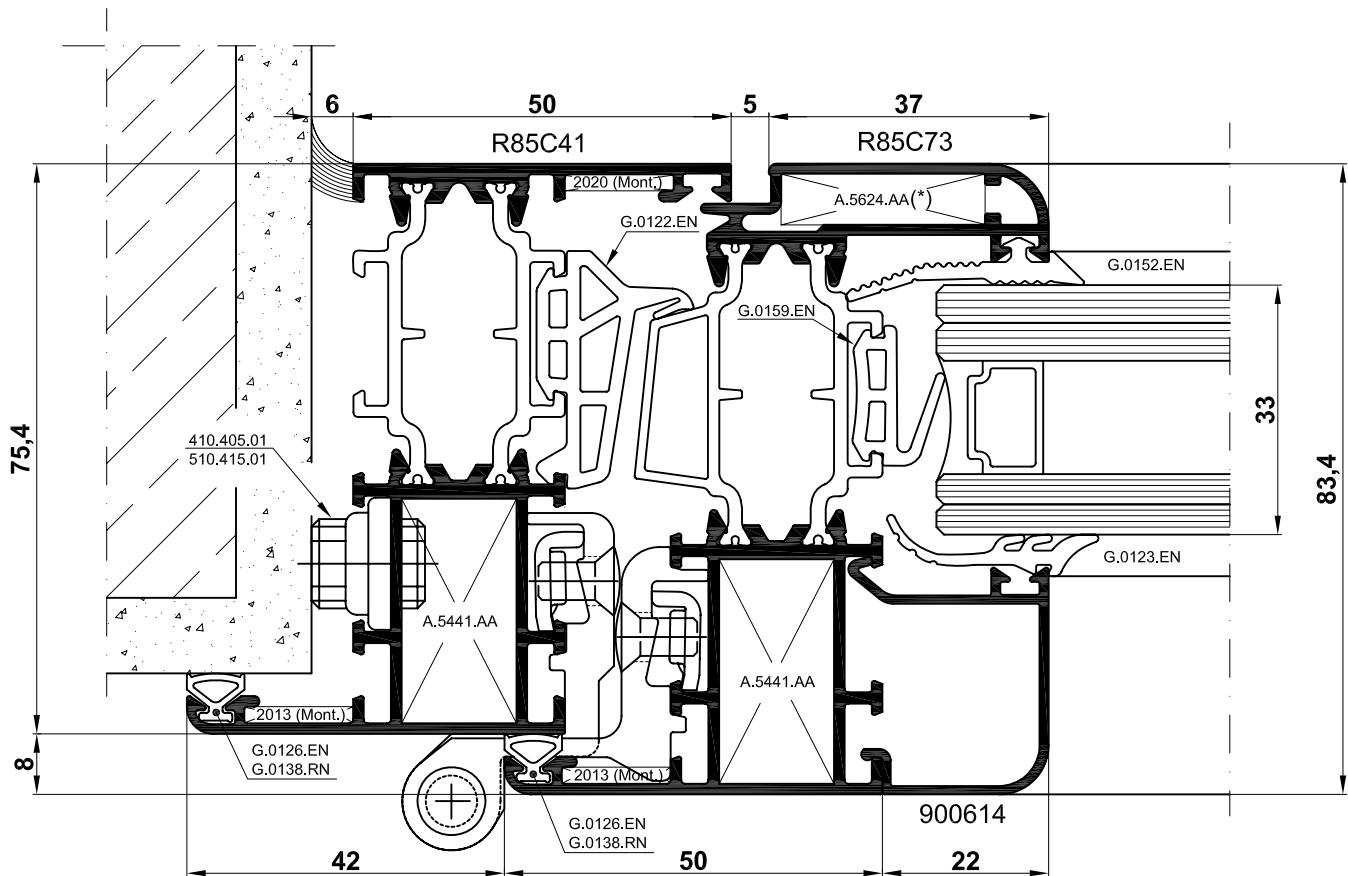
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO





(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
 Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

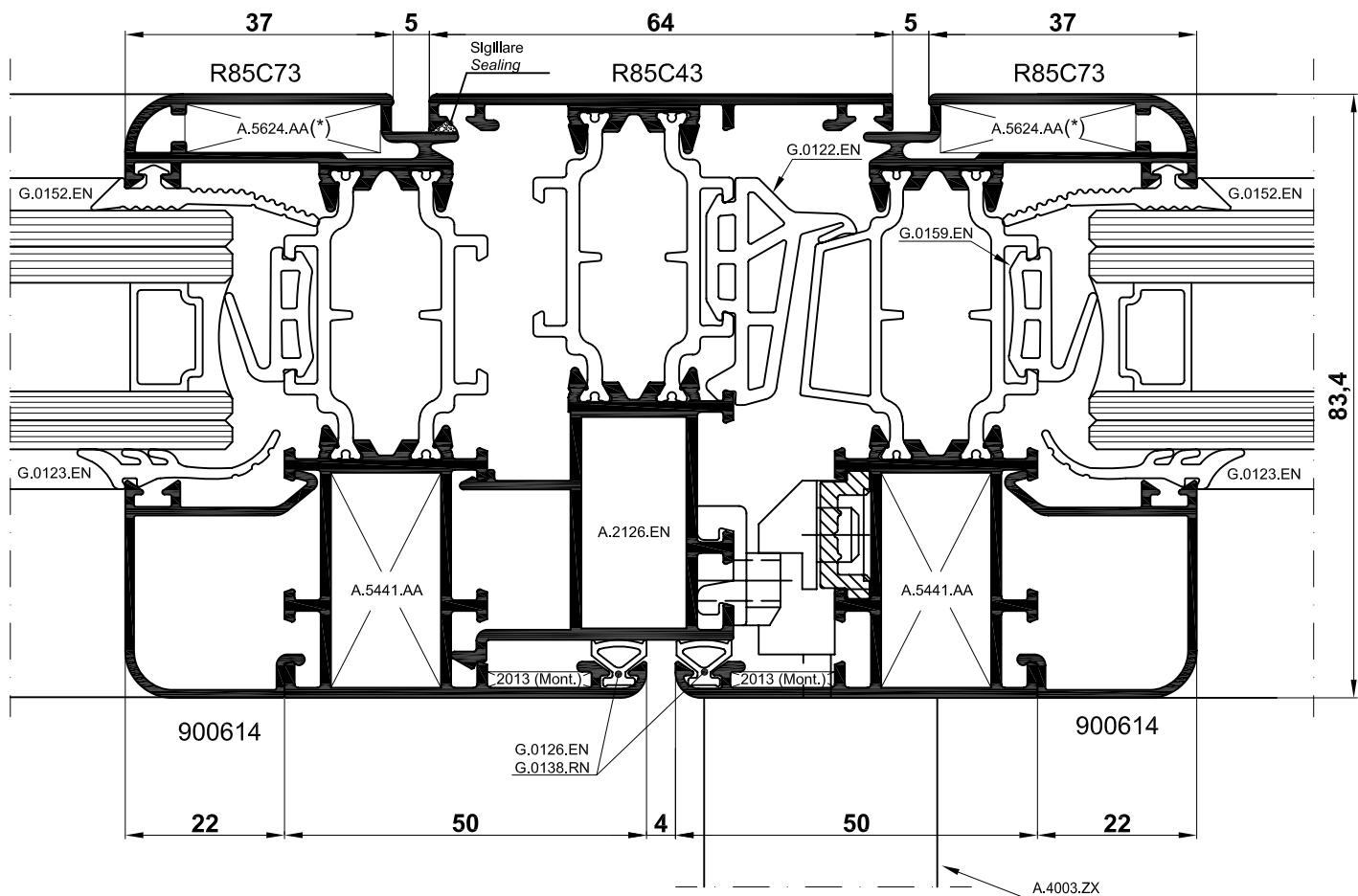
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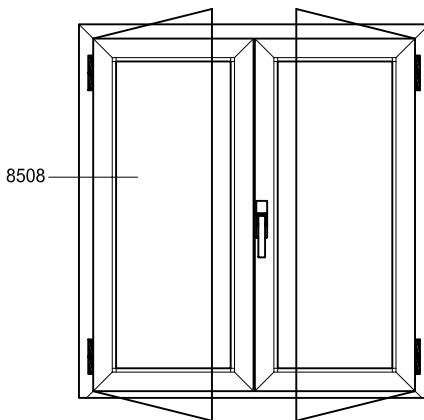




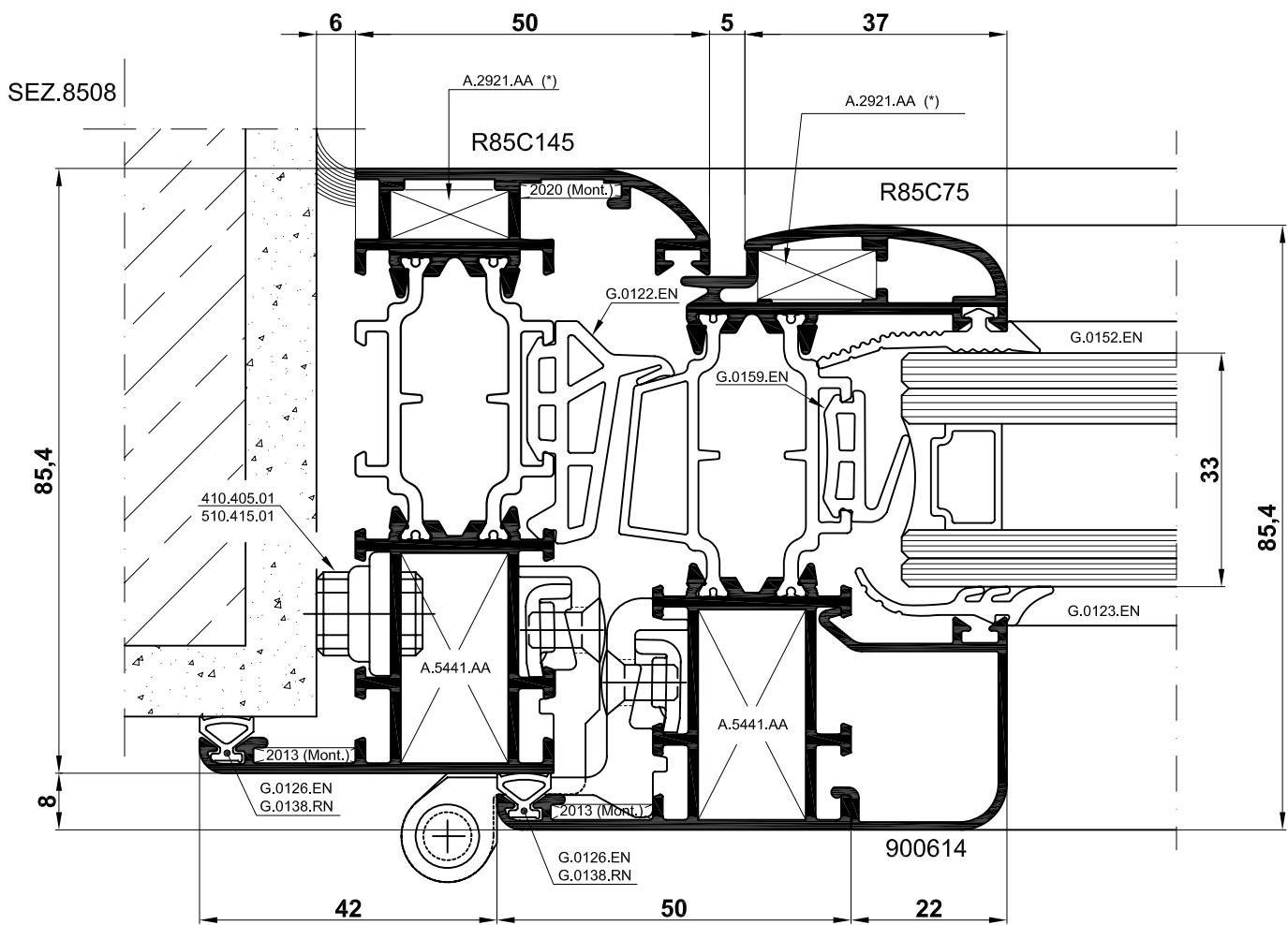
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
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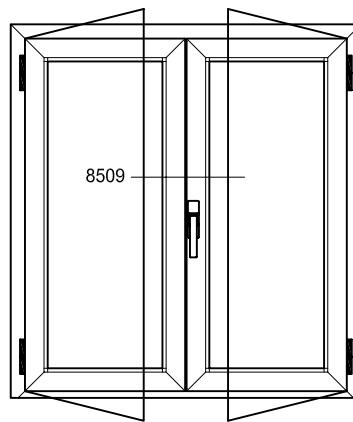
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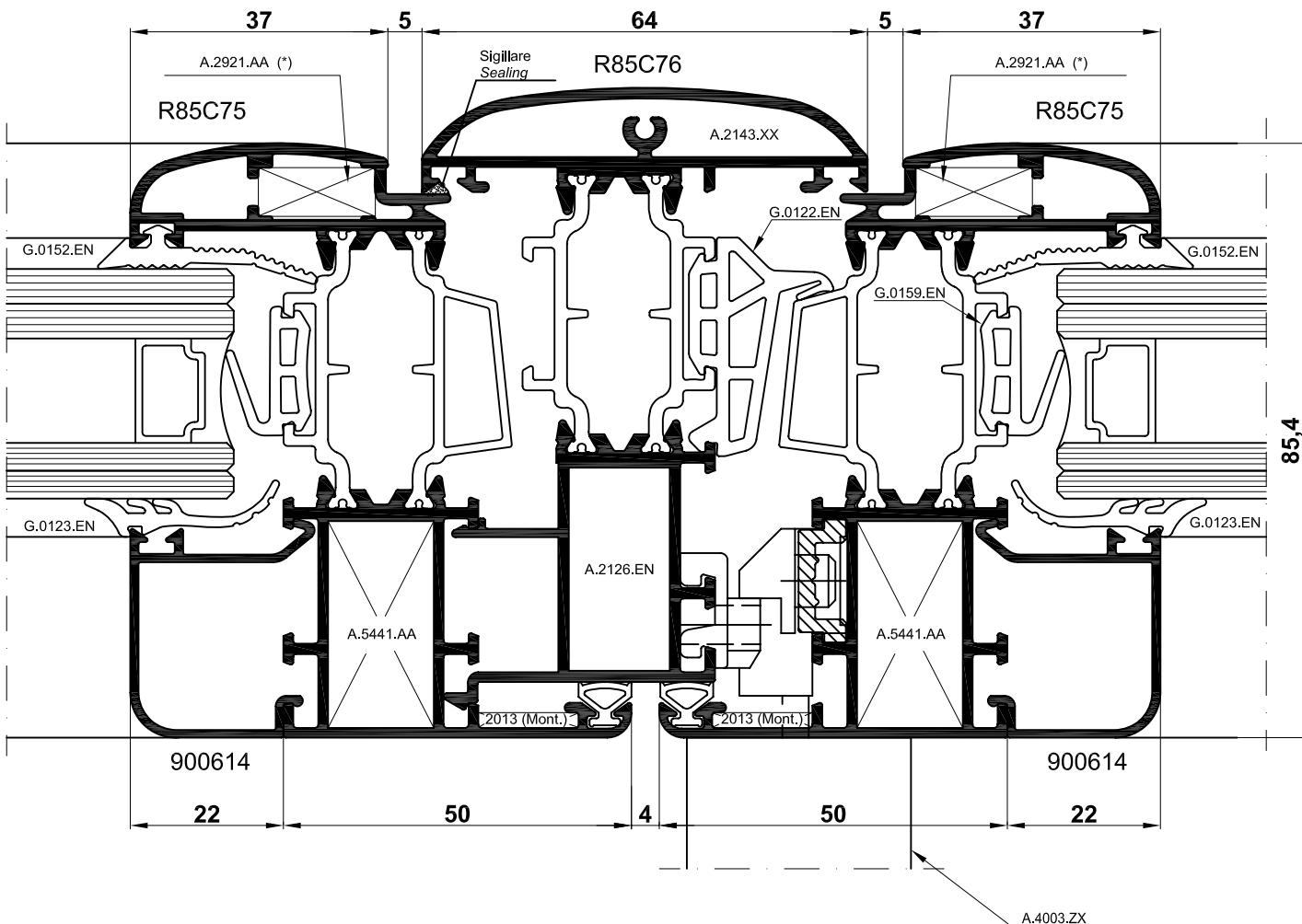
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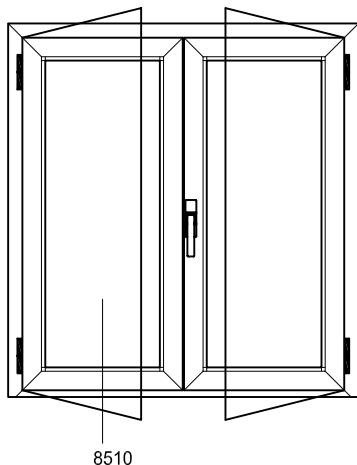




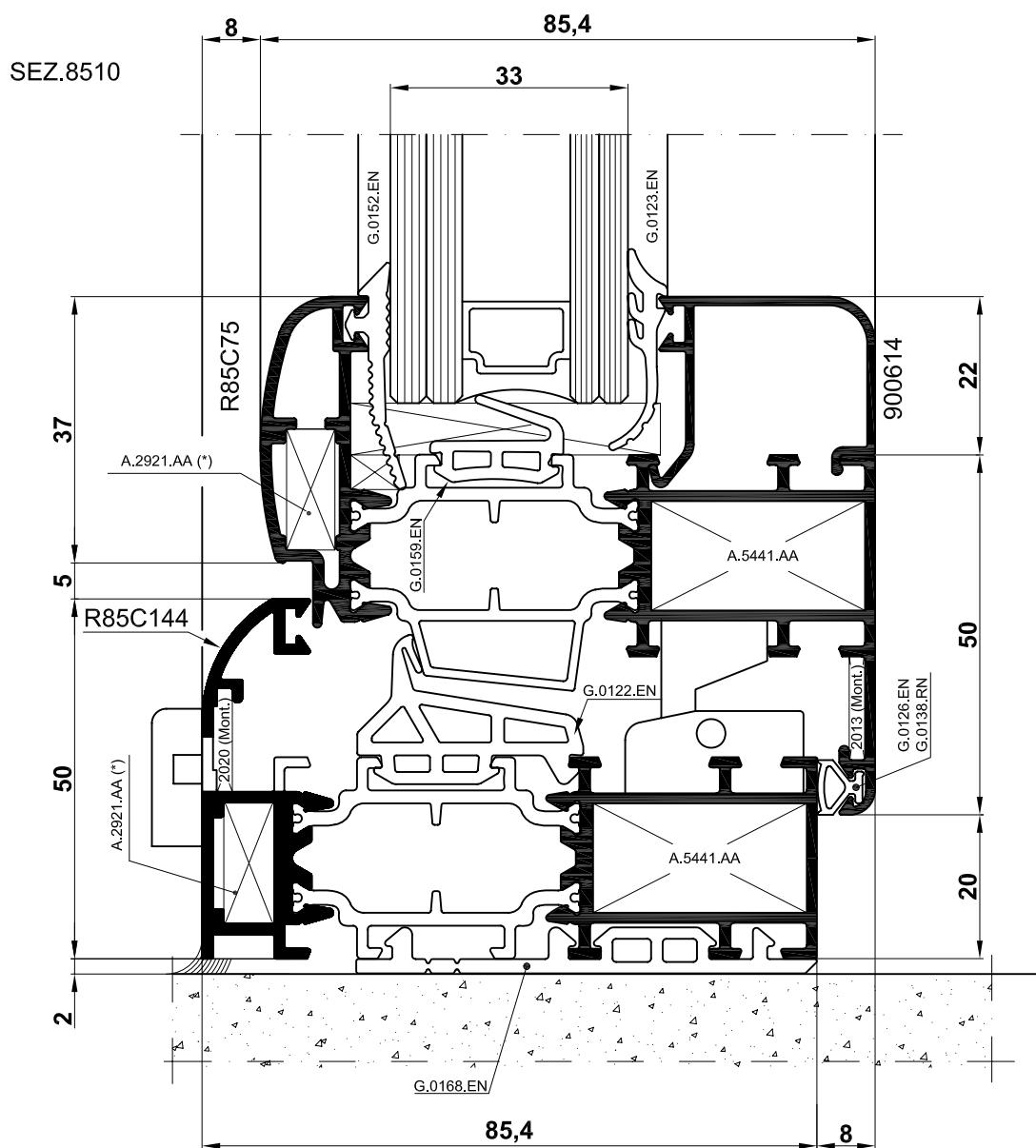
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
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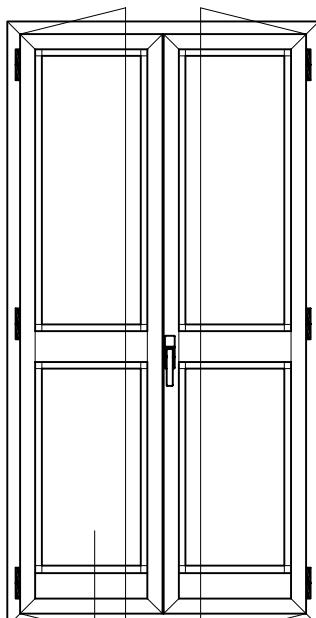
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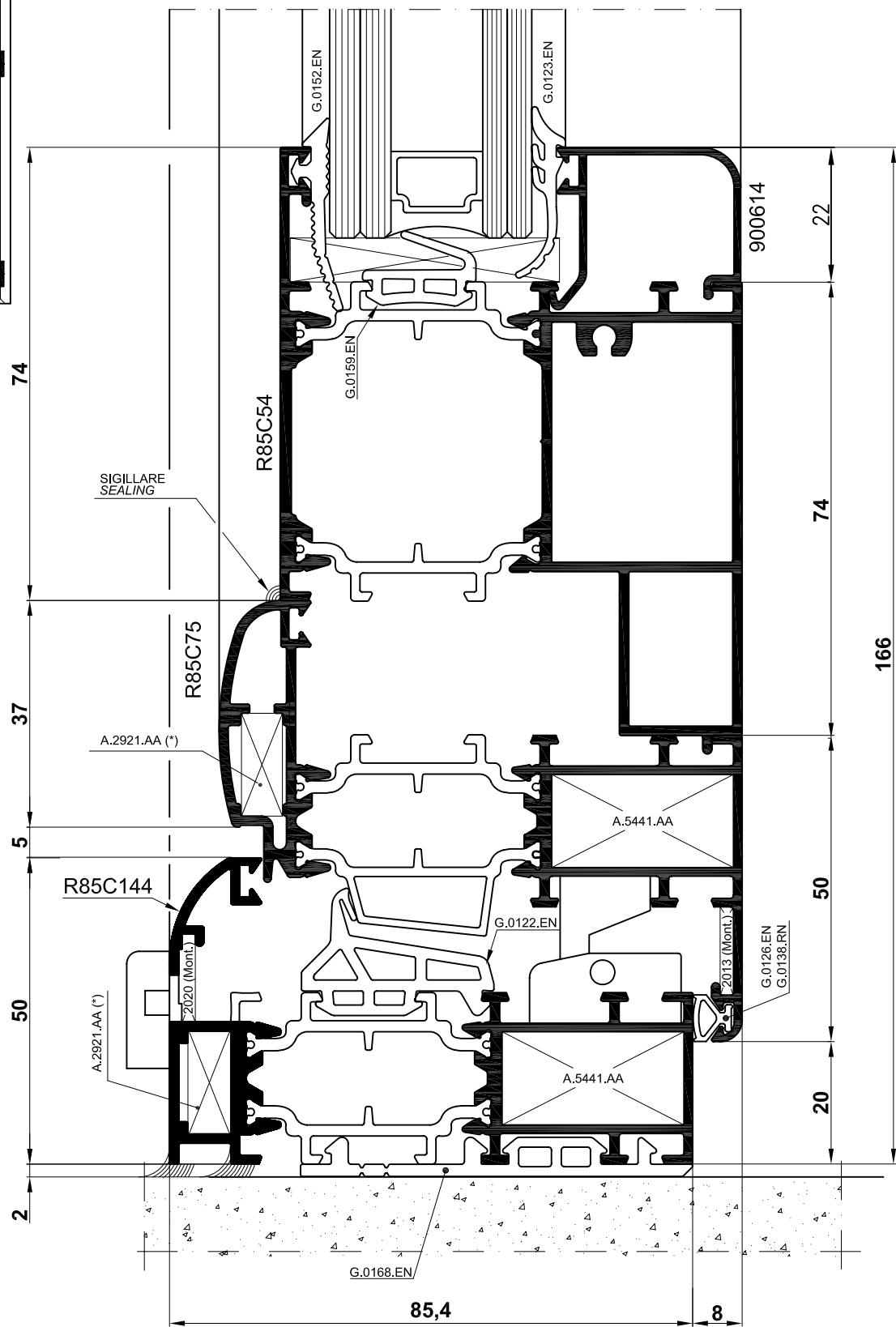
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

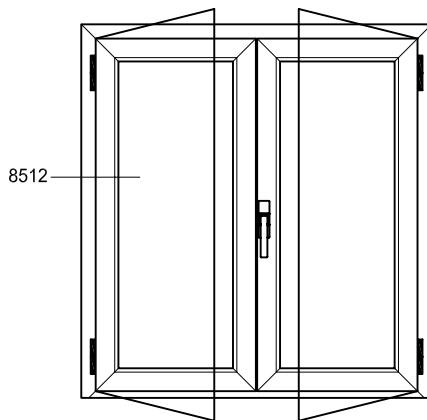




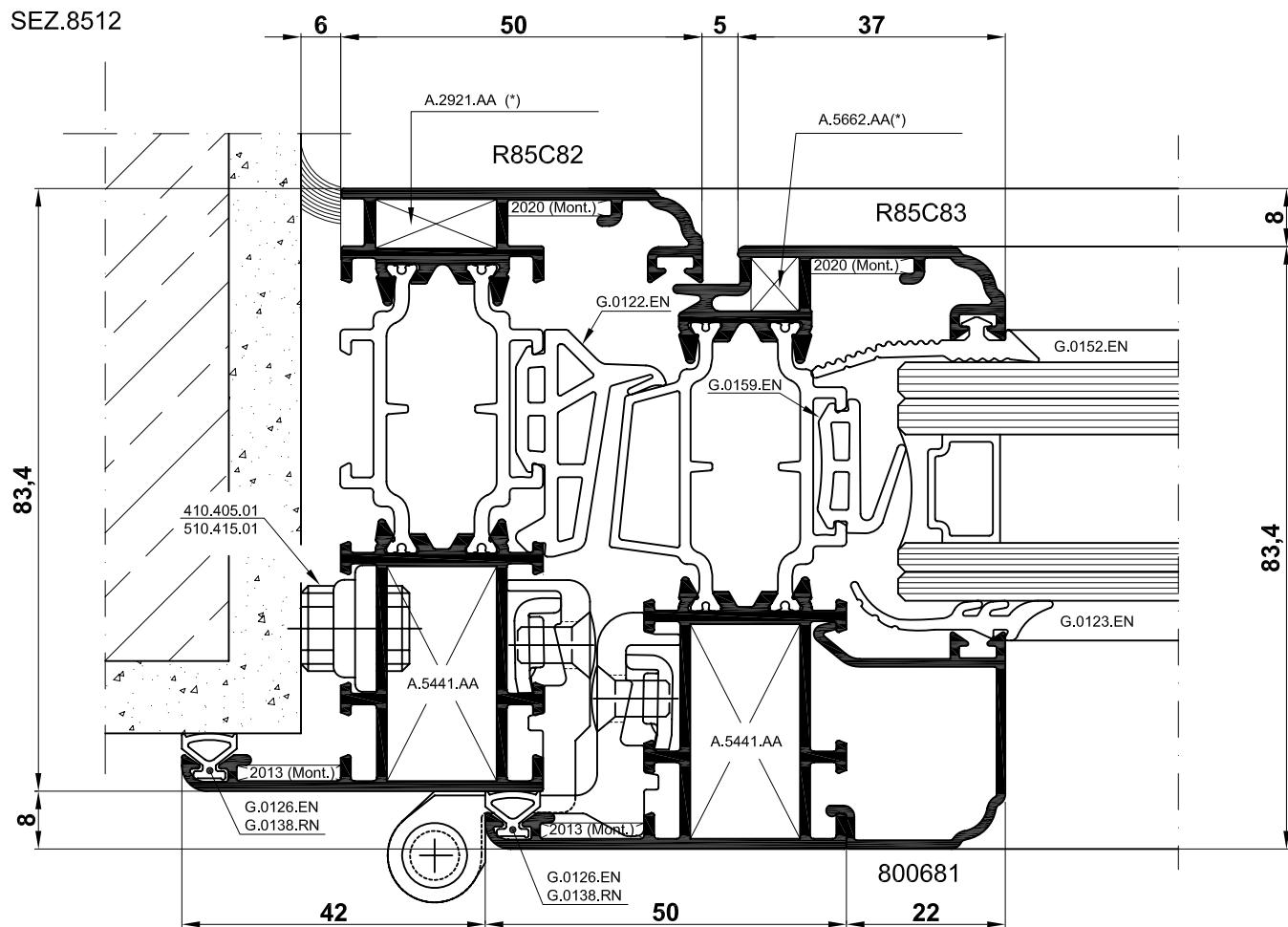
SEZ.8511

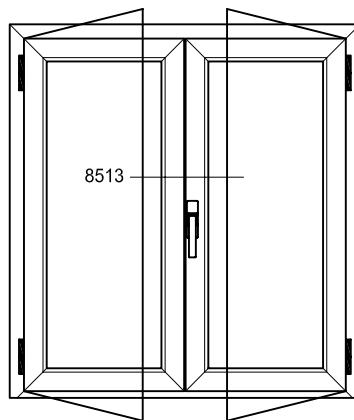
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*





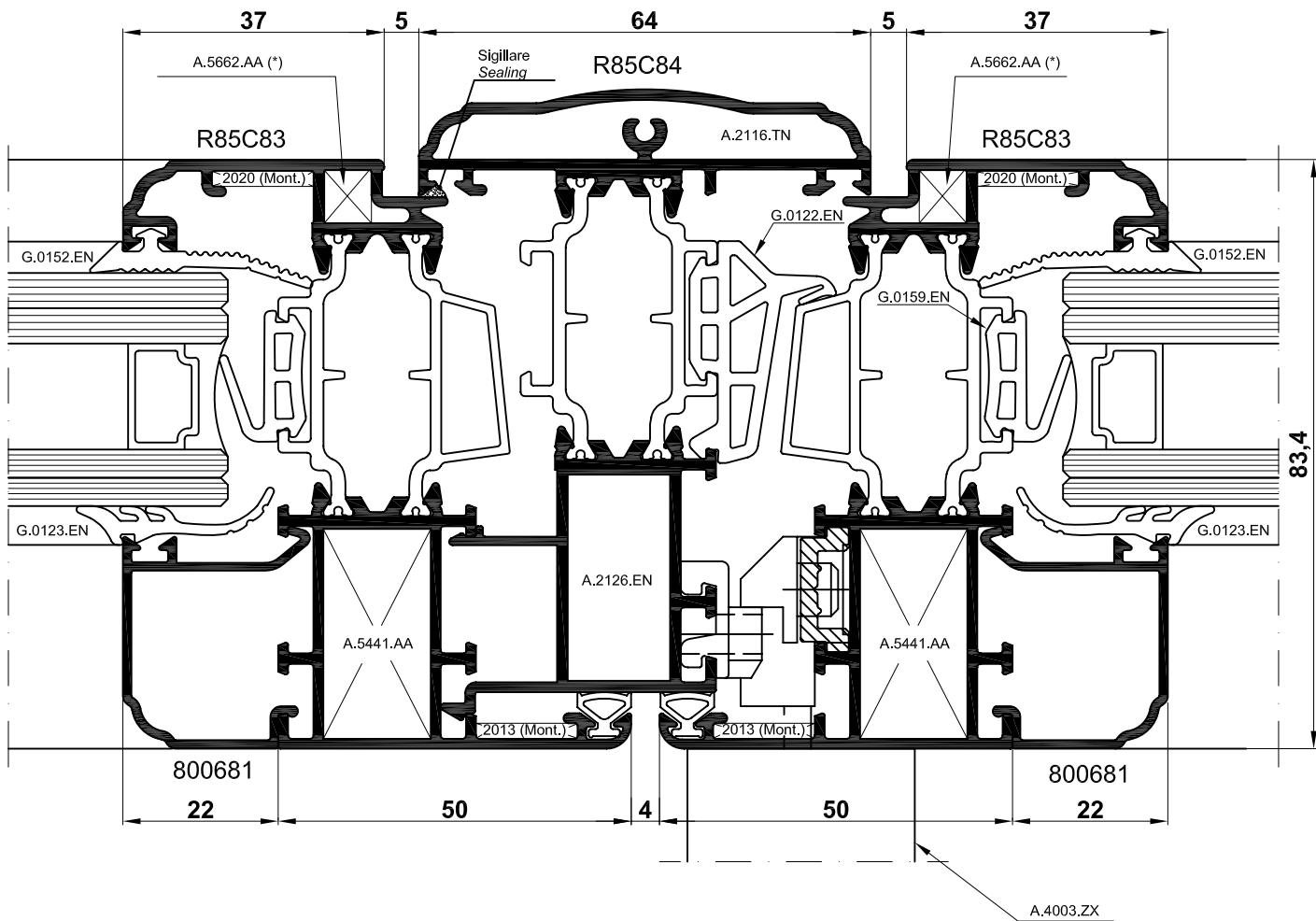
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

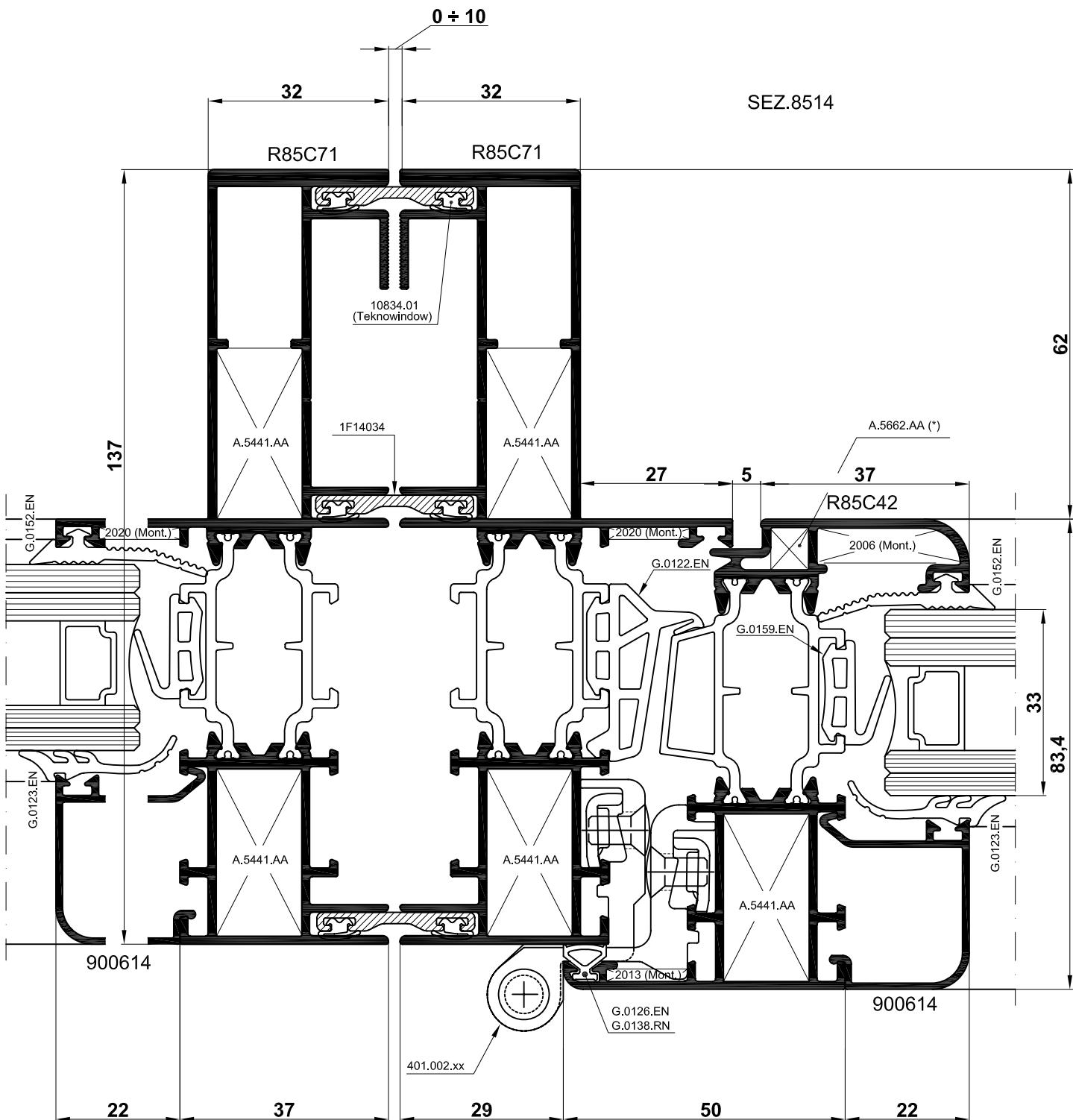




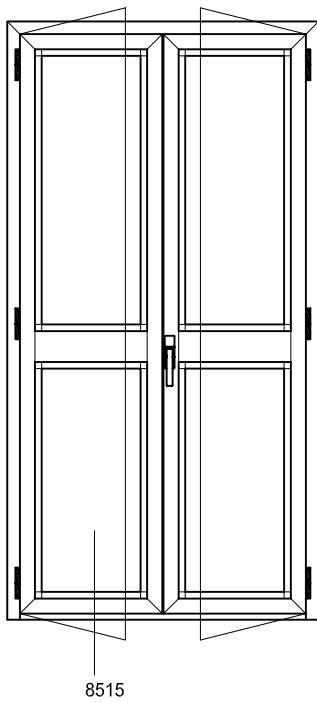
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
 Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

SEZ.8513





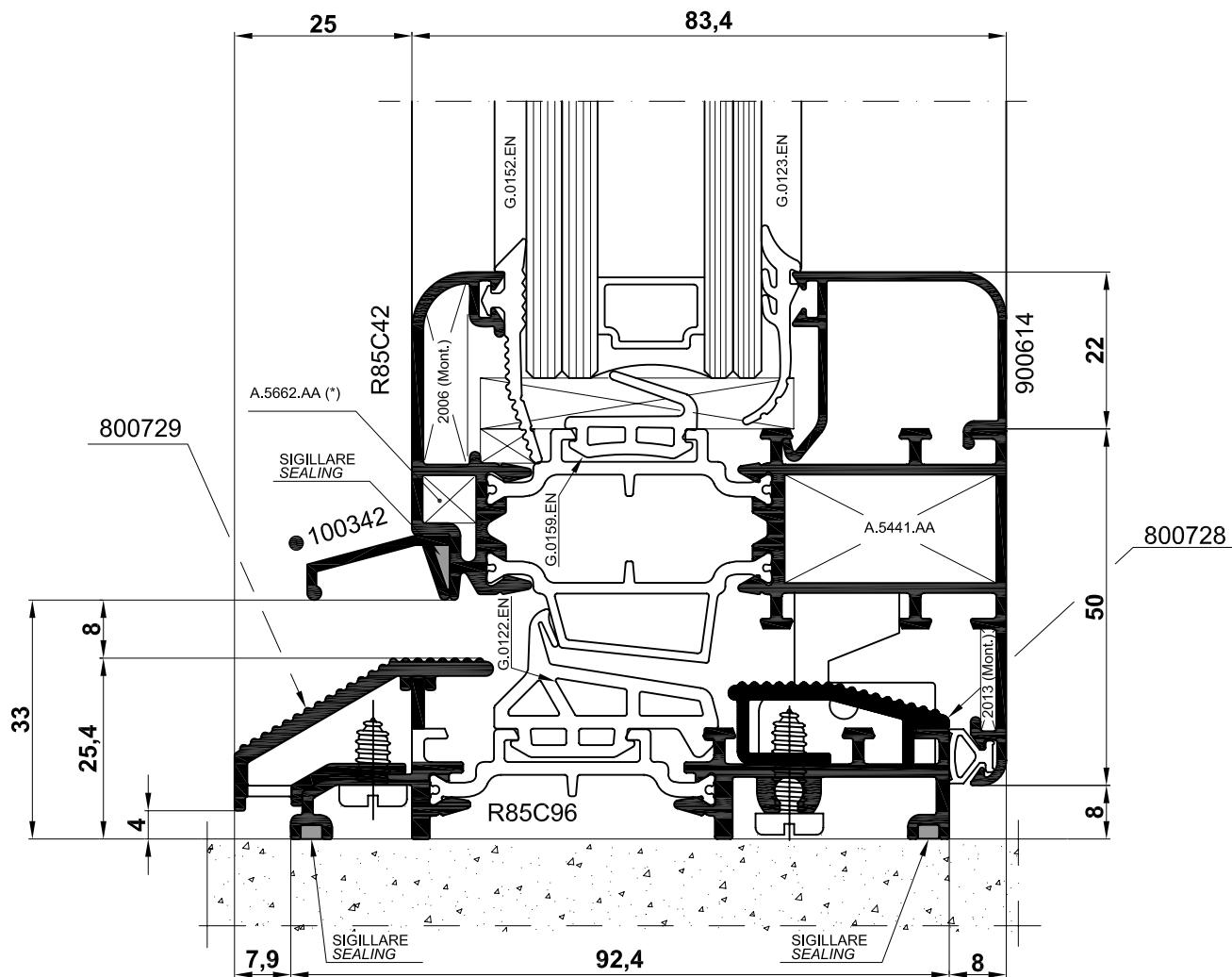
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

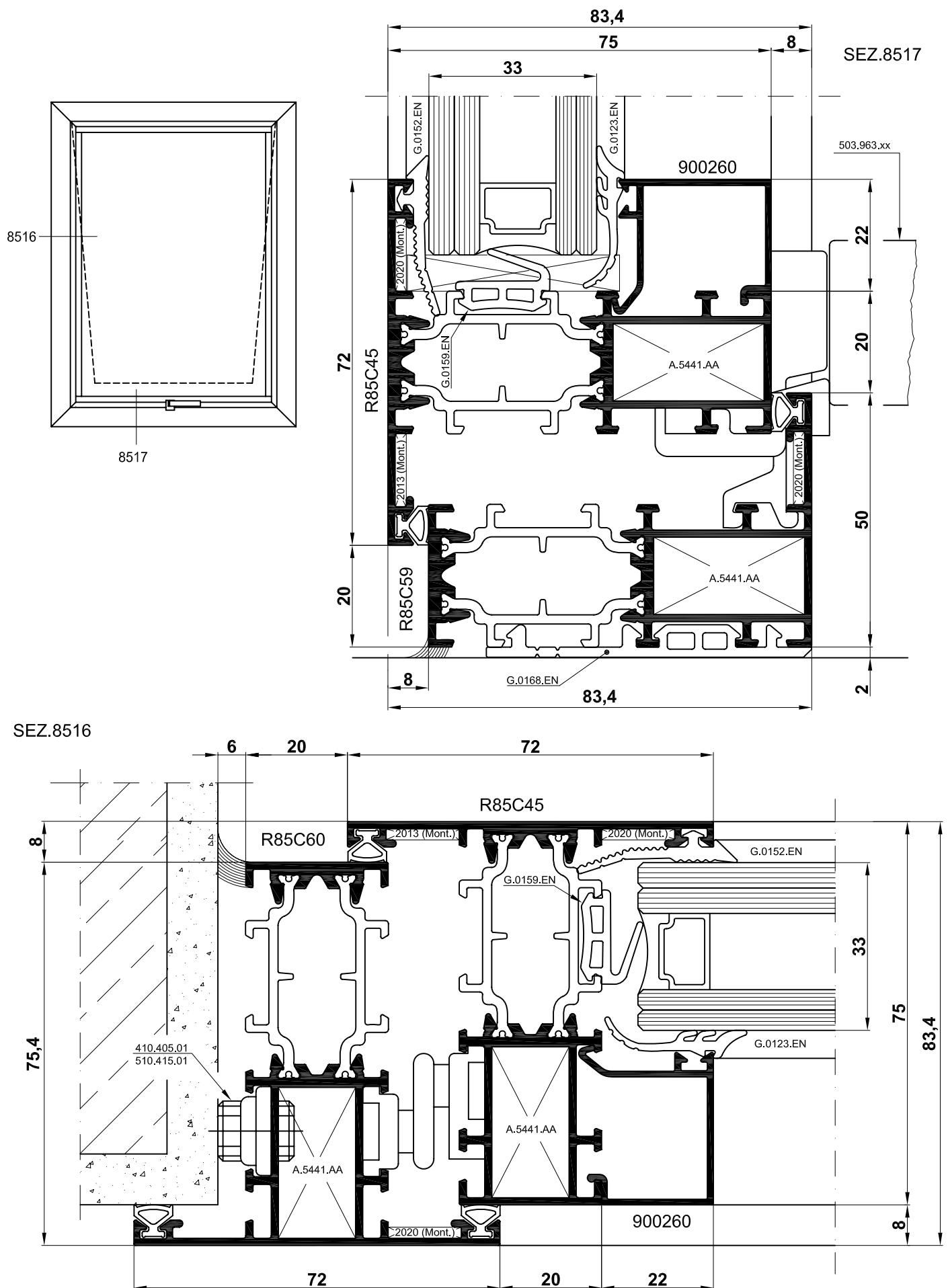


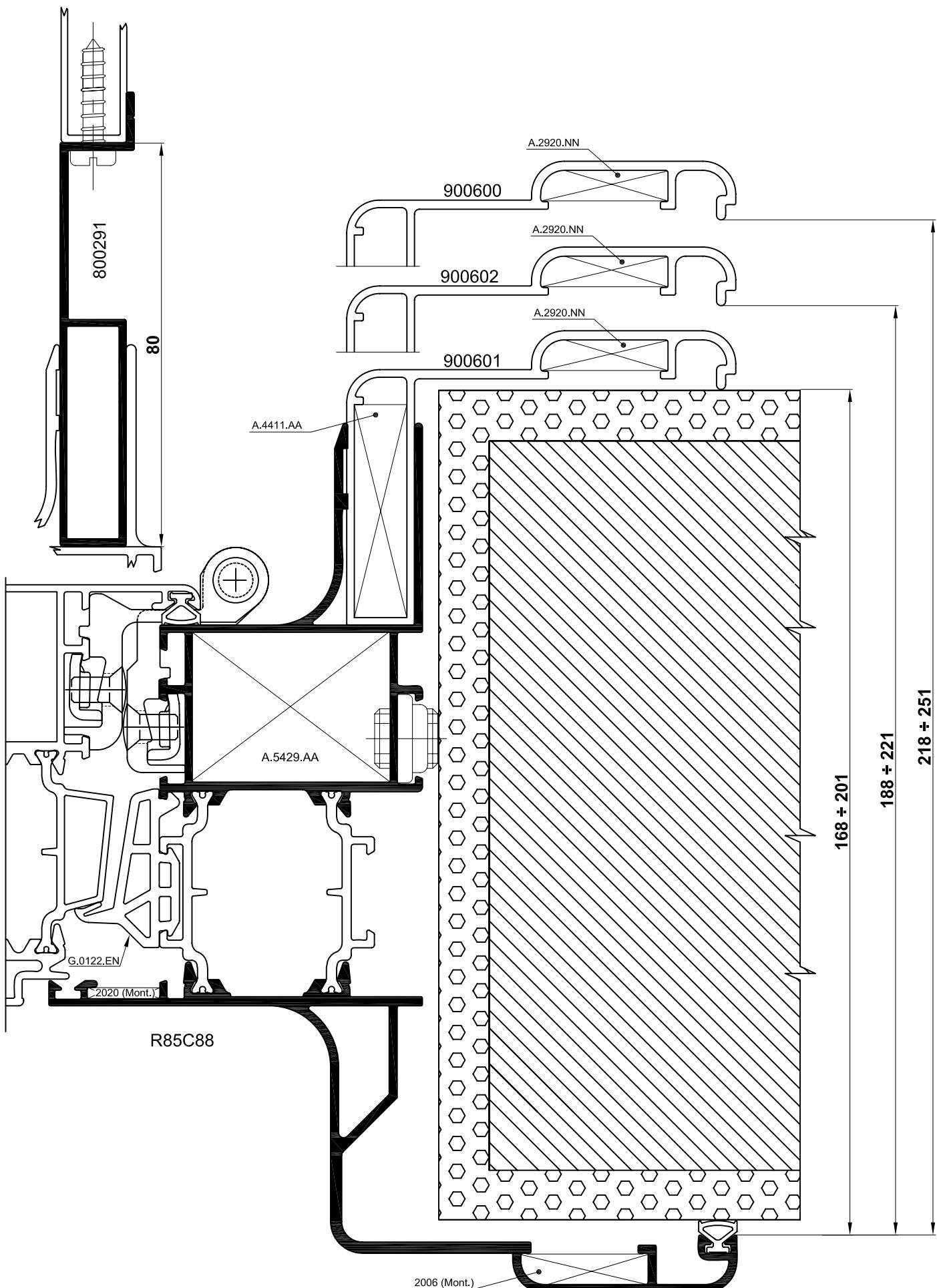
(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate.  
Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO

- Asolare il profilato 100342 in corrispondenza della lavorazione della ventilazione dei vetri  
Slot the profile 100342 matching the glass ventilation processing

SEZ.8515

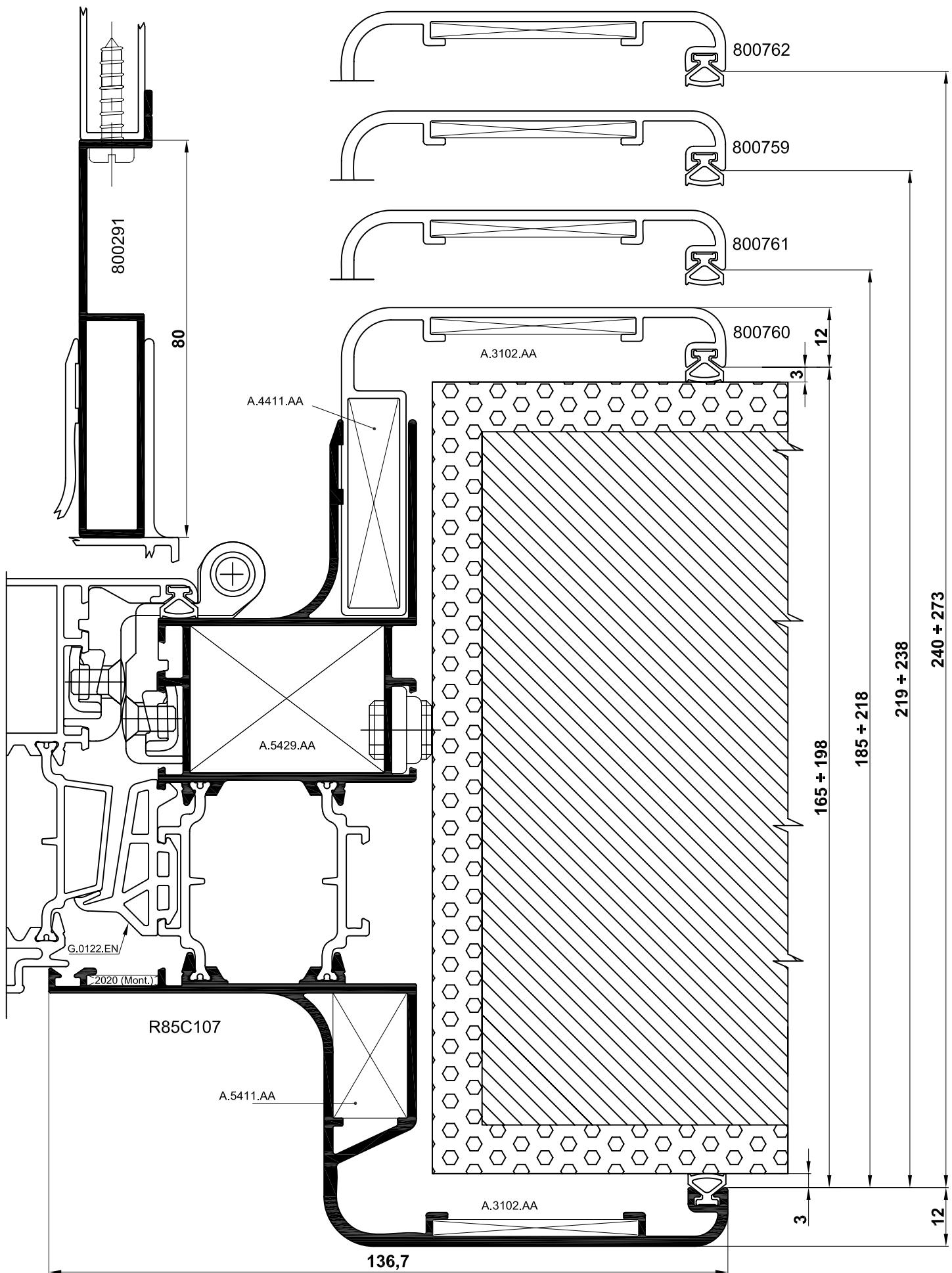






**SEZIONI - TELAIO SPECIALE**  
**SECTIONS - SPECIAL FRAME**

**R** 85<sup>TT</sup> 1.0  
SYSTEM



F4-T85-E-18

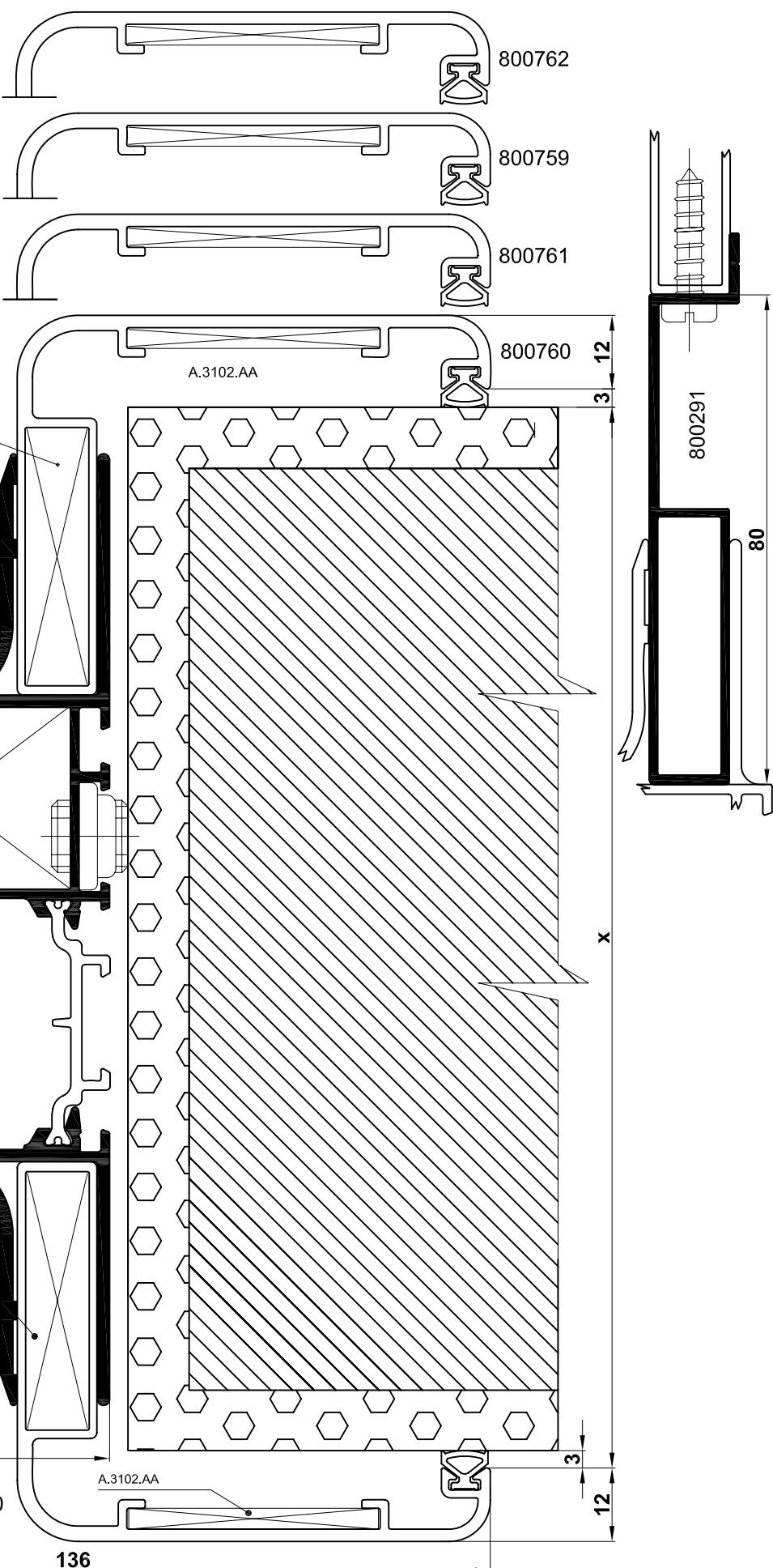
Rev. : 2013  
Ottobre  
October

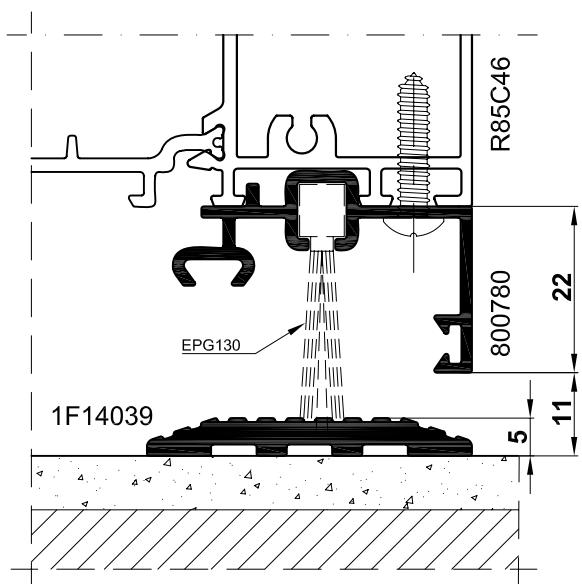
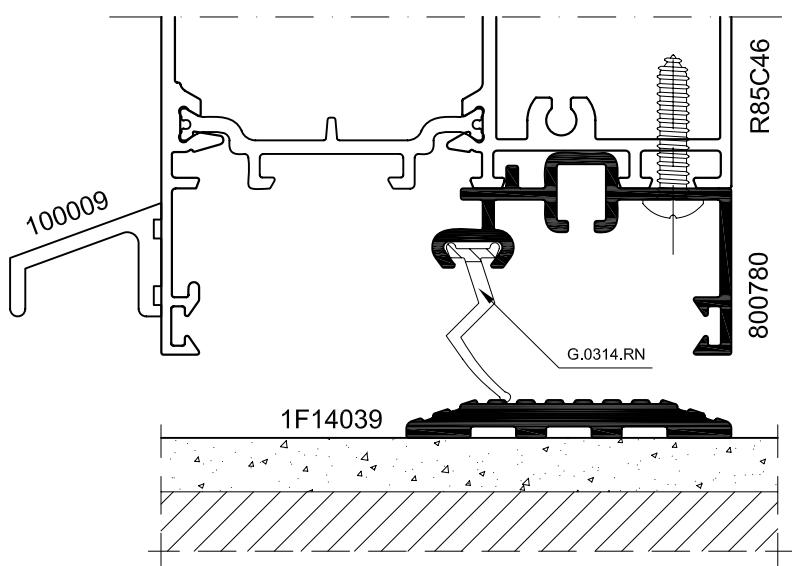
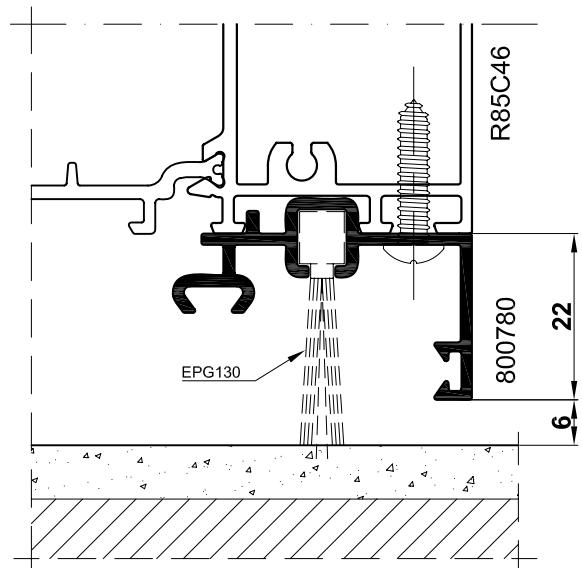
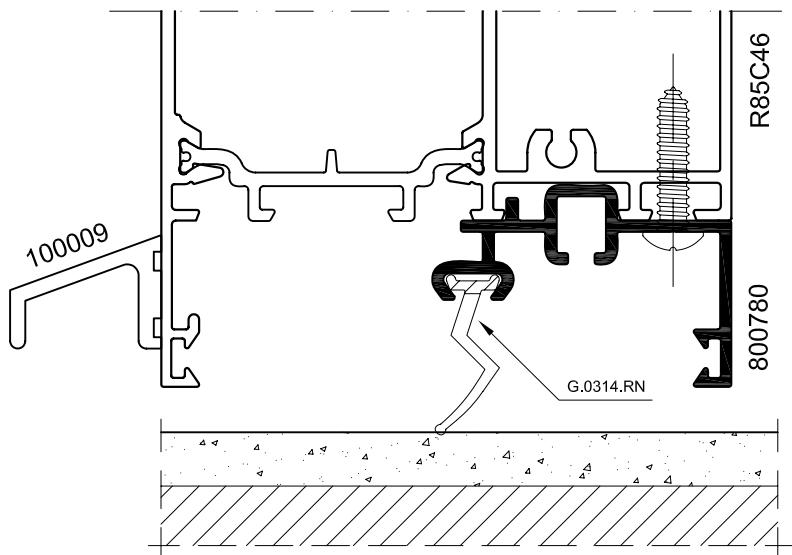
Profilati, accessori e guarnizioni di questo  
catalogo sono proprietà di Sapa, titolare  
di tutti i diritti di esclusiva.

The sections, accessories and weatherstrips  
in this catalogue belong to Sapa  
as sole patentee.

**sapa**

Profiliati Sections	Spessore Muro Wall Thikness	mm
Ester.	Inter.	
800760	800760	x= 176+242
800760	800761	x= 196+262
800760	800759	x= 230+280
800760	800762	x= 251+317
800761	800760	x= 196+254
800761	800761	x= 216+282
800761	800759	x= 250+300
800761	800762	x= 271+337
800759	800760	x= 230+280
800759	800761	x= 247+300
800759	800759	x= 285+320
800759	800762	x= 305+355
800762	800760	x= 251+317
800762	800761	x= 271+337
800762	800759	x= 305+355
800762	800762	x= 326+392

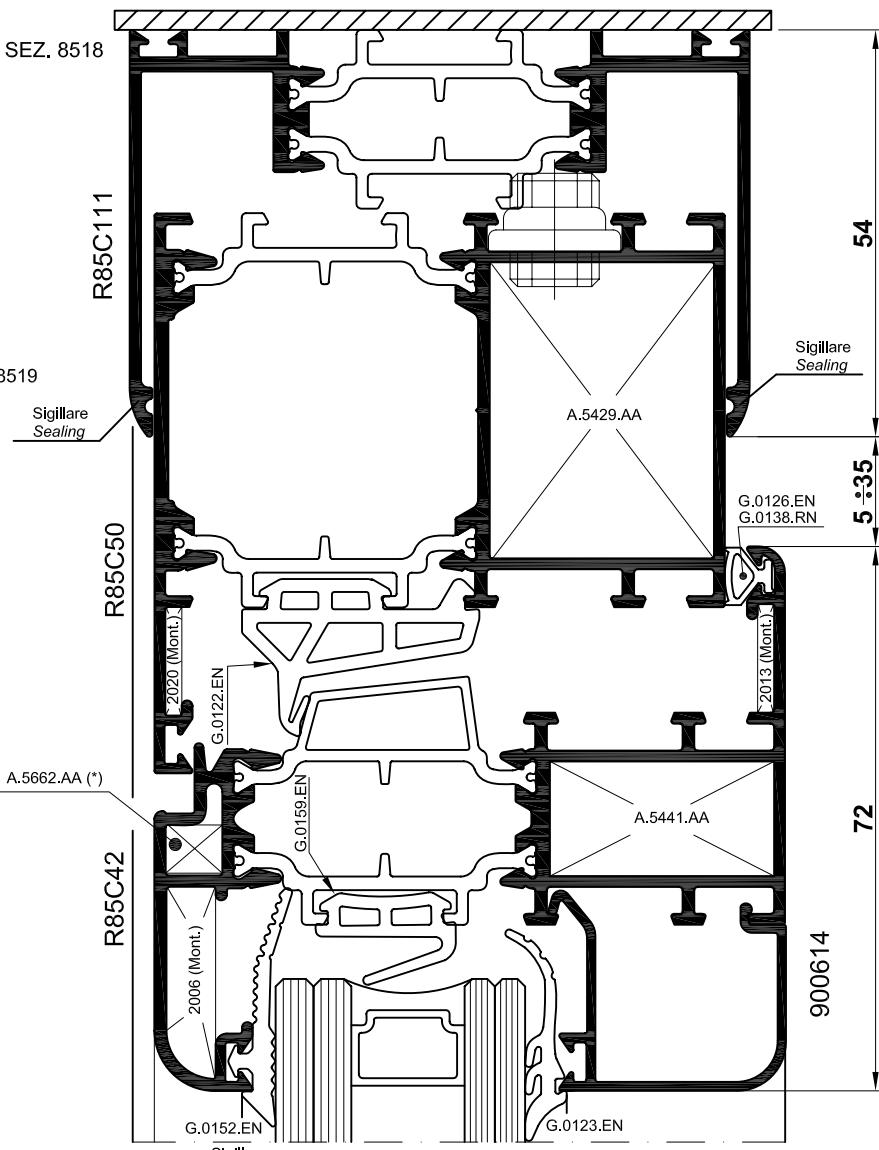
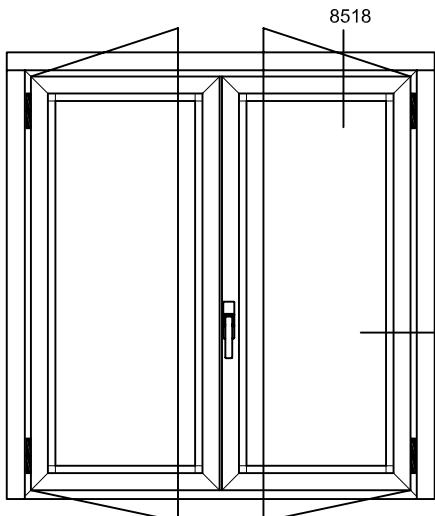




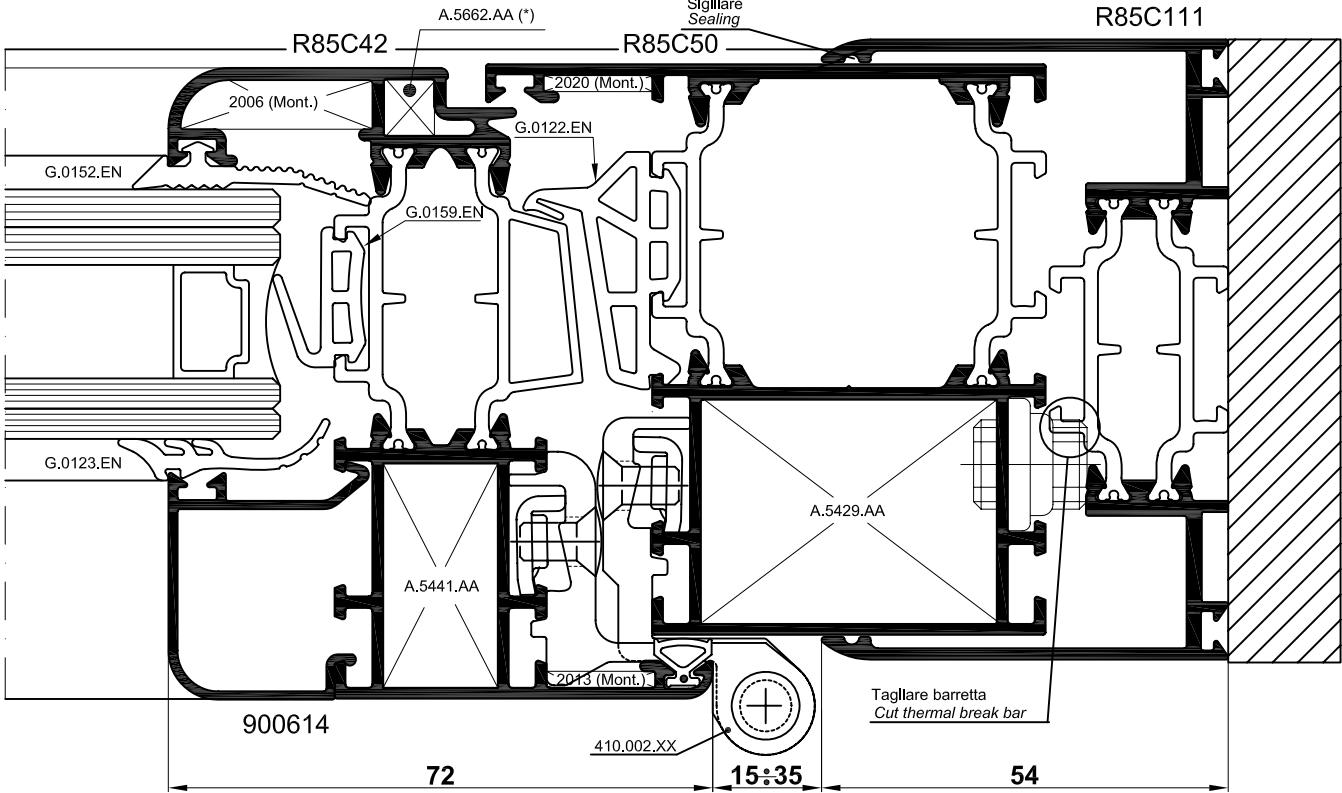
# SEZIONI - FISSAGGI ALLA MURATURA CON COMPENSATORI

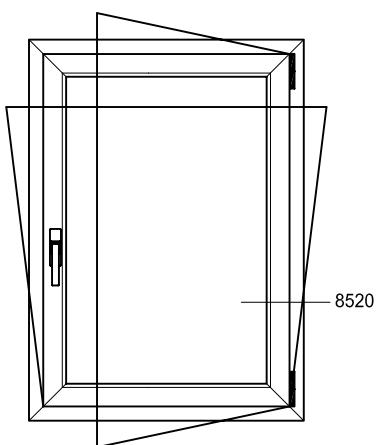
## SECTIONS - FIXING TO WALL WITH COMPENSATORS

**R** 85 TT 1.0  
SYSTEM



SEZ. 8519





(\*) Negli angoli a 45° le squadrette inserite nel tubolare esterno devono essere sempre incollate e cianfrinate. Cianfrinatura eseguibile anche con attrezzatura manuale Cod. M.2001.OO  
*In the 45° corners, the corner joints in the external tubular section, must always be glued and caulked. Caulking may also be carried out by hand with equipment Art.M.2001.OO*

**CAMPO DI APPLICAZIONE**  
**APPLICATION RANGE**

<b>2800</b>	50	50	40	30	28	24	22	20	18	16	14	14	13	13	12
<b>2700</b>	50	50	40	30	28	24	22	20	18	16	14	14	13	13	13
<b>2600</b>	50	50	40	35	30	26	22	20	18	16	16	14	14	13	13
<b>2500</b>	50	50	40	35	30	26	24	22	20	18	16	14	14	13	13
<b>2400</b>	50	50	45	35	30	28	24	22	20	18	16	16	14	14	13
<b>2300</b>	50	50	45	35	30	28	26	24	22	20	18	16	16	14	14
<b>2200</b>	50	50	50	40	35	30	26	24	22	20	18	18	16	14	14
<b>2100</b>	50	50	50	40	35	30	28	26	24	22	20	18	16	16	14
<b>2000</b>	50	50	50	45	35	30	30	28	24	22	20	18	18	16	16
<b>1900</b>	50	50	50	45	40	35	30	28	26	24	22	20	18	18	16
<b>1800</b>	50	50	50	40	35	30	30	28	26	22	20	18	18	18	18
<b>1700</b>	50	50	50	45	40	35	30	30	26	24	22	20	20	18	18
<b>1600</b>	50	50	50	50	40	35	35	30	28	26	24	22	20	20	20
<b>1500</b>	50	50	50	50	45	40	35	30	30	28	26	24	22	20	20
<b>1400</b>	50	50	50	50	45	40	40	35	30	30	28	26	24	●	●
<b>1300</b>	50	50	50	50	50	45	40	35	35	30	30	26	●	●	●
<b>1200</b>	50	50	50	50	50	50	50	45	40	35	35	30	●	●	●
<b>1100</b>	50	50	50	50	50	50	50	50	45	40	35	●	●	●	●
<b>1000</b>	50	50	50	50	50	50	50	50	50	50	40	●	●	●	●
<b>900</b>	50	50	50	50	50	50	50	50	50	50	●	●	●	●	●
<b>800</b>	50	50	50	50	50	50	50	50	50	50	●	●	●	●	●
<b>700</b>	50	50	50	50	50	50	50	50	●	●	●	●	●	●	●
<b>600</b>	50	50	50	50	50	50	50	●	●	●	●	●	●	●	●
	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

**PER MAGGIORI CHIARIMENTI**

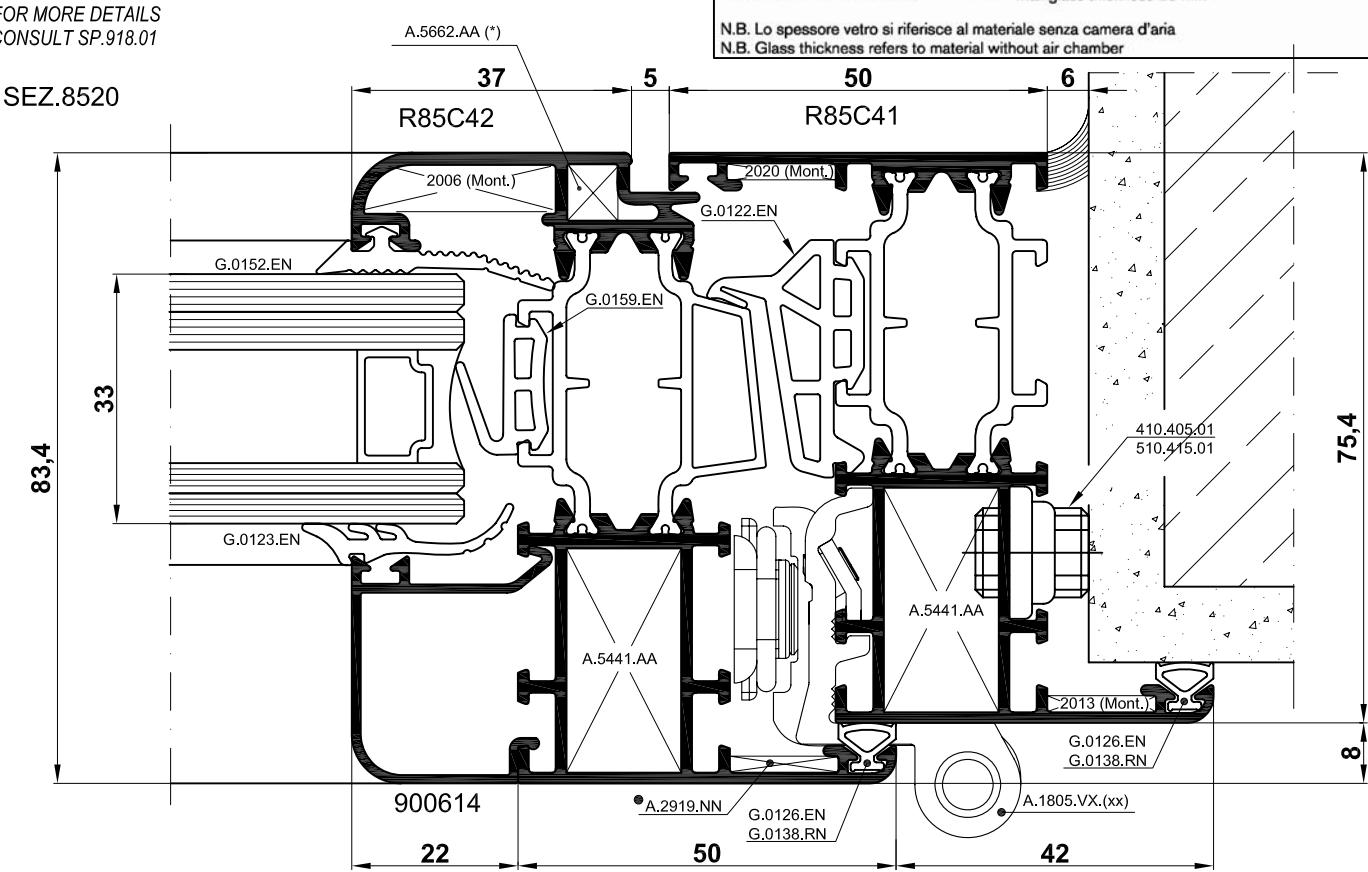
**CONSULTARE SP.918.01**

**FOR MORE DETAILS  
CONSULT SP.918.01**

H = Altezza anta mobile  
H = Height of the moving leaf  
L = Larghezza anta mobile  
L = Width of the moving leaf

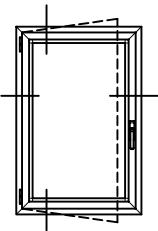
Non eseguibile  
 Not feasible  
28 Max spessore vetro 28 mm  
Max glass thickness 28 mm

N.B. Lo spessore vetro si riferisce al materiale senza camera d'aria  
N.B. Glass thickness refers to material without air chamber



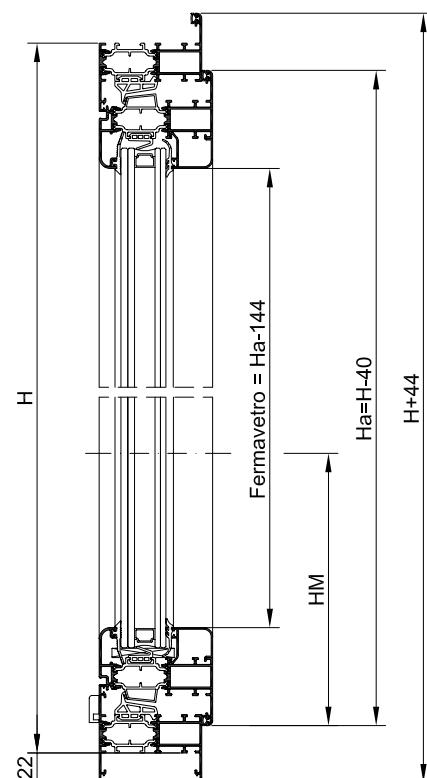
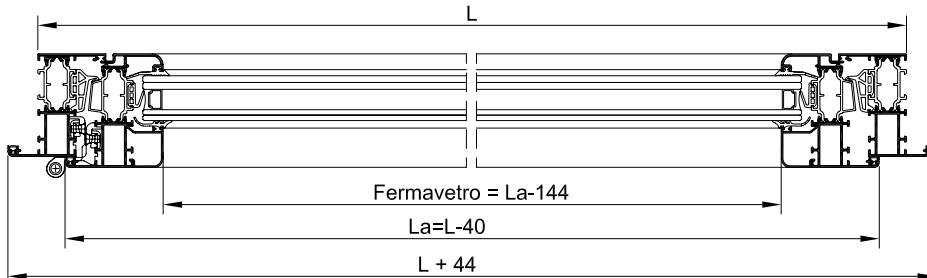
- Attenzione: in corrispondenza dei cardini inferiore e superiore utilizzare la squadretta A.2919.NN invece della 2013 (Monticelli)
- Attention: in correspondence of the bottom and upper hinges, use corner joint A.2919.NN instead of 2013 (Monticelli)

**FINESTRA 1 ANTA**  
**ONE-WING WINDOW**



N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI**  
**SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	2		1	
			1	
	2		2	
	2		2	
	1	(Inferiore/Lower) Hm - 131	1	(Superiore/Upper) Ha - Hm - 131

**DIMENSIONI VETRO**  
**GLASS SIZE**

**N. 1 PEZZO**

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Gloco perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

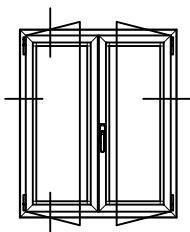
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.3501.TA	Innesti per cremonese su prof 900221(cp) Nylon pair of coupling internal opening for 900221	1	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	4	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5
404.145.05	Puntali in zama su prof. 900221 (cp) Pair of zamak terminals on profile 900221	1	401.002.XX	Cerniera sfilabile con controp. in acc. inox Slip-of hinge with stainless steel counterplate	2	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	A.4003.ZX	Cremonese reversibile per ap. int. Reversible cremon bolt for internal opening	1	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	8	504.091.05	Riscontro registrabile per puntali 404.145.05 Adjustable striker for terminals 404.145.05	2	502.002.XX	Angolo stampato per fermavento arrotondato Moulded corner for snap-on rounded glass beading	4
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	4	A.2833.AA	Appoggio vetro Glass support	2	410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	5
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	8	509.261.55	Cappella scarico acqua (paratempesta) Water drain cover of nylon	2			

**GUARNIZIONI**  
**WEATHERSTRIPS**

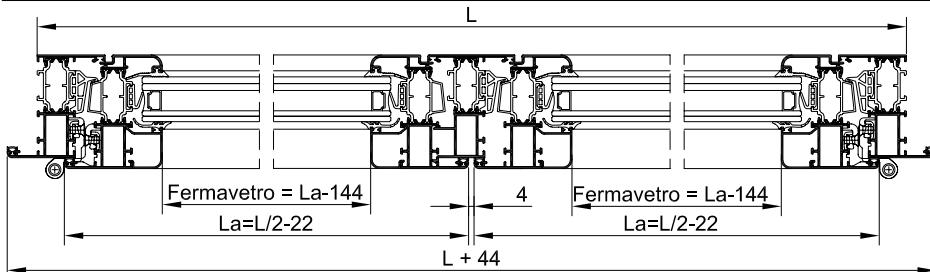
Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	4H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	2H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	2H 2L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	2H 2L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	2H 2L			

**FINESTRA 2 ANTE**  
**TWO-WINGS WINDOW**



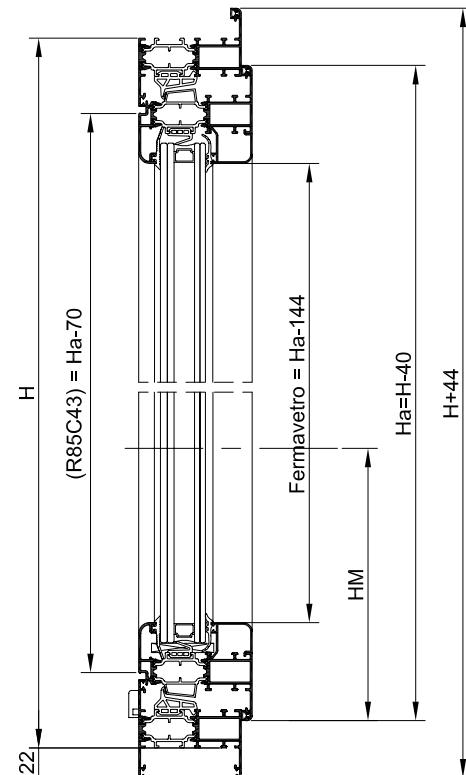
N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI**  
**SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	2	H + 44	1	L + 44
			1	L + 44
	4	Ha = H - 40	4	La = L/2 - 22
	4	Ha - 144	4	La - 144
	1	Ha - 70		
	1	(Inferiore/Lower) Hm -131	1	(Superiore/Upper) Ha - Hm - 131



**DIMENSIONI VETRO**  
**GLASS SIZE**

**N. 2 PEZZI**

Ha - 110  
La - 110

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Gloco perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

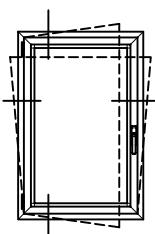
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.3501.TA	Innesti per cremonese su prof 900221(cp) Nylon pair of coupling internal opening for 900221	1	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	8	509.261.55	Cappetta scarico acqua (paraptempa) Water drain cover of nylon	2
404.145.05	Puntali in zama su prof. 900221 (cp) Pair of zamak terminals on profile 900221	2	401.002.XX	Cerniera sfilabile con controp. ra in acc. inox Slip-of hinge with stainless steel counterplate	4	410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	5
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	A.4003.ZX	Cremonese reversibile per ap. int. Reversible cremon bolt for internal opening	1	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	12	504.091.05	Riscontro registrabile per puntali 404.145.05 Adjustable striker for terminals 404.145.05	2	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	8	A.2833.AA	Appoggio vetro Glass support	4	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	12	403.801.55	Manovra catenaccio per puntali 404.145.55 Lever deadlatch for terminals 404.145.55	2	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	8

**GUARNIZIONI**  
**WEATHERSTRIPS**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	6H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	4H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	4H 2L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	4H 2L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	3H 2L			

**FINESTRA 1 ANTA A RIBALTA**  
**TIET AND TURN WINDOW**



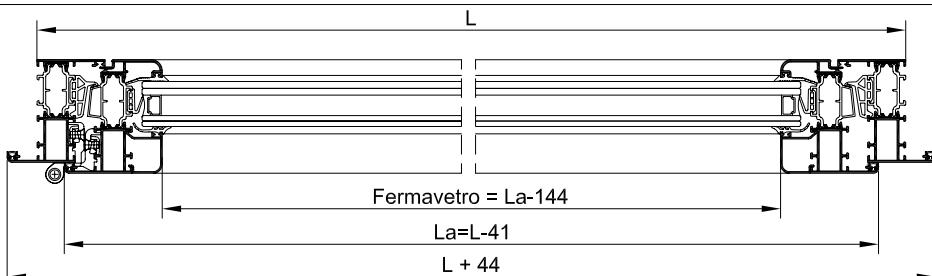
N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli.

Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.

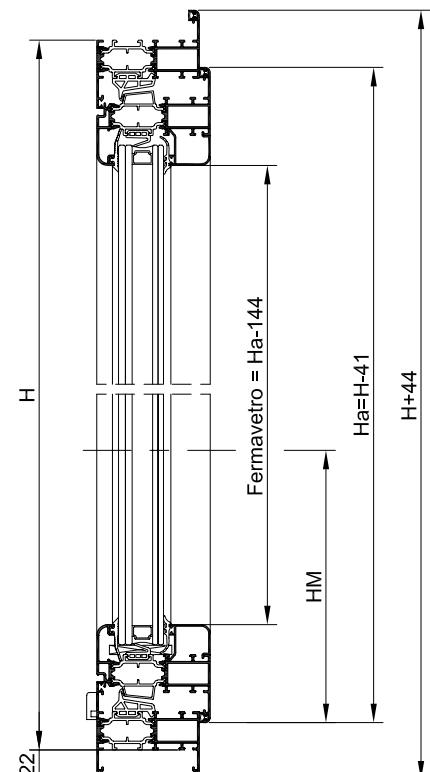
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.

Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI**  
**SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut		
	2	H + 44	1	L + 44		
			1	L + 44		
	2	Ha = H - 41	2	La = L - 41		
	2	Ha - 144	2	La - 144		
	1	Verticale inferiore Lower Vertical Hm - 250 (*)	1	Verticale Superiore Upper Vertical Ha - Hm - 243 (*)	1	Orizzontale Superiore Upper Orizontal La - 515 (*)



**DIMENSIONI VETRO**  
**GLASS SIZE**

**N. 1 PEZZO**

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Gloco perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

(\*) = Valido per ante con La da 550 a 1200 mm ed Ha fino a 2800 mm. Per altre dimensioni ed ulteriori informazioni Vi preghiamo di consultare lo schema di montaggio contenuto nella confezione AR.

This for wings with L from 550 to 1200 mm and H up to 2800 mm. For other dimensions and further information please see processing scheme inside A/R box

Attenzione: in corrispondenza dei cardini inferiore e superiore utilizzare squadretta A.2919.NN invece della 2013 (Mont.)  
Attention: in correspondence of the bottom and upper hinges, use corner joint A.2919.NN instead of 2013 (Mont.)

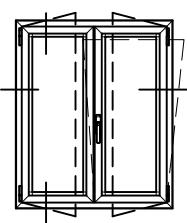
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.1805.VX	Gruppo completo anta ribalta Tilt-and-turn kit	1	A.2833.AA	Appoggio vetro Glass support	2	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	4
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	509.261.55	Cappetta scarico acqua (paratempesta) Water drain cover of nylon	2	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	6	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	4			
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	4	410.405.01	Baseetta unificata per regolo mobile Unified plate for adjustable block	5			
A.2919.NN	Squadretta per giunzione d'angolo Corner joint	2	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5			
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	8	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5			

**GUARNIZIONI**  
**WEATHERSTRIPS**

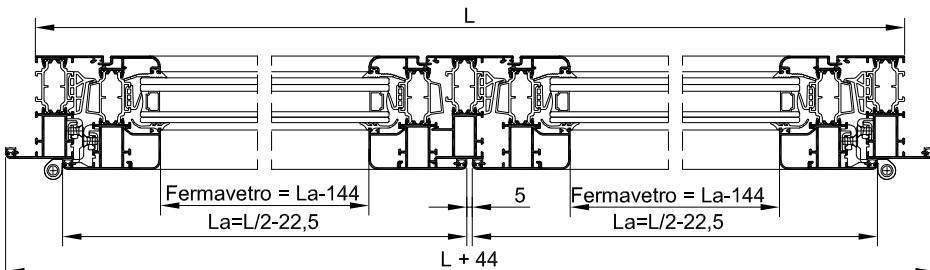
Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	4H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	2H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	2H 2L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	2H 2L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	2H 2L			

**FINESTRA 2 ANTE  
CON ANTA RIBALTA**  
**WING WINDOW - OVERLAP  
AND TILT-AND-TURN**



N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profilati prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



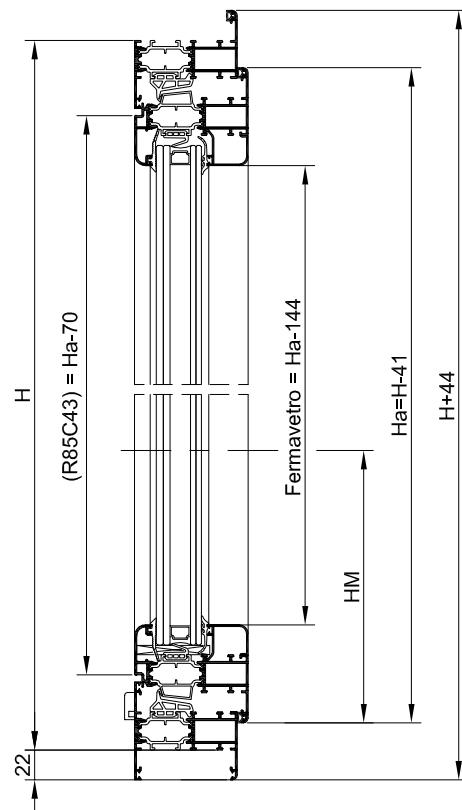
**PROFILATI  
SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	2	H + 44	1	L + 44
			1	L + 44
	4	Ha = H - 41	4	La = L/2 - 22,5
	4	Ha - 144	4	La - 144
	1	Ha - 70		
	1	Verticale inferiore Lower Vertical	1	Verticale Superiore Upper Vertical
		Hm - 250 (*)		Ha - Hm - 243 (*)
			1	La - 515 (*)
				Orizzontale Superiore Upper Horizontal

(\*) = Valido per ante con La da 550 a 1200 mm ed Ha fino a 2800 mm. Per altre dimensioni ed ulteriori informazioni Vi preghiamo di consultare lo schema di montaggio contenuto nella confezione AR.

This for wings with L from 550 to 1200 mm and H up to 2800 mm. For other dimensions and further information please see processing scheme inside A/R box

Attenzione: in corrispondenza dei cardini inferiori e superiori utilizzare squadretta A.2919.NN invece della 2013 (Mont.)  
Attention: in correspondence of the bottom and upper hinges, use corner joint A.2919.NN instead of 2013 (Mont.)



**DIMENSIONI VETRO  
GLASS SIZE**

**N. 2 PEZZI**

N.B.: Spessore vetro considerato 33 mm (5+5+15+4+4)  
Gioco perimetrale tra profilo e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass and profile 5 mm

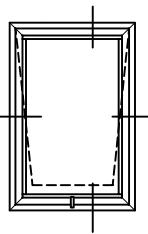
**ACCESSORI  
ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.1809.VX	Kit cerniere anta affiancata A/R Kit hinges for side by side leaf	1	A.2919.NN	Squadretta per giunzione d'angolo Corner joint	4	410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	5
A.1810.VV	Paletti per anta semifissa A/R (cp) Straight latches for semifixed wing (pair)	1	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	8	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5
A.1805.VX	Gruppo completo anta ribalta tilt-and-turn kit	1	A.5441.AA	Squadretta per giunzione d'angolo Corner joint	12	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	8	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	8	509.261.55	Cappella scarfo acqua (paratempsta) Water drain cover of nylon	2	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	8
	Appoggio vetro Glass support	4	A.2833.AA			A.2126.EN	Coppia tappi per riporto centrale R85C43 Pair of plugs for central rabbet on profile R85C43	1

**GUARNIZIONI  
WEATHERSTRIPS**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	6H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	4H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	4H 2L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	4H 2L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	3H 2L			

**FINESTRA SPORGERE**  
**PROJECTING WINDOW**



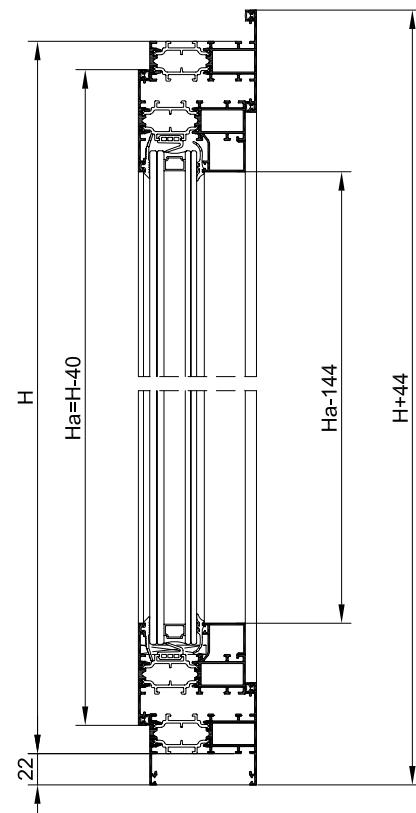
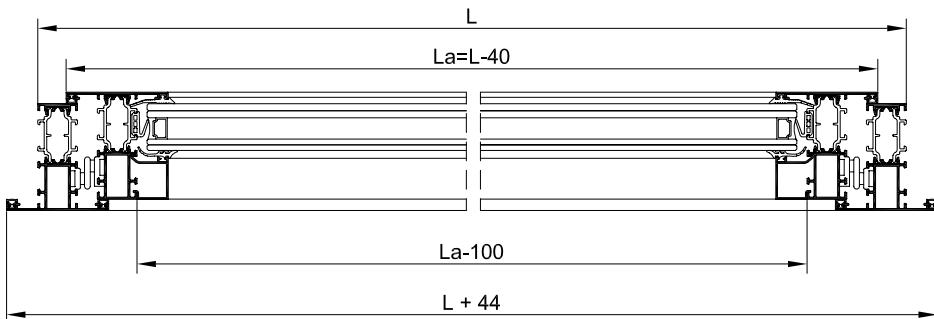
N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.

Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli. Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.

It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.

Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI**  
**SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	2		1	
			1	
	2		2	
	2		2	

**DIMENSIONI VETRO**  
**GLASS SIZE**

**N. 1 PEZZO**

N.B.: Spessore vetro considerato

33 mm (5+5+15+4+4)

Gloco perimetrale tra

profilato e vetro 5 mm

For glass with 33 mm thickness

Space between glass

and profile 5 mm

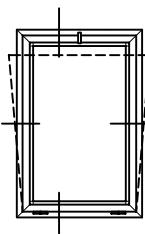
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
406.499.05	Gruppo articolazione sporgere con bracci Kit for stiffened projecting windows with arms	1	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5			
503.963.xx	Maniglia a tappellino "linea 600" "600 flatcatch" handle for projecting windows	1	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5			
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	8	A.2833.AA	Appoggio vetro Glass support	2			
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	8						
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	8						
410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	5						

**GUARNIZIONI**  
**WEATHERSTRIPS**

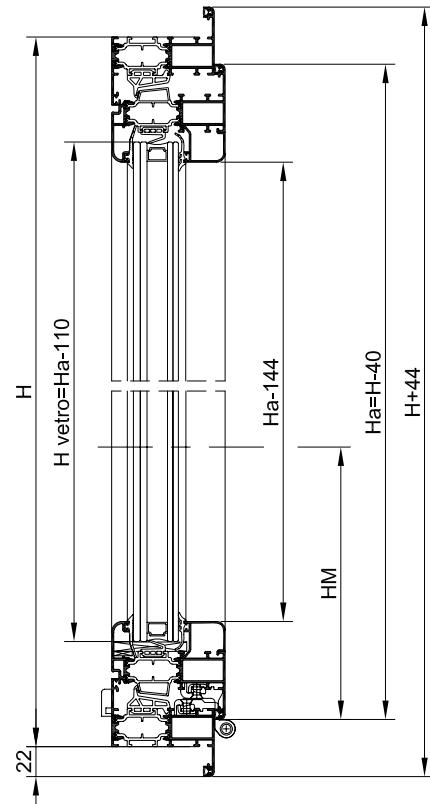
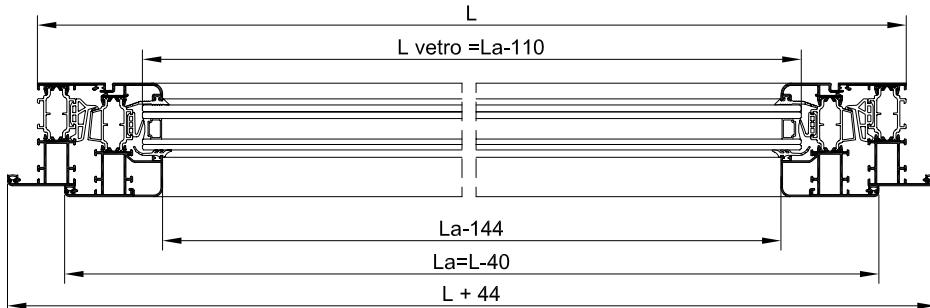
Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	6H 5L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	2H 2L			
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	2H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	2H 2L			

**FINESTRA VASISTAS**  
**OVERLAP HOPPER WINDOW**



N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profilati prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI**  
**SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	2		2	
	2		2	
	2		2	

**DIMENSIONI VETRO**  
**GLASS SIZE**

**N. 1 PEZZO**

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Globo perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

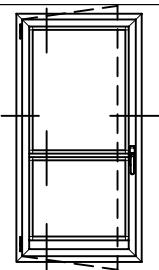
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.3906.IA	coppia bracci per vasistas Nylon pair of coupling internal opening for 900221	1	A.5441.AA	Squadretta per giunzione d'angolo Corner joint	8	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	4
401.002.xx	Cerniera sfilabile con controp.ra in acc. Inox Slip-of hinge with stainless steel counterplate	2	A.2833.AA	Appoggio vetro Glass support	2	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
503.642.xx	Chiusura a cricchetto Spring latch locking	1	509.261.55	Cappetta scarico acqua (paratempesta) Water drain cover of nylon	2			
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	410.405.01	Baseetta unificata per regolo mobile Unified plate for adjustable block	5			
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	8	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	5			
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	4	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	5			

**GUARNIZIONI**  
**WEATHERSTRIPS**

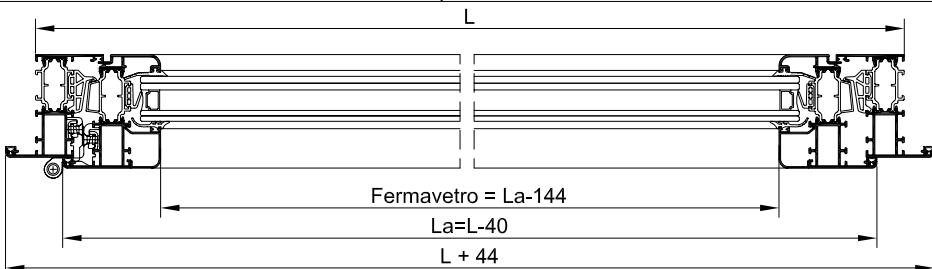
Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	4H 4L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	2H 2L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	2H 2L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	2H 2L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	2H 2L			

**PORTA  
BALCONE 1 ANTA**  
**ONE-WING  
BALCONY DOOR**



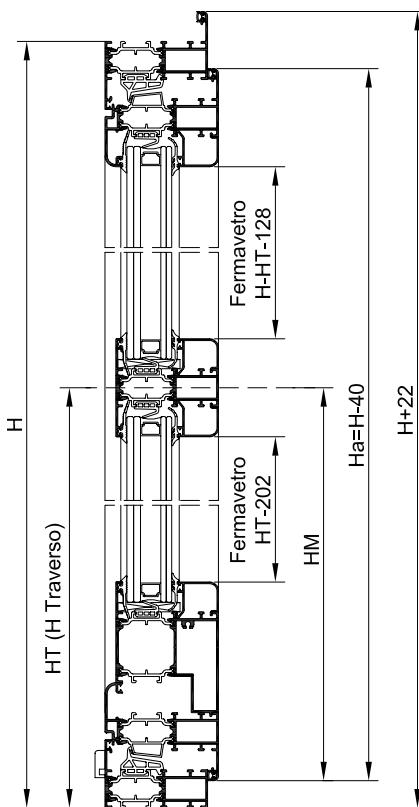
N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



**PROFILATI  
SECTIONS**

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	1		1	
	1		1	
	2		2	
	1		1	
	2		2	
	1		1	



**DIMENSIONE VETRO  
GLASS SIZE**

**N. 1 PEZZO**

HT - 168  
La - 110

**N. 1 PEZZO**

H - HT - 94  
La - 110

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Gloco perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

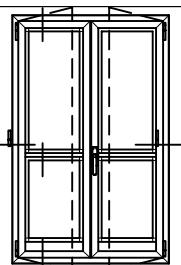
**ACCESSORI  
ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.3501.TA	Irnesti per cremonese su prof 900221(cp) Nylon pair of coupling internal opening for 900221	1	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	4	410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	7
404.145.05	Puntali in zama su prof. 900221 (cp) Pair of zamak terminals on profile 900221	1	401.002.XX	Cerniera sfilabile con controp. ra in acc. inox Slip-of hinge with stainless steel counterplate	3	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	7
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	505.267.01	Giunto a "T" in alluminio estruso Extruded aluminium T-joint	2	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	9
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	6	A.4003.ZX	Cremonese reversibile per ap. int. Reversible cremona bolt for internal opening	1	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	4	504.091.05	Riscontro registrabile per puntali 404.145.05 Adjustable striker for terminals 404.145.05	2	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	8
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	8	509.261.55	Cappella scarico acqua (paratempsta) Water drain cover of nylon	2	A.2833.AA	Appoggio vetro Glass support	4
						A.3204.ZA	Cavallotto di giunzione telai-traversi Tjoint for frames and transoms	6

**GUARNIZIONI  
WEATHERSTRIPS**

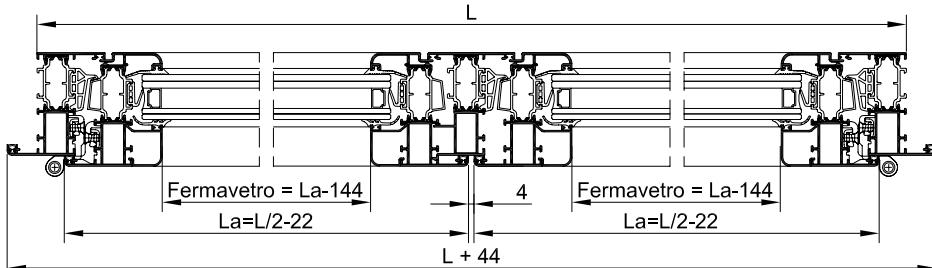
Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	4H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	2H 4L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	2H 4L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	2H 4L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	2H 2L			

**PORTA  
BALCONE 2 ANTE**  
**TWO-WINGS  
BALCONY DOOR**



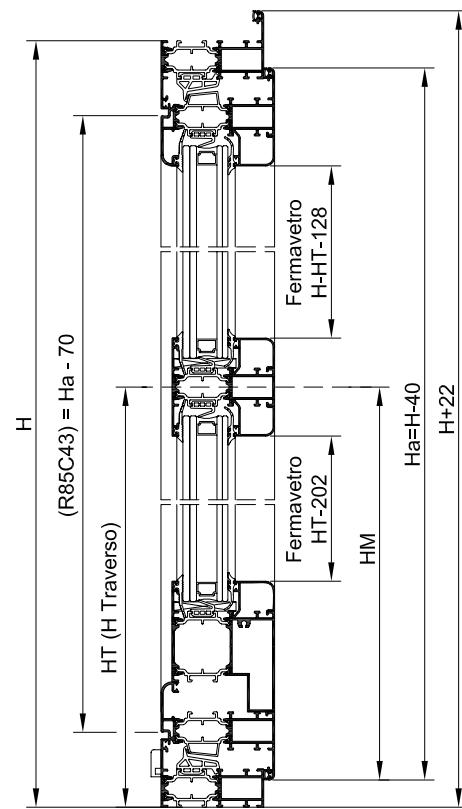
N.B.: - Le dimensioni di taglio e di lavorazione indicate nelle pagine seguenti sono state ottenute considerando le quote teoriche.  
Pertanto è necessario verificare sempre le dimensioni dei profili prima di effettuare i tagli.  
Sapa declina ogni responsabilità per errori dovuti al mancato controllo da parte del costruttore.

N.B.: - The cutting and processing dimensions, indicated in the following pages, are obtained considering theoretical values.  
It is, therefore, always necessary to check the dimensions of the profiles before executing the cutting.  
Sapa declines any responsibility from errors caused from the missing dimensional check of the carpenter



PROFILATI  
SECTIONS

Profilo tipo Type Section	N° Pz.	Taglio Cut	N° Pz.	Taglio Cut
	1		1	
	1			
			1	
	4		4	
			2	
			2	
	1			
	4		4	
	1		1	



DIMENSIONE VETRO  
GLASS SIZE

**N. 2 PEZZI**

HT - 168  
La - 110

**N. 2 PEZZI**

H - HT - 94  
La - 110

N.B.: Spessore vetro considerato  
33 mm (5+5+15+4+4)  
Gloco perimetrale tra  
profilato e vetro 5 mm  
For glass with 33 mm thickness  
Space between glass  
and profile 5 mm

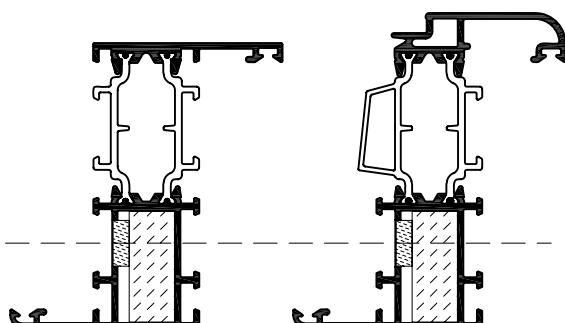
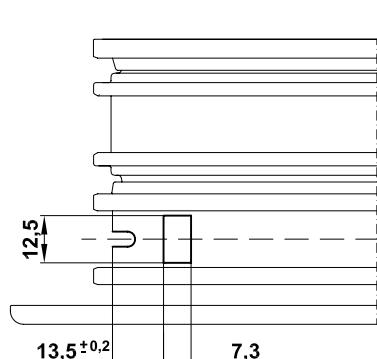
**ACCESSORI**  
**ACCESSORIES**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N
A.3501.TA	Innesti per cremonese su prof 900221(cp) Nylon pair of coupling internal opening for 900221	1	A.5662.AA	Squadretta a cianfrinare su prof. est. anta External corner joint to be crimped	8	403.801.55	Manovra catenaccio per puntali 404.145.55 Lever deadlatch for terminals 404.145.55	2
404.145.05	Puntali in zama su prof. 900221 (cp) Pair of zamak terminals on profile 900221	2	401.002.xx	Cerniera sfilabile con controp. ra in acc. inox Slip-of hinge with stainless steel counterplate	6	509.261.55	Cappetta scarico acqua (parapente) Water drain cover of nylon	2
2020 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	4	A.4003.ZX	Cremonese reversibile per ap. int. Reversible cremona bolt for internal opening	1	410.405.01	Basetta unificata per regolo mobile Unified plate for adjustable block	8
2013 (Mont)	Squadretta d'allineamento aletta "FUJI" Alignment corner joint for rabbet "FUJI"	10	504.091.05	Riscontro registrabile per puntali 404.145.05 Adjustable striker for terminals 404.145.05	2	510.415.01	Regolo mobile da 15 mm Adjustable block mm 15	8
2006 (Mont)	Squadretta allineamento aletta prof. compl. Alignment corner joint for coplanar profiles	8	505.267.01	Giunto a "T" in alluminio estruso Extruded aluminium Ti joint	4	510.491.55	Tappo rotondo copriforo diametro 12 mm Circular coverhole plug dia. mm 12	10
A.5441.AA	Squadretta per giunzione d'angolo Corner joint	12	A.2126.EN	Coppia tappi per riporto centrale R85C43 Pair of plugs for central rabbet on profile R85C43	1	A.0226.EN	Angolo stampato per precamera R85TT Moulded corner for central weatherstrip R85TT	4
			A.2833.AA	Appoggio vetro Glass support	8	502.002.XX	Angolo stampato per fermavetro arrotondato Moulded corner for snap-on rounded glass beading	16
						A.3204.ZA	Cavalotto di giunzione telaio-traversi Tjoint for frames and transoms	6

**GUARNIZIONI**  
**WEATHERSTRIPS**

Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	N	Articolo Item	Descrizione Description	
G.0138.RN	Guarnizione di battuta Weatherstrip of rabbet	6H 3L	G.0152.EN	Guarnizione esterna appoggio vetri 3 mm Weatherstrip on glass support mm 3	4H 4L	G.0159.EN	Guarnizione sotto vetro Weatherstrip under glass	4H 4L
G.0123.EN	Guarnizione interna tenuta vetro 4-6 mm Weatherstrip on glazing bead shim mm 4-6	4H 4L	G.0122.EN	Guarnizione di precamera R85TT Central weatherstrip R85TT	3H 2L			

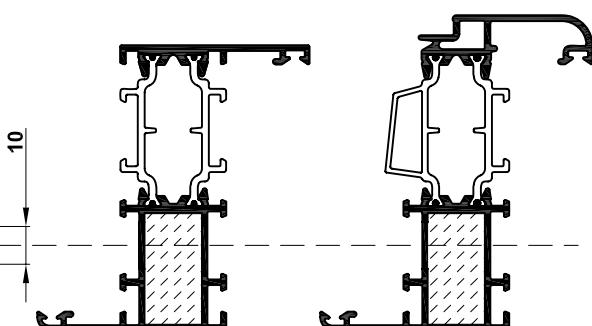
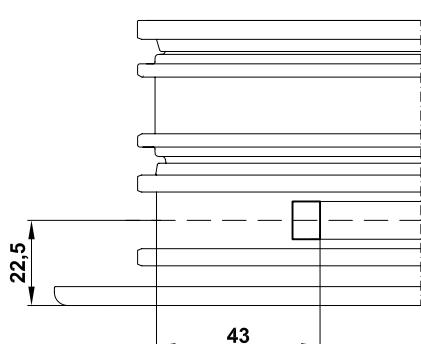
**SQUADRETTA D'ANGOLO**  
CORNER JOINT



ART. : A.5441.AA



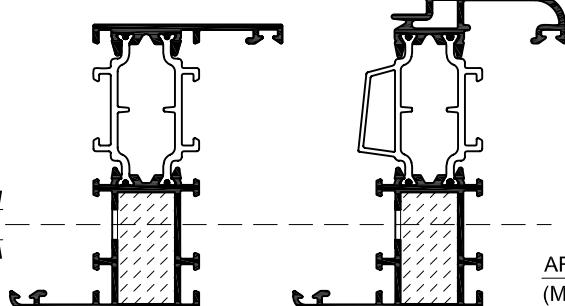
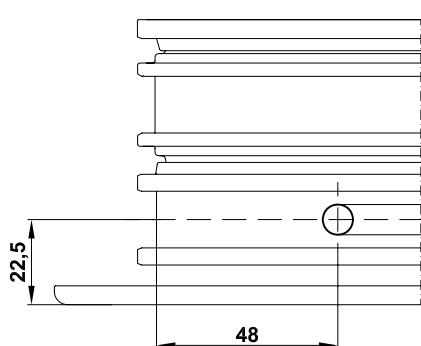
Attrezzatura: PUNZONATRICE  
Tooling: PUNCHING MACHINE



ART. : 5034



Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL

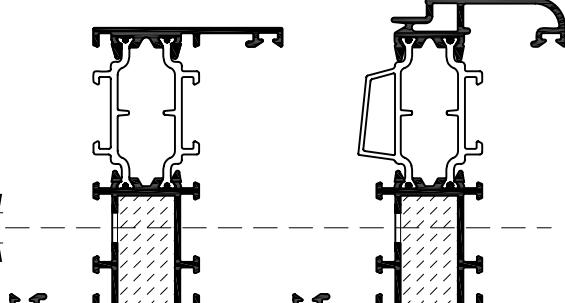
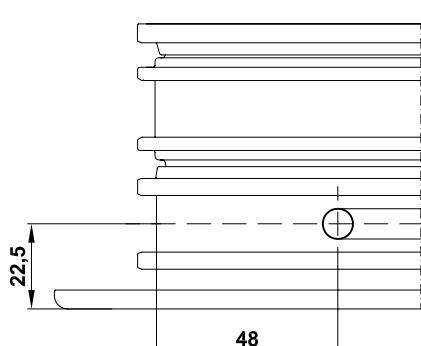


ART. : 5034



ART. : VILM 5x14\_D8  
(Monticelli)

Attrezzatura: TRAPANO  
Tooling: DRILL



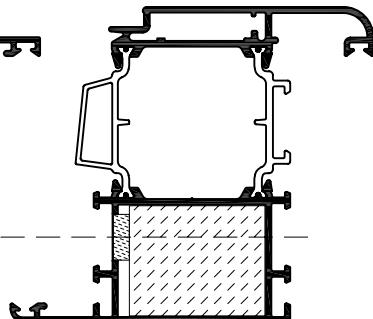
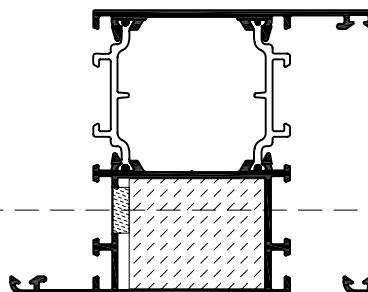
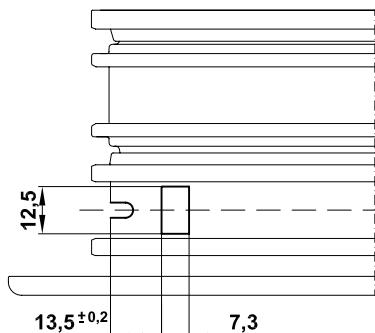
ART. : 5034



ART. : VILM 5x14\_0088  
(Monticelli)

Attrezzatura: TRAPANO  
Tooling: DRILL

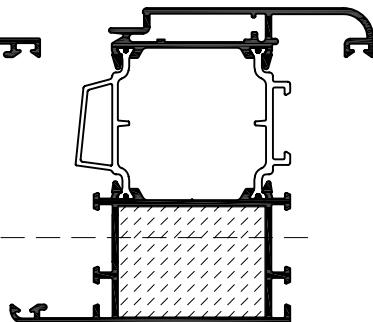
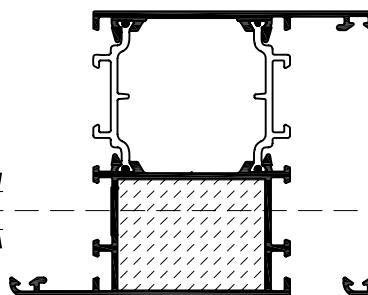
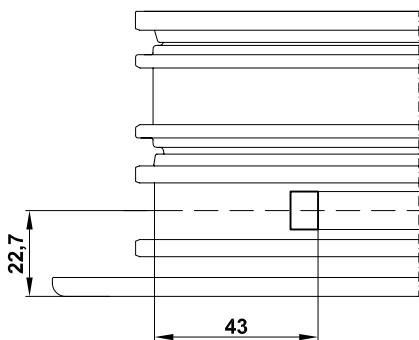
**SQUADRETTA D'ANGOLO**  
**CORNER JOINT**



ART. : A.5429.AA



Attrezzatura: PUNZONATRICE  
Tooling: PUNCHING MACHINE

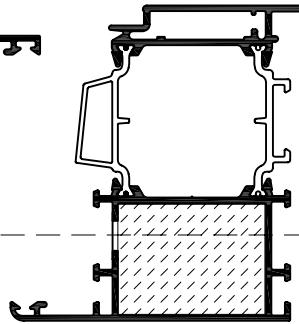
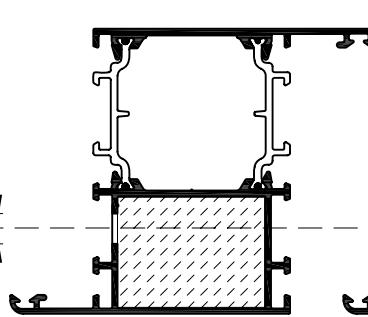
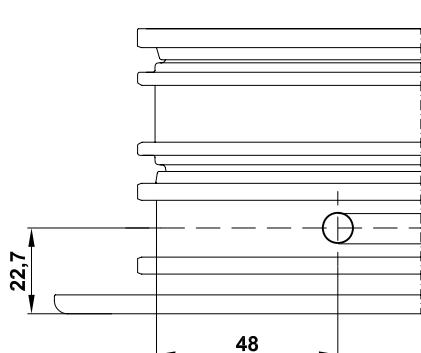


ART. : 5043



Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL

LAVORAZIONE ESTERNA  
EXTERNAL TOOLING



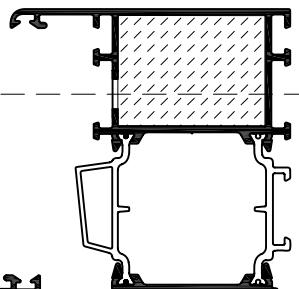
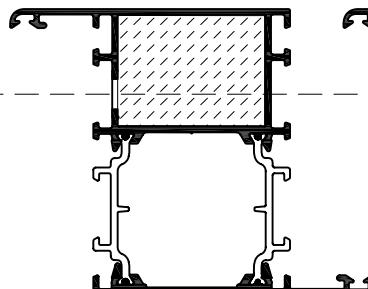
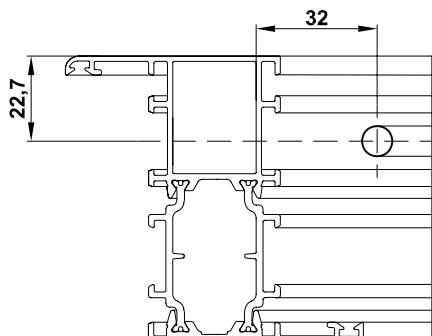
ART. : VILM 5x14\_D8  
(Monticelli)



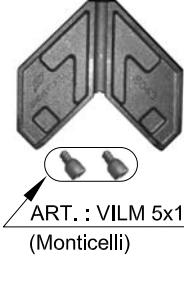
ART. : 5043



Attrezzatura: TRAPANO  
Tooling: DRILL



ART. : 5043

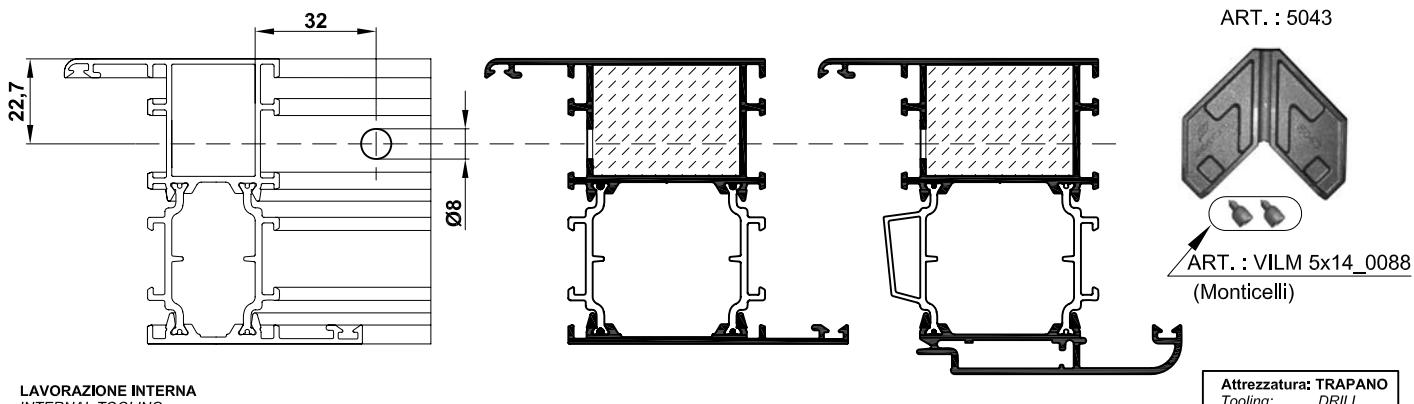
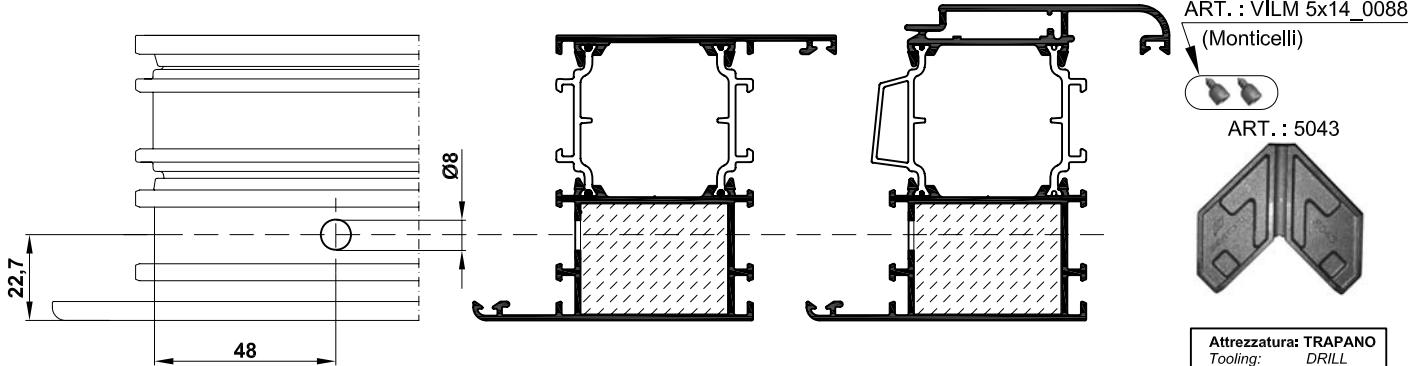


Attrezzatura: TRAPANO  
Tooling: DRILL

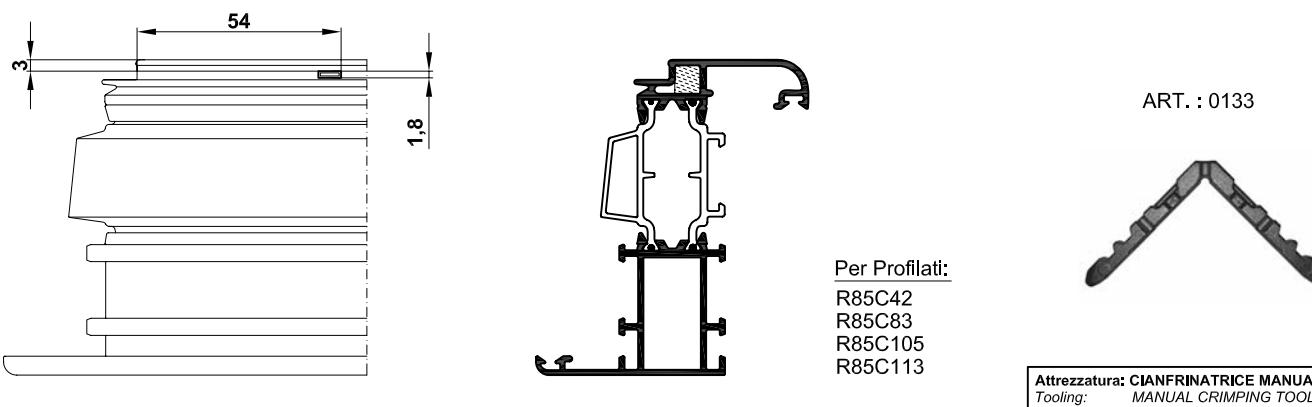
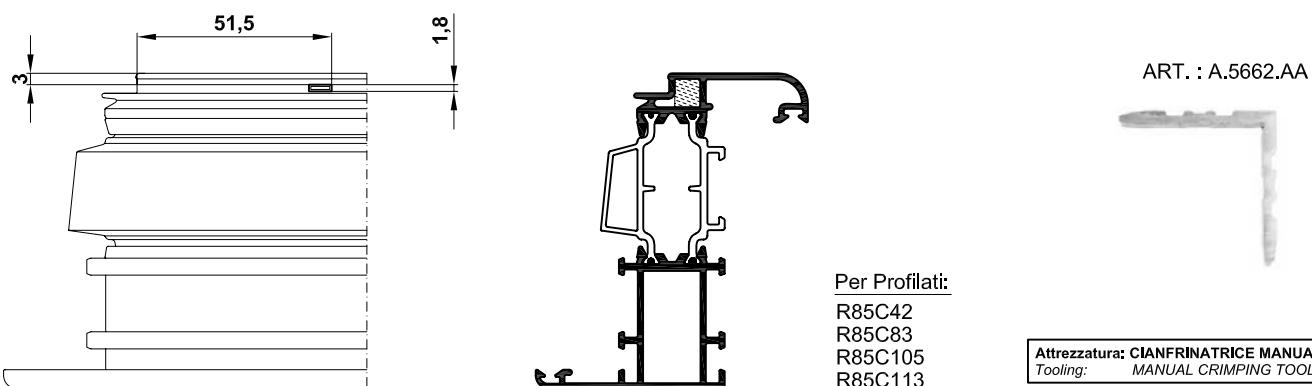
LAVORAZIONE INTERNA  
INTERNAL TOOLING

**SQUADRETTA D'ANGOLO**  
**CORNER JOINT**

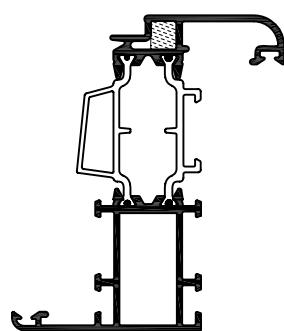
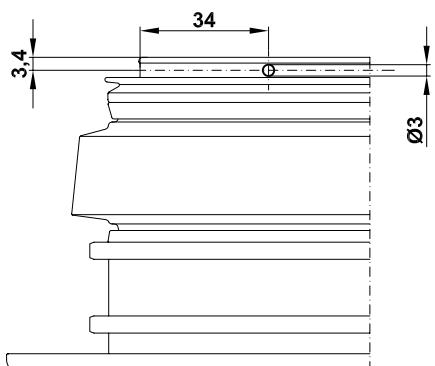
LAVORAZIONE ESTERNA  
EXTERNAL TOOLING



LAVORAZIONE INTERNA  
INTERNAL TOOLING

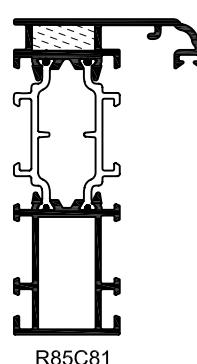
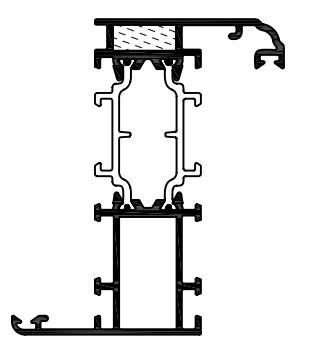
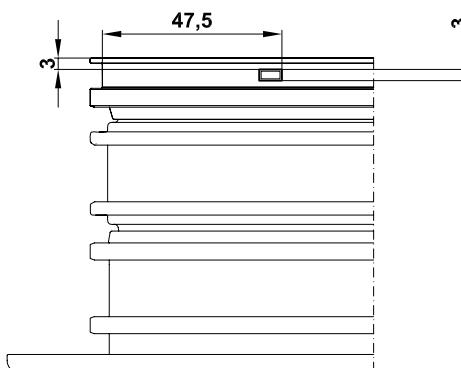


**SQUADRETTA D'ANGOLO**  
**CORNER JOINT**



Per Profilati:  
R85C42  
R85C83  
R85C105  
R85C113

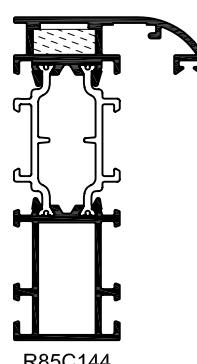
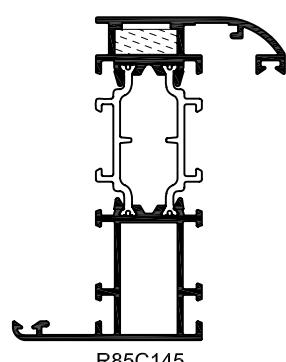
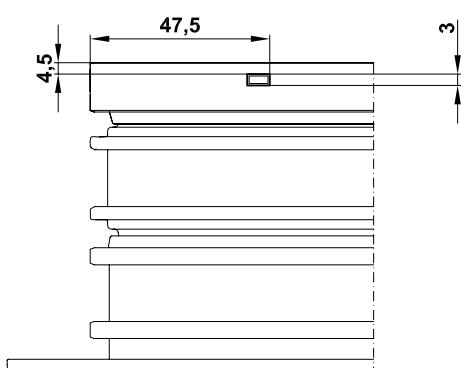
Attrezzatura: TRAPANO  
Tooling: DRILL



ART. : A.2921.AA



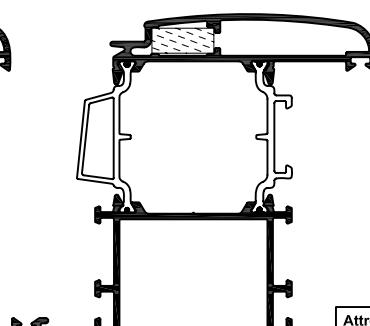
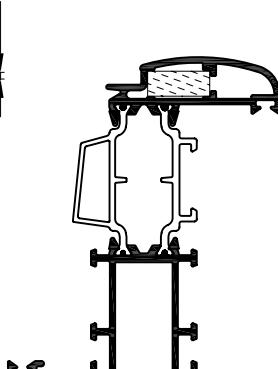
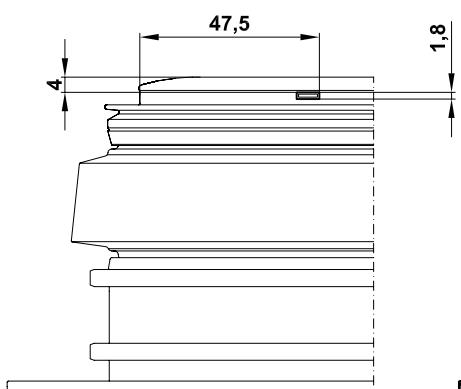
Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL



ART. : A.2921.AA



Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL

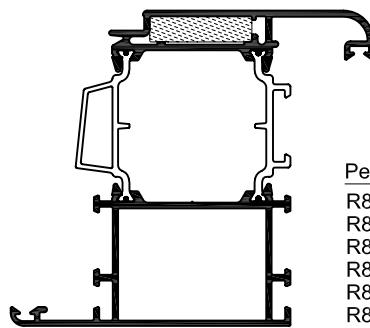
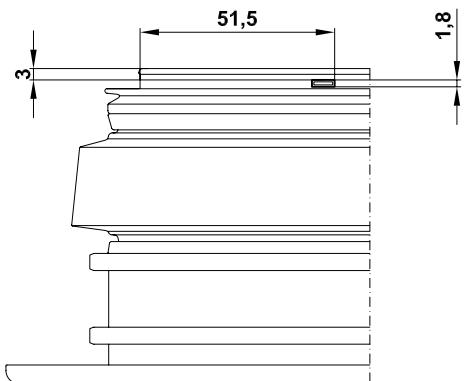


ART. : A.2921.AA



Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL

**SQUADRETTA D'ANGOLO**  
**CORNER JOINT**



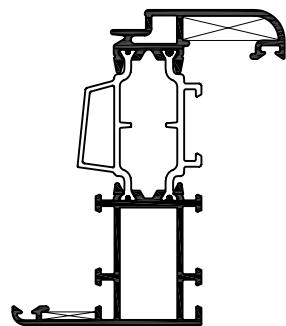
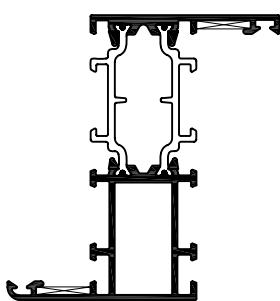
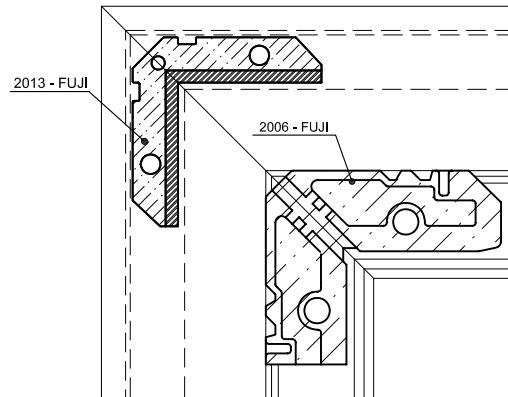
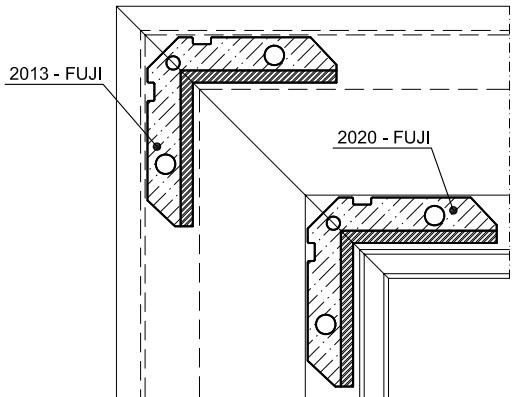
ART. : A.5624.AA

Per Profiliati:  
R85C53  
R85C73  
R85C98  
R85C103  
R85C106  
R85C109



Attrezzatura: CIANFRINATRICE MANUALE  
Tooling: MANUAL CRIMPING TOOL

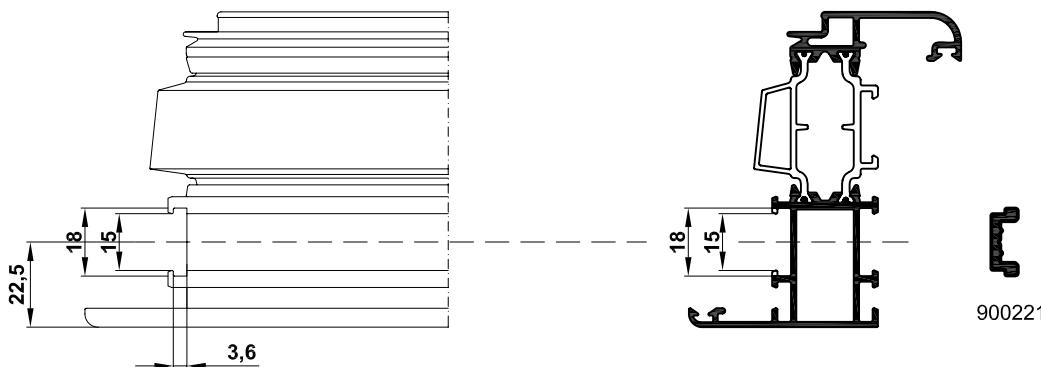
**APPLICAZIONE SQUADRETTA DI ALLINEAMENTO**  
**ALIGNMENT CORNER JOINTS APPLICATION**



- Le squadrette di allineamento su alette, devono essere incollate con colle per alluminio di tipo epossidico bicomponente o di tipo poliuretanico monocomponente

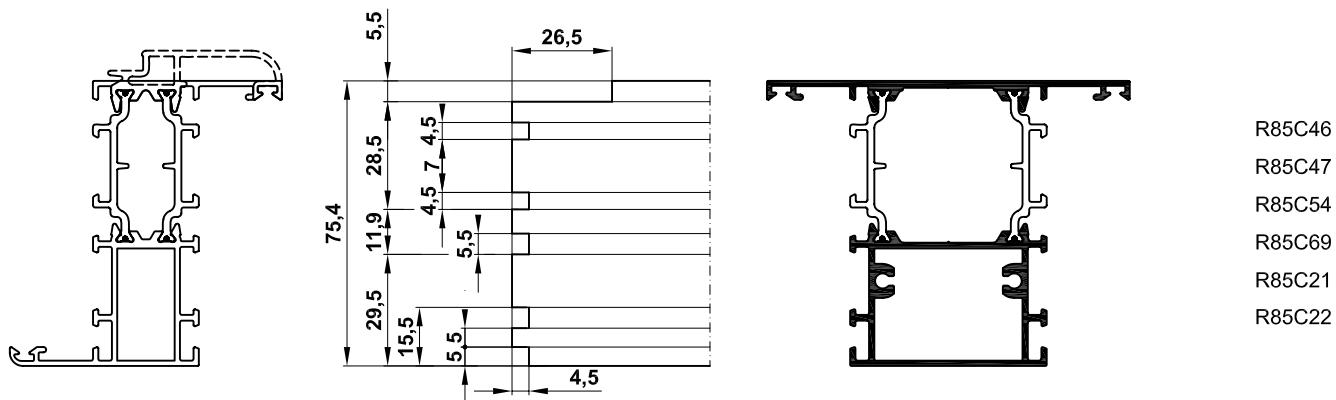
- The corner joints to be crimped, and alignment on fins, must be glued with bicomponent epoxy or monocomponent polyuretan glue for aluminium

**ASPORTAZIONE DENTINI PER INSERIMENTO ASTA**  
**TOOTH REMOVAL FOR ROD NOTCH**



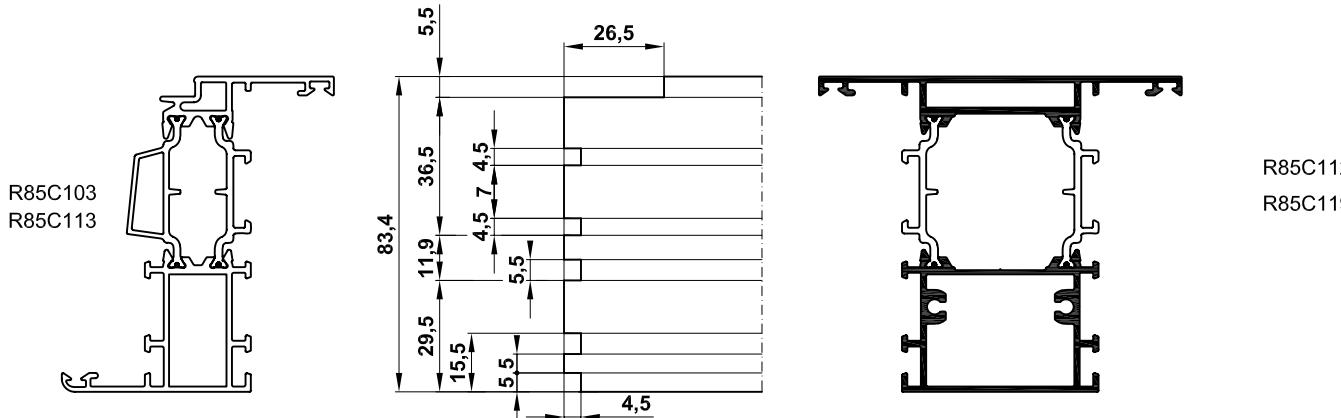
Attrezzatura: PUNZONATRICE  
Tooling: PUNCHING MACHINE

**INTESTATURA FASCE E ZOCCOLI**  
**BUTTING HORIZONTAL PANELS - SKIRTING BOARDS**



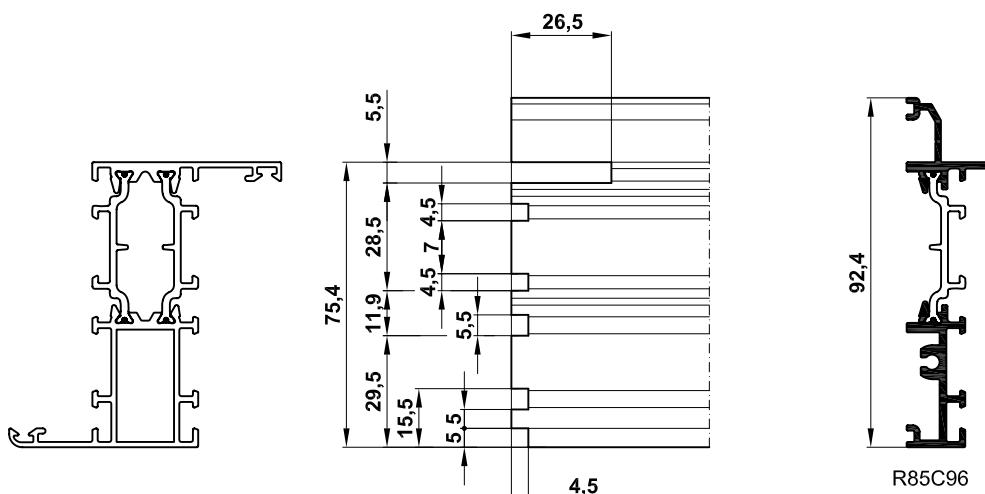
Attrezzatura: GRUPPO FRESE  
Tooling: MILLING CUTTER GROUP

**INTESTATURA FASCE E ZOCCOLI PER ANTE COMPLANARI**  
**BUTTING HORIZONTAL PANELS - SKIRTING BOARDS FOR COPLANAR WINGS**



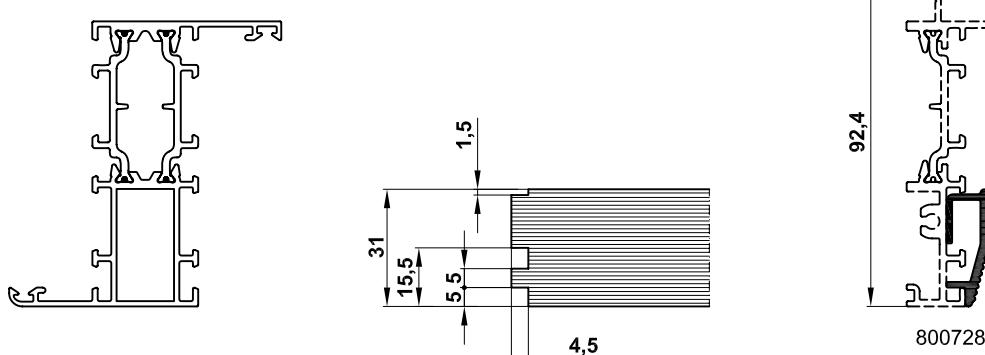
Attrezzatura: GRUPPO FRESE  
Tooling: MILLING CUTTER GROUP

**INTESTATURA SOGLIA PROFILATO R85C96**  
**BUTTING FRAME SECTIONS R85C96**



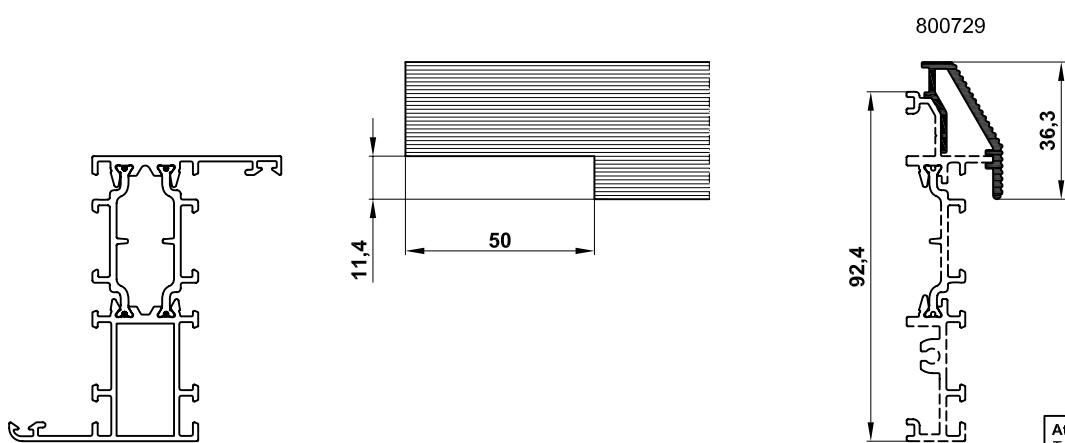
Attrezzatura: GRUPPO FRESE  
Tooling: MILLING CUTTER GROUP

**INTESTATURA SOGLIA PROFILATO 800728**  
**BUTTING FRAME SECTIONS 800728**



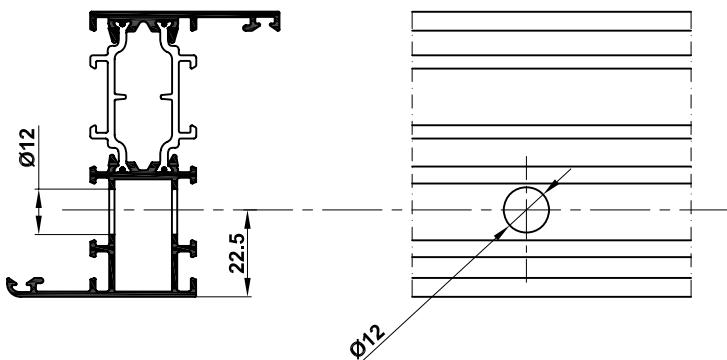
Attrezzatura: GRUPPO FRESE  
Tooling: MILLING CUTTER GROUP

**INTESTATURA SOGLIA PROFILATO 800729**  
**BUTTING FRAME SECTIONS 800729**



Attrezzatura: FRESA  
Tooling: MILLING CUTTER

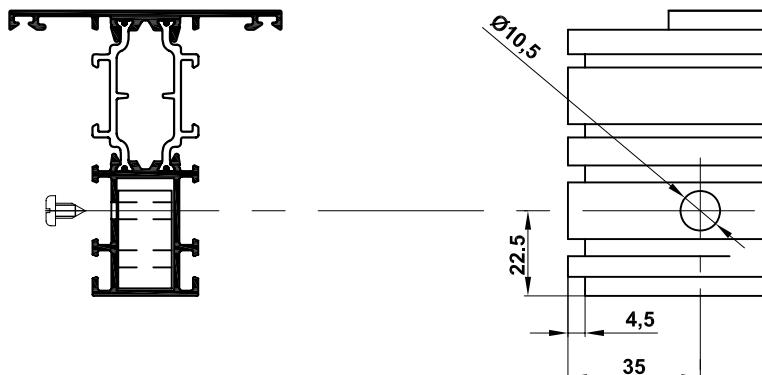
**FORATURA PER REGOLO MOBILE**  
**PUNCHING FOR ADJUSTABLE BLOCK**



Art. 410.405.01      Art. 510.415.01  
510.420.01  
510.430.01  
510.445.01  
510.460.01

Attrezzatura: TRAPANO  
Tooling: DRILL

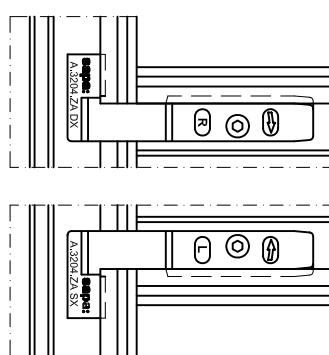
**CAVALLOTTI CON VITE**  
**T JOINTS WITH SCREW**



Art. 505.267.01

Attrezzatura: TRAPANO  
Tooling: DRILL

**MONTAGGIO CAVALLOTTO A.3204.ZA**  
**ASSEMBLY TJOINTS A.3204.ZA**

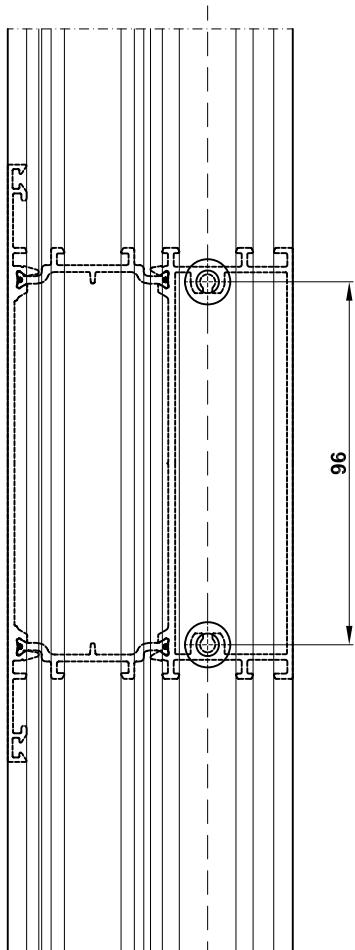


A.3204.ZA

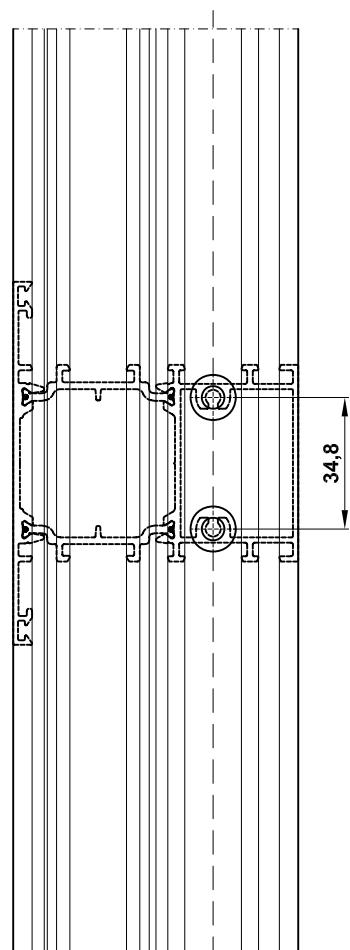
Attrezzatura: TRAPANO  
Tooling: DRILL

**FORATURA UNIONE FASCE - ZOCCOLI**  
PUNCHING FOR HORIZONTAL PANELS CONNECTION - SKIRTING BOARD

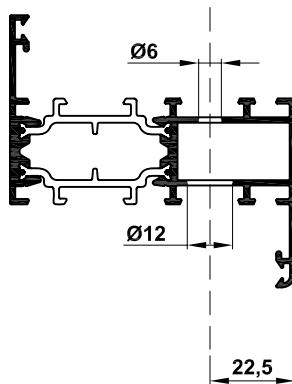
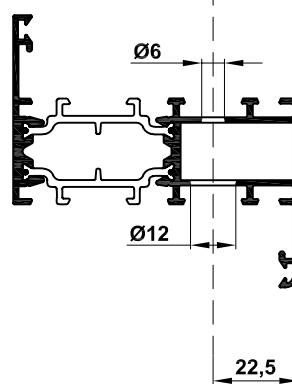
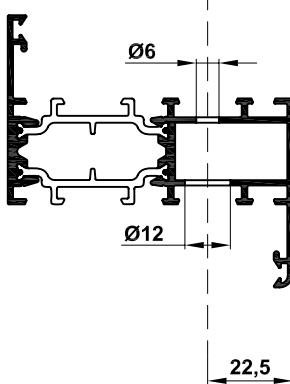
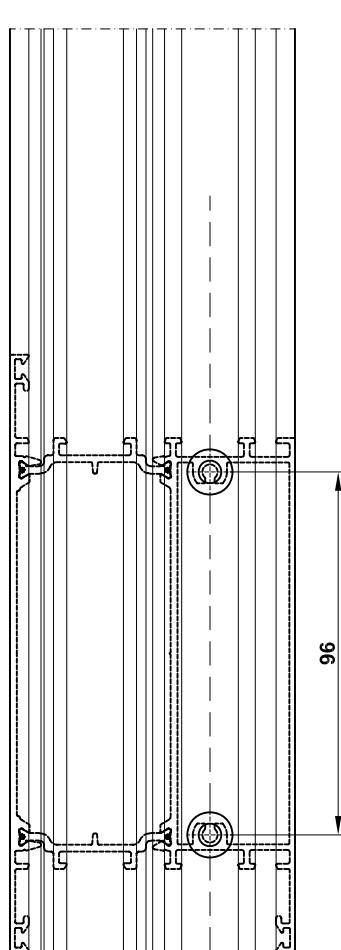
R85C46



R85C69



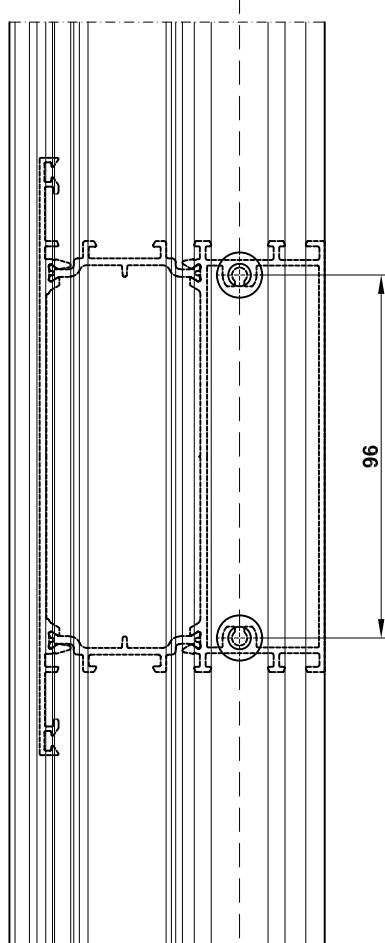
R85C47



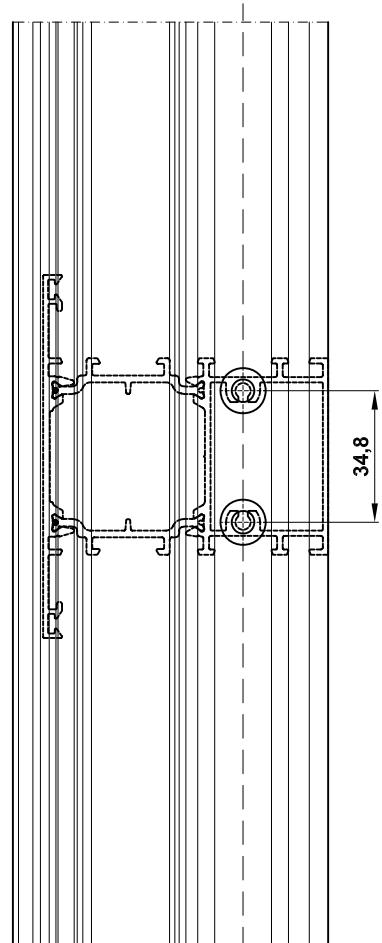
Attrezzatura: TRAPANO  
Tooling: DRILL

**FORATURA UNIONE FASCE - ZOCCOLI**  
PUNCHING FOR HORIZONTAL PANELS CONNECTION - SKIRTING BOARD

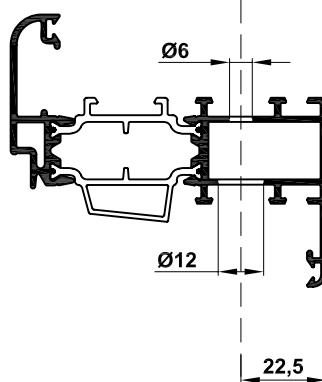
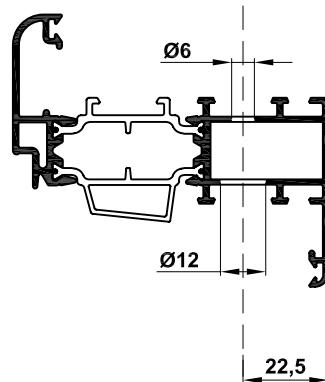
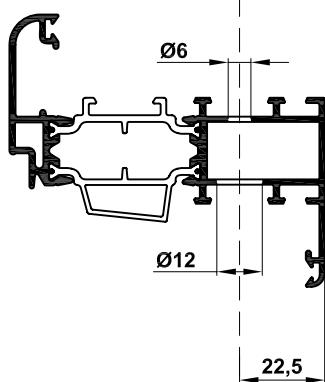
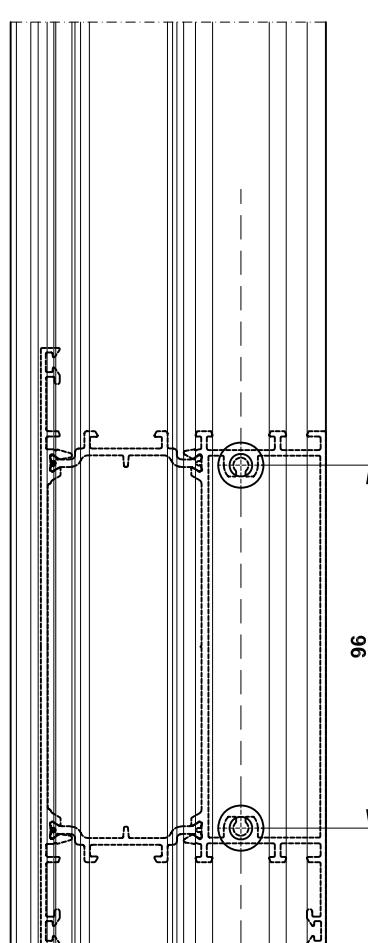
R85C46



R85C69

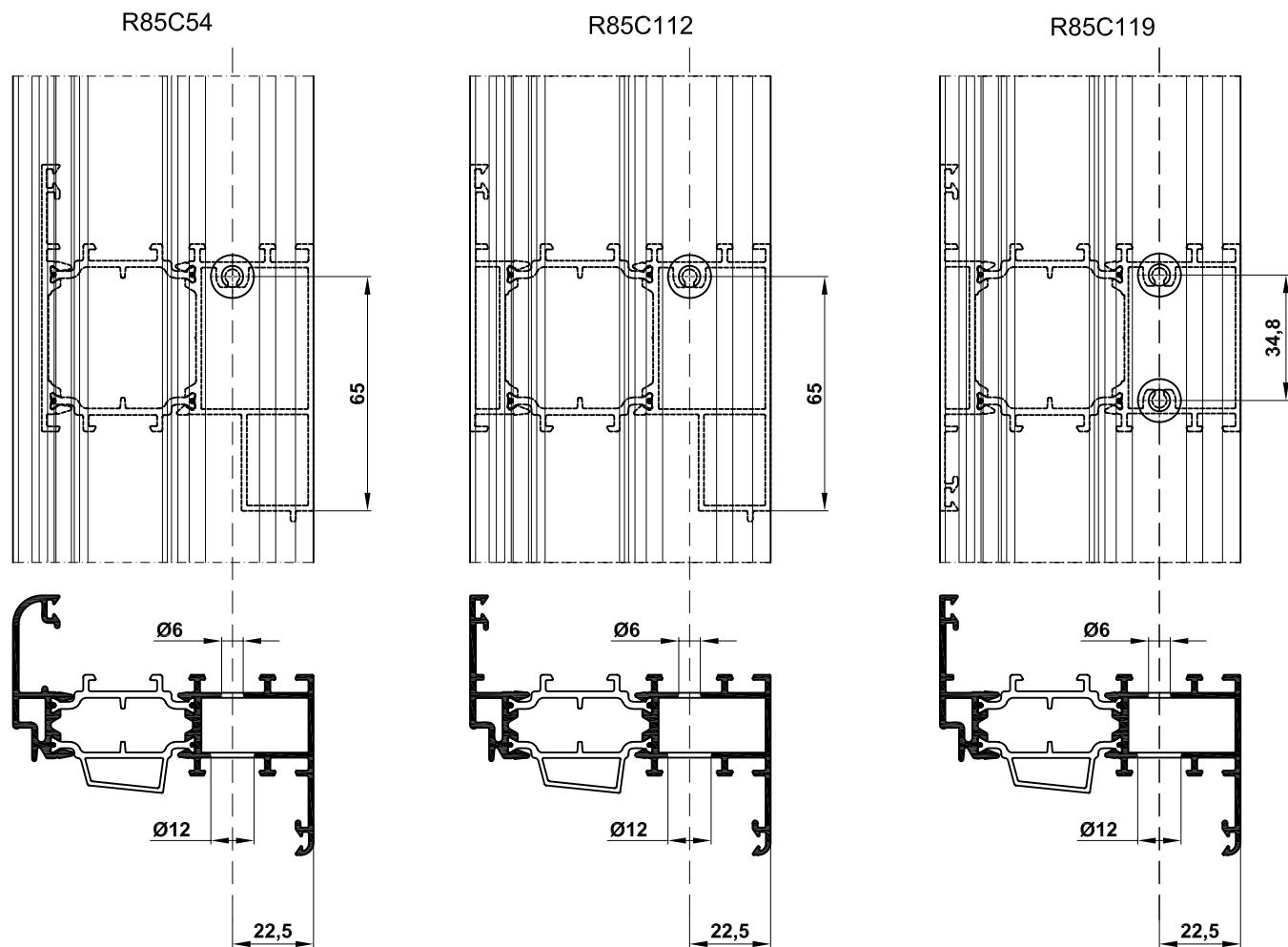


R85C47



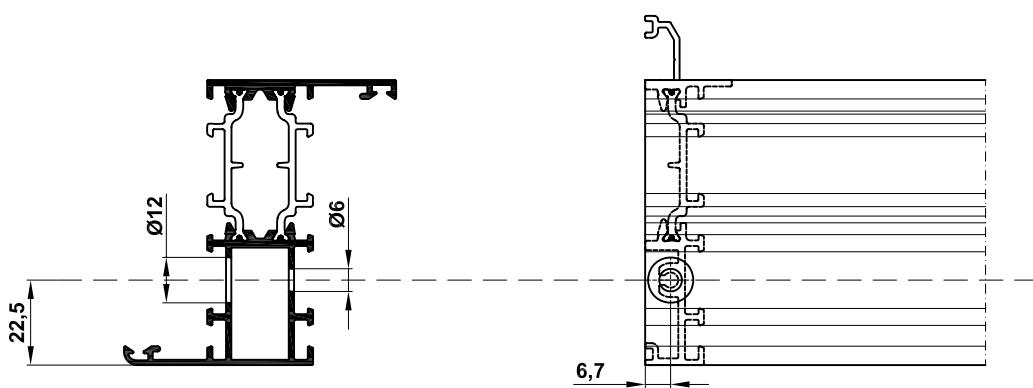
Attrezzatura: TRAPANO  
Tooling: DRILL

**FORATURA UNIONE FASCE - ZOCCOLI**  
PUNCHING FOR HORIZONTAL PANELS CONNECTION - SKIRTING BOARD



Attrezzatura: TRAPANO  
Tooling: DRILL

**FORATURA UNIONE FASCE - ZOCCOLI**  
PUNCHING FOR HORIZONTAL PANELS CONNECTION - SKIRTING BOARD

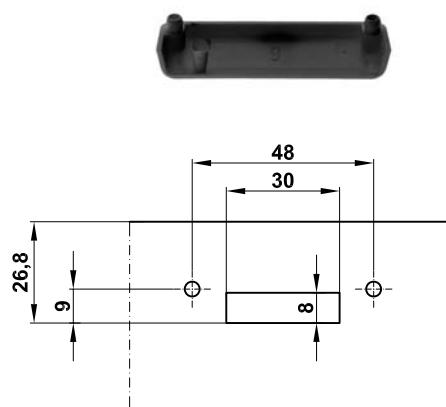
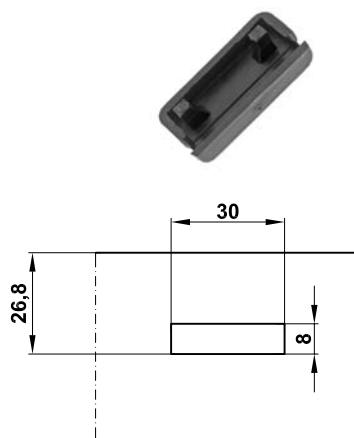
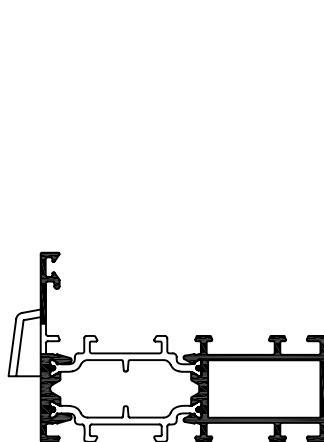


Attrezzatura: TRAPANO  
Tooling: DRILL

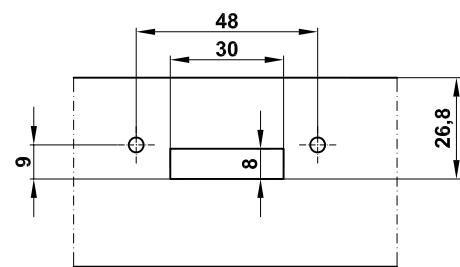
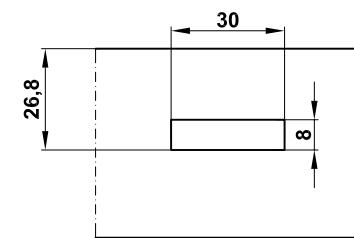
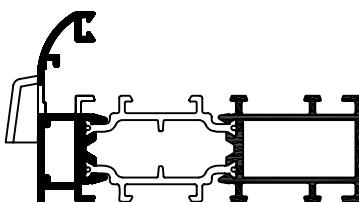
**LAVORAZIONE DELUSSO ACQUA**  
**TOOLING WATER DRAINAGE**

Art. 509.260.55  
509.261.55

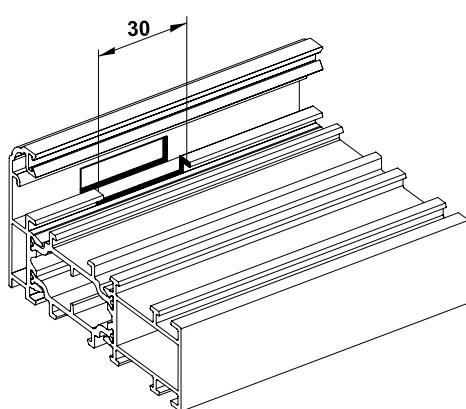
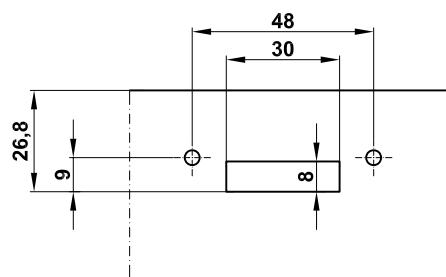
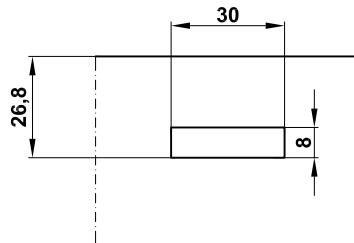
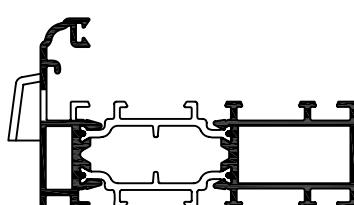
Art. 509.264.55



Attrezzatura: PUNZONATRICE  
Tooling: PUNCHING MACHINE



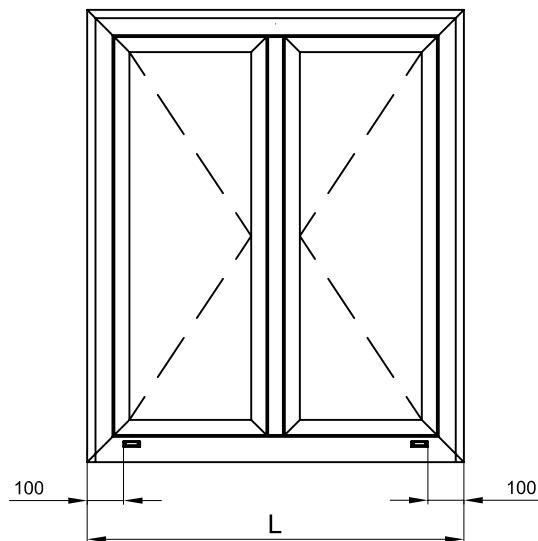
Attrezzatura: PANTOGRAFO  
Tooling: PANTOGRAPH



Attrezzatura: PUNZONATRICE-PANTOGRAFO  
Tooling: PUNCHING MACHINE-PANTOGRAPH

**LAVORAZIONI PER SCARICHI ACQUA E VENTILAZIONE VETRI**  
**PROCESSING FOR WATER DRAINAGE AND GLASS VENTILATION**

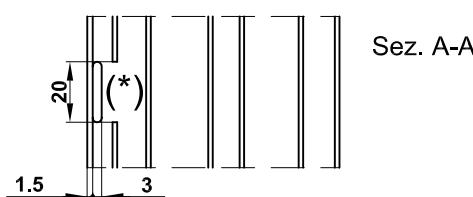
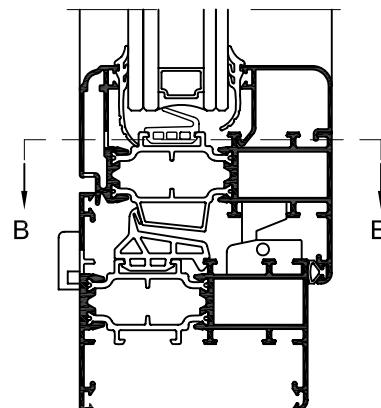
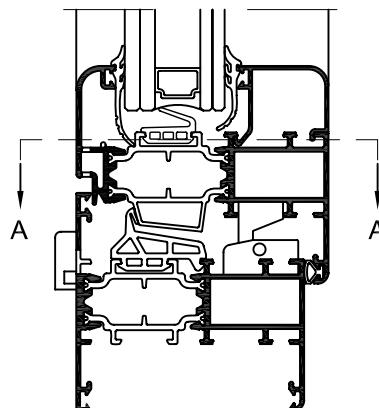
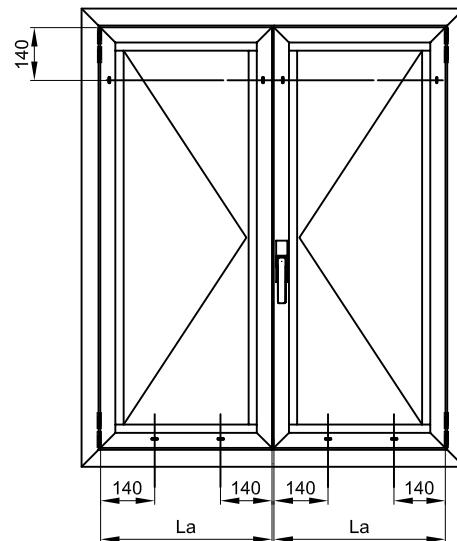
Posizione scarichi acqua  
Water drainages position



Scarichi acqua:  
N° 2 Per  $L \leq 1400$  mm  
N° 3 Per  $1400 \text{ mm} < L \leq 2100$  mm  
N° 4 Per  $L > 2100 \text{ mm} \leq 2800$  mm

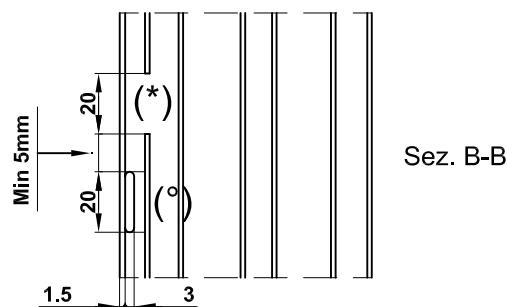
Water drains:  
N° 2 For  $L \leq 1400$  mm  
N° 3 For  $1400 \text{ mm} < L \leq 2100$  mm  
N° 4 For  $L > 2100 \text{ mm} \leq 2800$  mm

Posizione ventilazione vetri  
Glass ventilation position



(\*) Asportazione dentino solo su profilo anta lato inferiore  
in corrispondenza scarico acqua

Teeth removal only on lower wing section  
corresponding to the water drainage hole



(\*) Asola da 20x 5mm spostata rispetto all'altra lavorazione

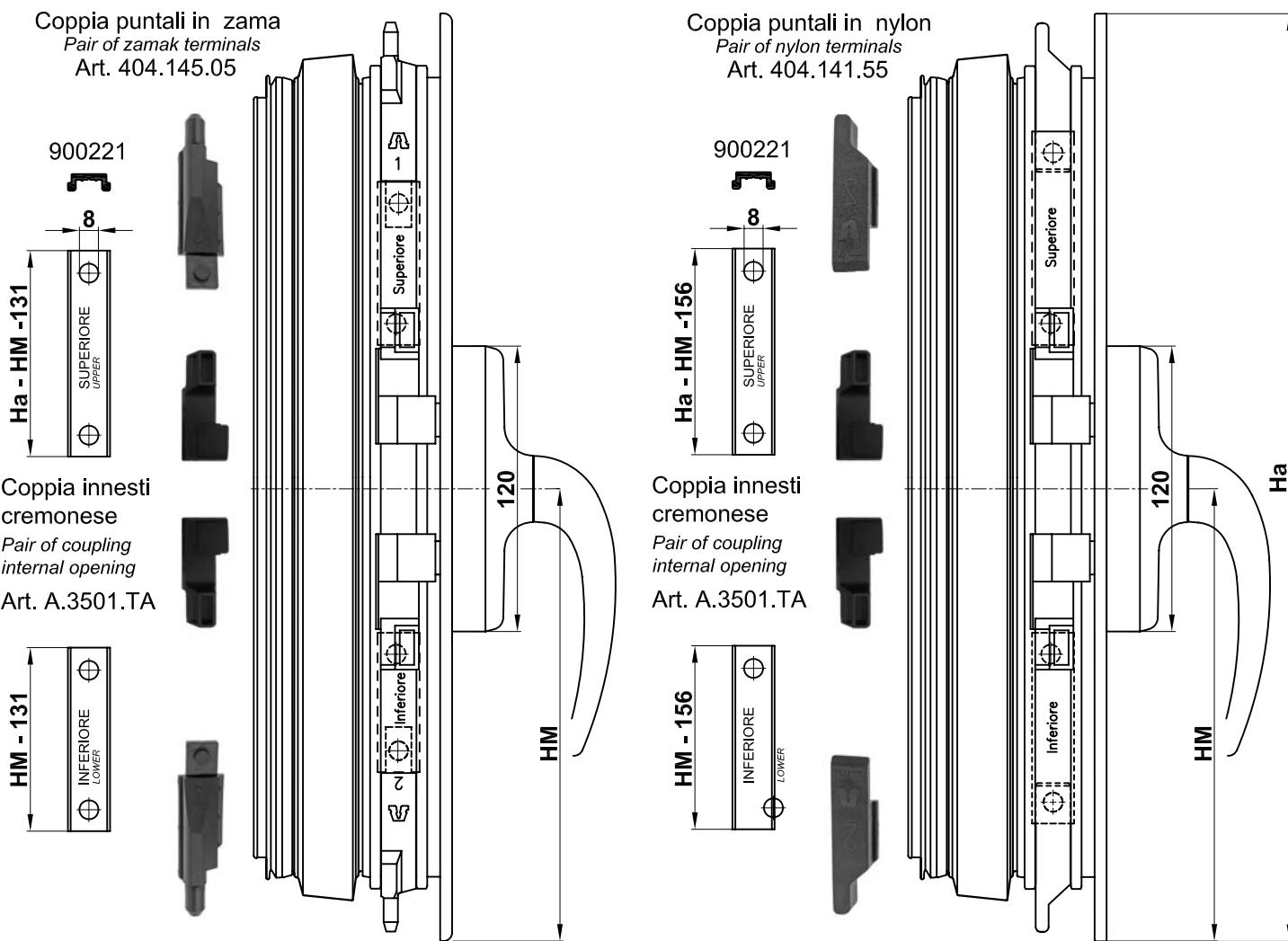
(\*) Asola da 20x 3mm in corrispondenza dello scarico acqua

(\*) Slot 20x5mm not corresponding to the other tooling

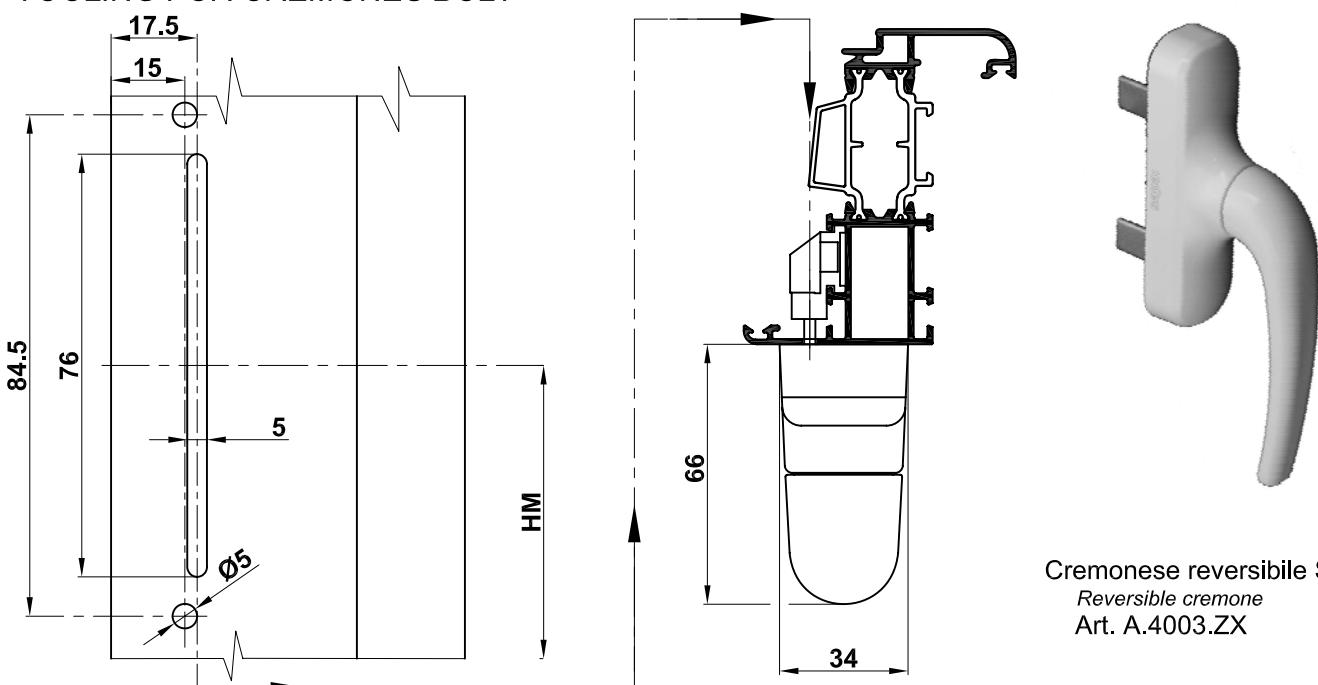
(\*) Slot 20x3mm corresponding to the water drainage hole

Attrezzatura: TRAPANO - PANTOGRAFO  
Tooling: DRILL - PANTOGRAPH

**PUNTALI ED INNESTI CREMONESE**  
TERMINALS AND COUPLINGS FOR CREMONE



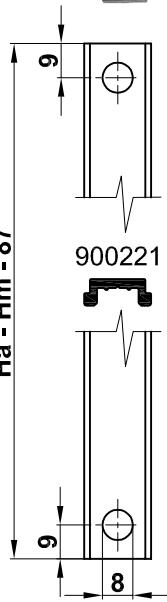
**LAVORAZIONE PER CREMONESE**  
TOOLING FOR CREMONES BOLT



**APERTURA ESTERNA R85C51**  
**EXTERNAL OPENING R85C51**

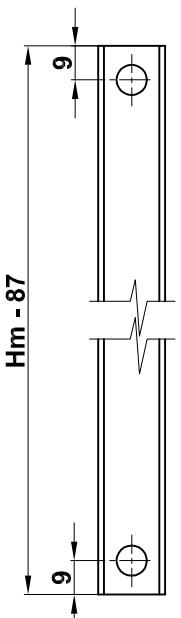
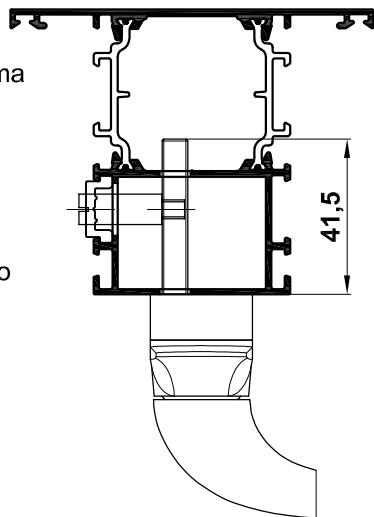


Coppia puntali in zama  
Pair of zamak terminals  
Art. 404.145.05



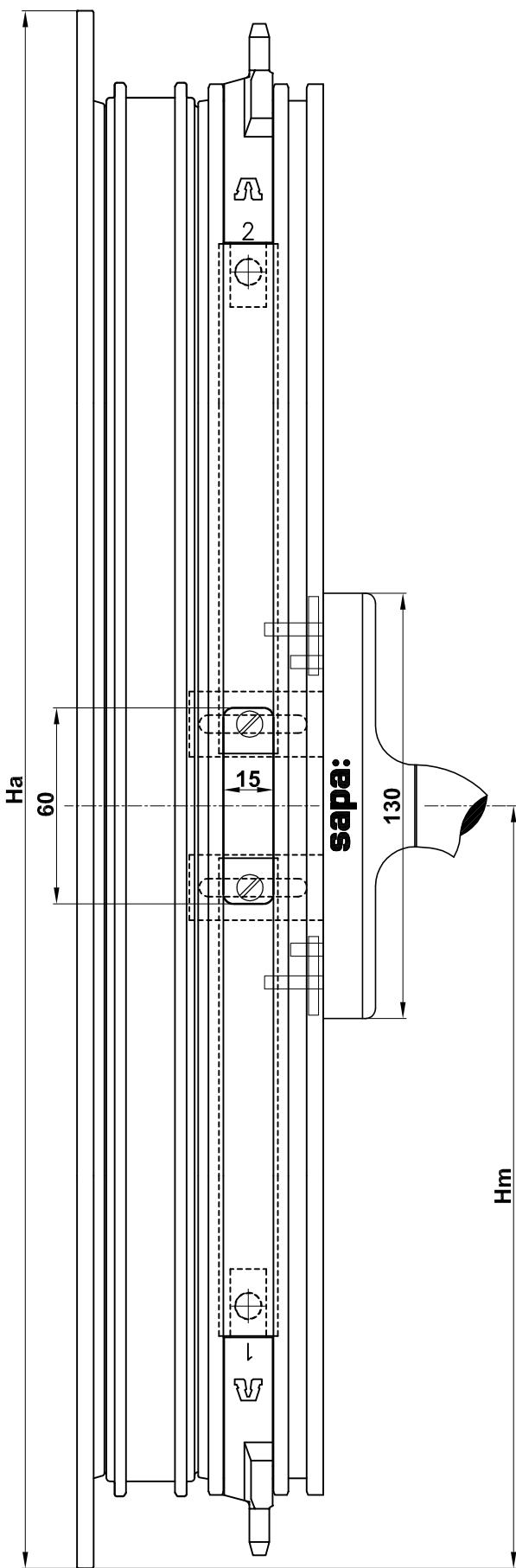
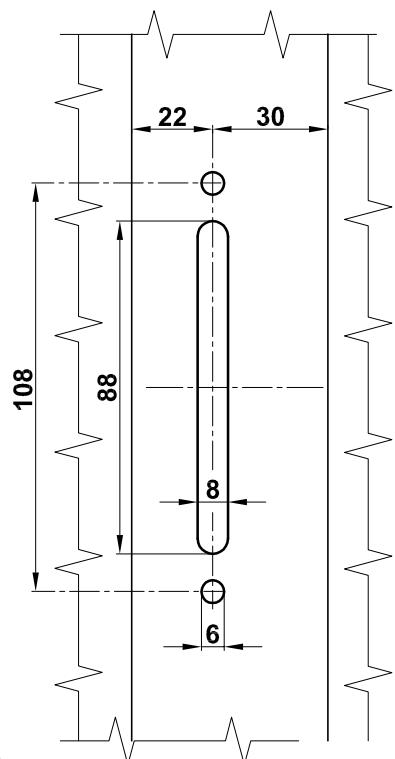
SUPERIORE  
UPPER

Perno di collegamento  
Connecting pin  
Art. A.4016.IA



INFERIORE  
LOWER

Cremonese Apertura Esterna  
Reversible cremone bolt  
Art. A.4006.ZX

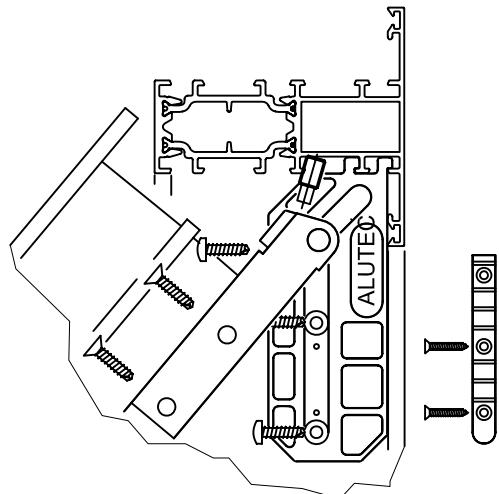


## GRUPPO ARTICOLAZIONE RINFORZATO PER SPORGERE PORTATA 90Kg RELEASABLE ARMS FOR HOPPER WINDOW

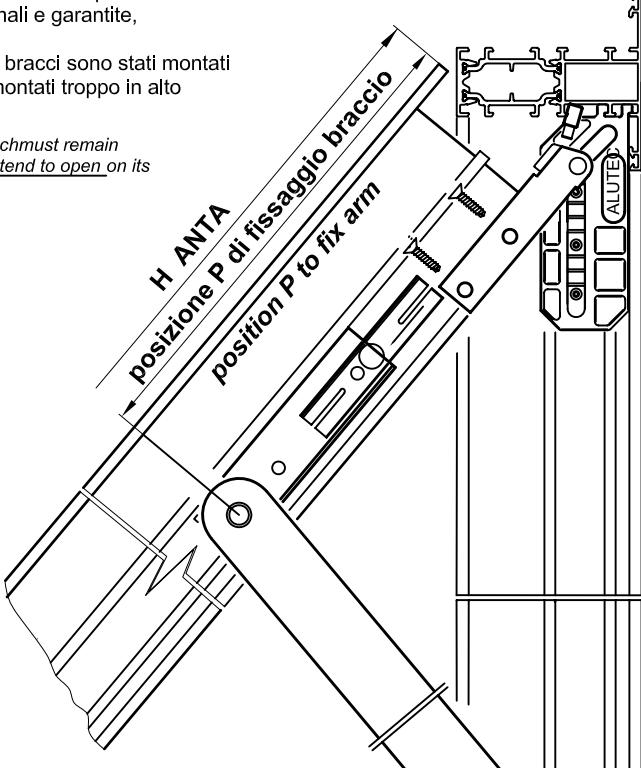
Il sistema a sporgere R85TT 1.0 è basato sul bilanciamento dell'anta che deve rimanere in equilibrio indipendentemente dalla sua posizione in apertura. Per ottenere le prestazioni ottimali e garantire, il peso dell'anta deve scaricarsi sempre sui bracci e mai sullo scivolo.

Per verificare l'equilibratura dell'anta si può procedere nella seguente maniera: se i bracci sono stati montati troppo in basso l'anta tenderà ad aprirsi autonomamente, viceversa se sono stati montati troppo in alto l'anta tenderà a chiudersi.

*R85TT 1.0, awning systems with load-bearing arms, are based on the balancing of the sash which must remain balanced regardless of its opening position. If the arms have been mounted too low the sash will tend to open on its own while vice versa, if they have been mounted too high up, the sash tends to close.*

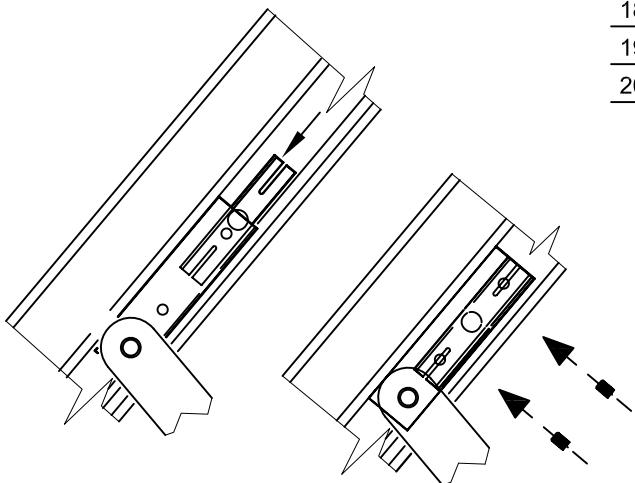


Posizione P Position P	
H anta H wing	P
700	223
800	265
900	285
1000	300
1100	318
1200	332
1300	342
1400	352
1500	362
1600	370
1700	377
1800	384
1900	392
2000	400

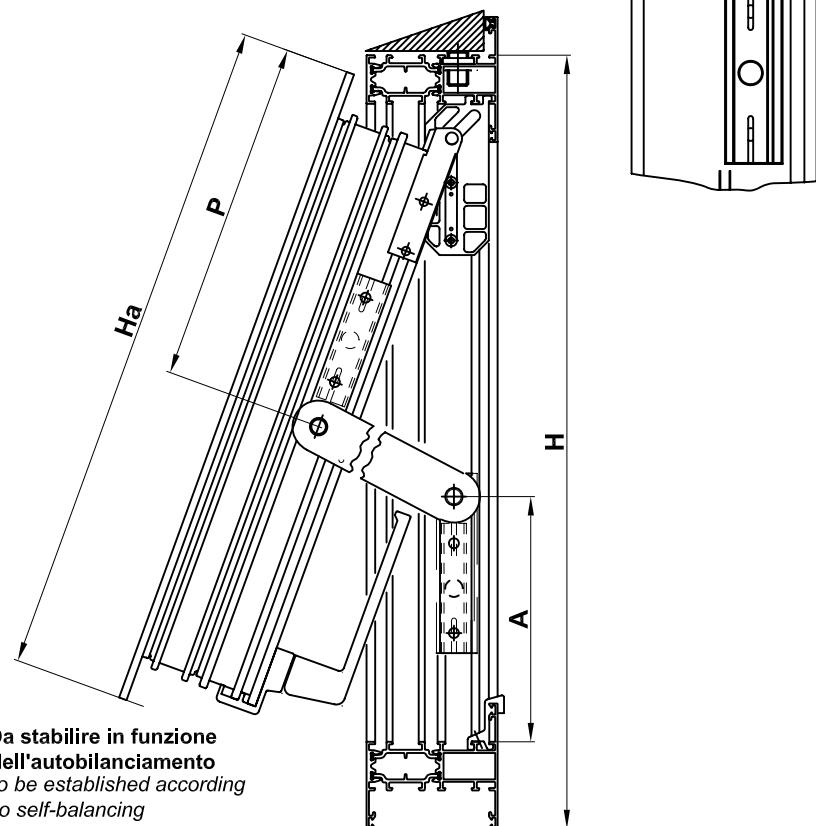


Per ulteriori informazioni chiedi lo schema di montaggio 80100057 (Alutec)

*For further informations ask for the assembling scheme 80100057 (Alutec)*



Art. 406.499.05



A = Da stabilire in funzione  
dell'autobilanciamento  
A = To be established according  
to self-balancing

# SCHEMA DI MONTAGGIO

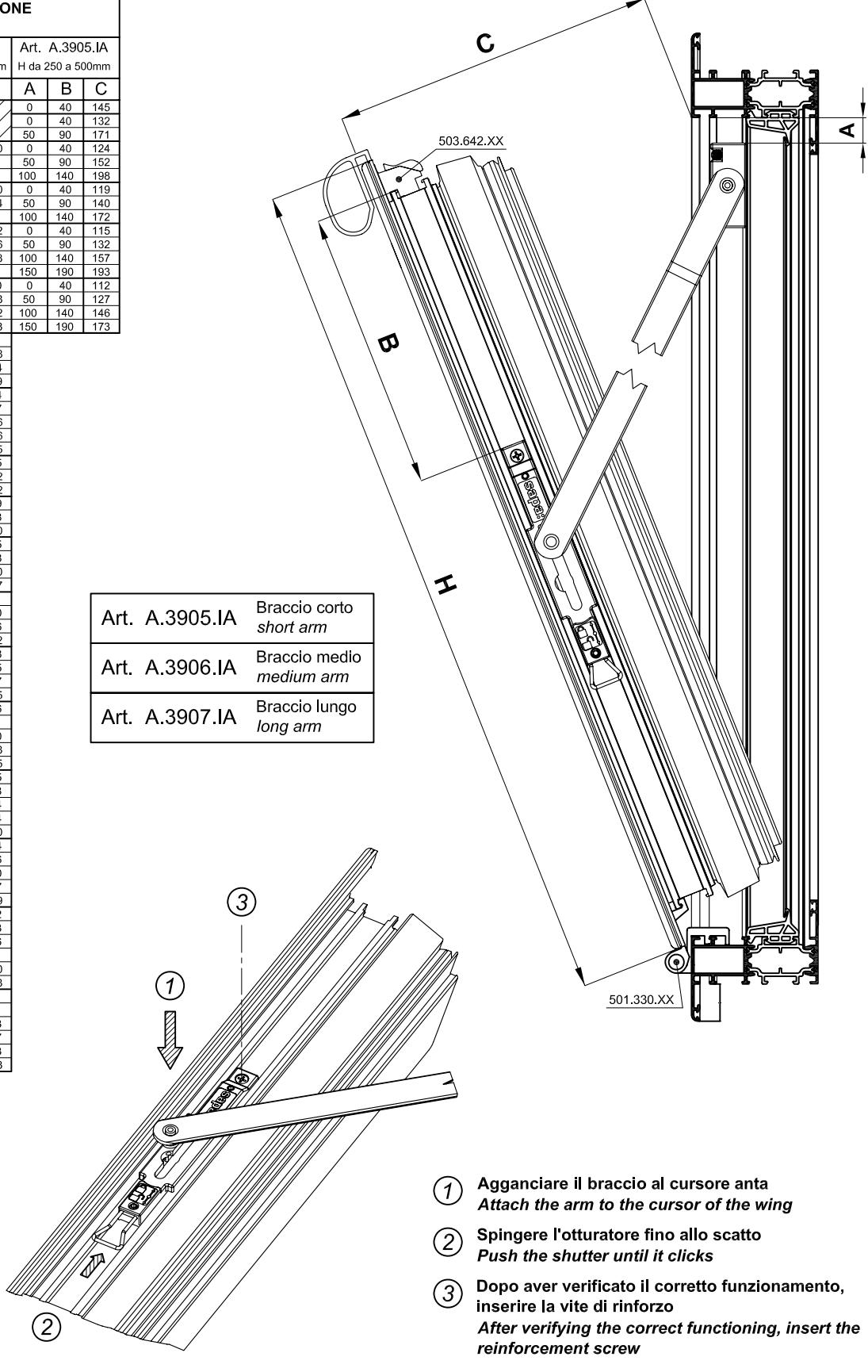
## Mounting Diagram

### BRACCI SGANCIABILI AMMORTIZZATI PER VASISTAS

#### RELEASABLE AND AMORTIZED ARMS FOR VASISTAS

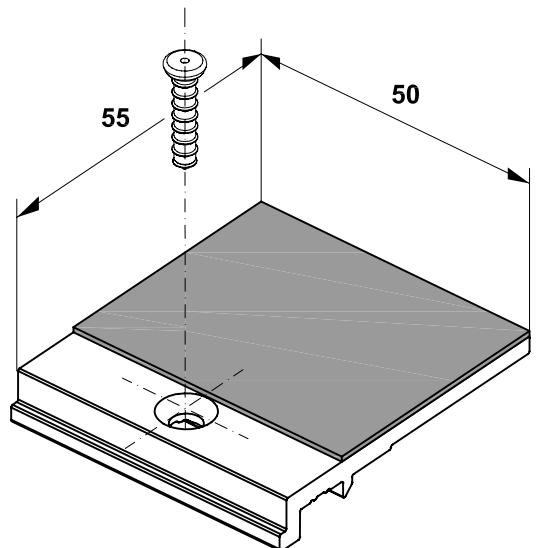
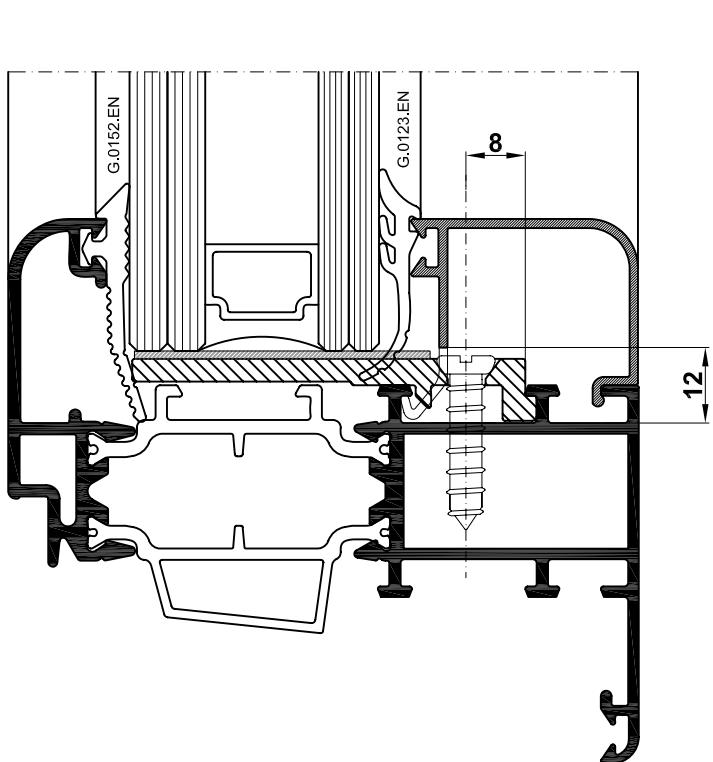
CAMPO DI APPLICAZIONE APPLICATION RANGE											
H	Art. A.3907.IA			Art. A.3906.IA			Art. A.3905.IA				
	H da 1000 a 2000mm	H da 350 a 1600mm	H da 250 a 500mm								
250							0	40	145		
300							0	40	132		
350				0	150	250	0	40	124		
400							50	90	171		
							100	140	198		
450				0	150	220	0	40	119		
				50	200	284	50	90	140		
							100	140	172		
500				0	150	202	0	40	115		
				50	200	246	50	90	132		
				100	250	318	100	140	157		
							150	190	193		
550				0	150	198	0	40	112		
				50	200	223	50	90	127		
				100	250	272	100	140	146		
				150	300	353	150	190	173		
600				0	150	181					
				50	200	208					
				100	250	244					
				150	300	299					
700				0	150	174					
				50	200	197					
				100	250	226					
				150	300	266					
				200	350	325					
800				0	150	165					
				100	250	202					
				200	350	262					
900				0	150	159					
				100	250	188					
				200	350	230					
				0	150	155					
				100	250	178					
				200	350	210					
				300	450	257					
1000				0	340	238	0	150	151		
				100	440	278	100	250	170		
				200	540	334	200	350	196		
				300	640	421	300	450	232		
1100				0	340	229	0	150	148		
				100	440	261	100	250	165		
				200	540	305	200	350	187		
				300	640	366	300	450	215		
1200				0	340	223	0	150	146		
				100	440	250	100	250	161		
				200	540	284	200	350	180		
				300	640	332	300	450	203		
				400	740	400	400	550	235		
1300				0	340	217	0	150	145		
				100	440	240	100	250	158		
				200	540	270	200	350	174		
				300	640	308	300	450	194		
				400	740	359	400	550	220		
1400				0	340	213	0	150	144		
				100	440	233	100	250	156		
				200	540	258	200	350	170		
				300	640	290	300	450	187		
				400	740	331	400	550	209		
1500				0	340	209	0	150	142		
				100	440	227	100	250	153		
				200	540	249	200	350	166		
				300	640	276	300	450	181		
				400	740	310	400	550	200		
				500	840	354	500	650	223		
1600				0	340	200	0	150	141		
				100	440	223	100	250	151		
				200	540	242	200	350	163		
				300	640	265	300	450	177		
				400	740	294	400	550	193		
				500	840	330	500	650	213		
1700				0	340	204					
				100	440	219					
				200	540	236					
				300	640	257					
				400	740	282					
				500	840	312					
1800				0	340	201					
				100	440	215					
				200	540	231					
				300	640	250					
				400	740	271					
				500	840	298					
				600	940	330					
1900				0	340	199					
				100	440	212					
				200	540	227					
				300	640	243					
				400	740	263					
				500	840	286					
				600	940	315					
2000				0	340	198					
				100	440	210					
				200	540	223					
				300	640	243					
				400	740	263					
				500	840	286					
				600	940	315					

Art. A.3905.IA Braccio corto short arm  
 Art. A.3906.IA Braccio medio medium arm  
 Art. A.3907.IA Braccio lungo long arm



Per sganciare, eseguire l'operazione inversa.  
 To release, perform the inverse operation.

**APPOGGIO VETRO "A.2833.AA"**  
**GLASS SUPPORTO "A.2833.AA"**



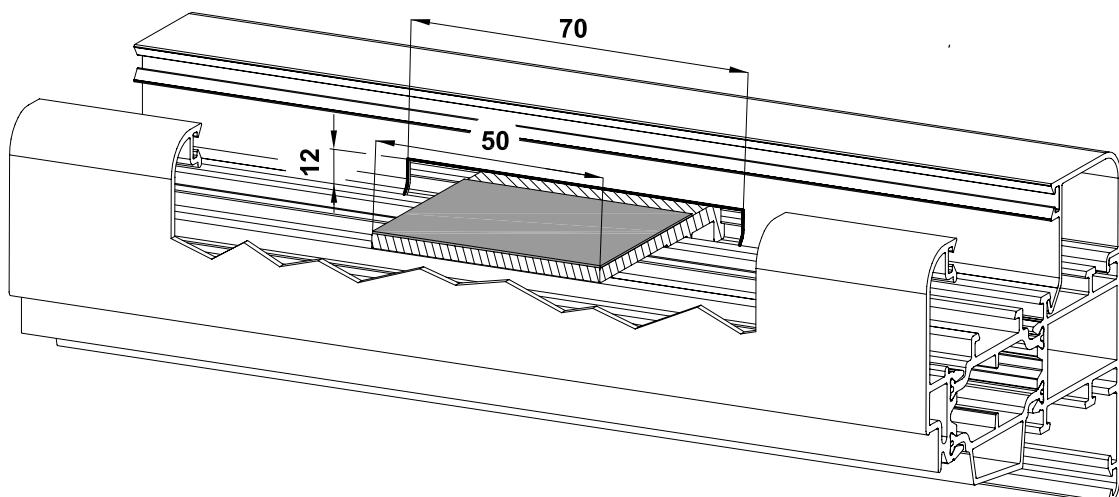
**ART. "A.2833.AA"**

\* **ART. "A.2833.AA"**

**Inserire solo sul traverso inferiore posizionato  
come da schema riportato a Pag. F3-T85-A-03**

*Insert only on the lower transom.*

*Please, see the scheme Pag.F3-T85-A-03*



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