

**MANUALE TECNICO
EKU WOODART TT
THERMOPLUS 98
EDIZIONE 01/2017**



**TECHNICAL MANUAL
EKU WOODART TT
THERMOPLUS 98
EDITION 01/2017**

Indice - Table of contents

INFORMAZIONI TECNICO COMMERCIALI TECHNICAL INFORMATION BUSINESS	1	01 - 10
ELENCO ACCESSORI E GUARNIZIONI ACCESSORIES AND GASKETS LIST	2	01 - 06
ELENCO PROFILI PROFILES LIST	3	01 - 03
PROFILI IN SCALA 1:1 PROFILES 1:1	4	01 - 68
SEZIONI IN SCALA 1:1 <i>CROSS SECTIONS 1:1</i>	5	01 - 24
DISTINTE DI TAGLIO PREPARATIONS	6	01 - 16
VETRAZIONI GLAZING	7	01 - 05
LAVORAZIONI TOOLING	8	01 - 19
COLLEGAMENTI ALLA MURATURA LINKS TO THE WALL	9	01 - 04

INFORMAZIONI TECNICO COMMERCIALI



TECHNICAL INFORMATION BUSINESS

DESCRIZIONE TECNICA DEL SISTEMA PER SERRAMENTI A BATTENTE TT ALLUMINIO-LEGNO EKU WOODART TT THERMOPLUS 98

Profilati estrusi in lega di alluminio EN AW-6060 (UNI EN 573-3)

Stato di fornitura: T5

Isolamento termico ottenuto tramite barrette in poliammide, da mm. 24 per i profili delle parti fisse e da mm. 32 per i profili delle parti apribili, inserite in apposite sedi tra i due profili di alluminio (guscio interno ed esterno) e successivamente bloccate mediante rullatura sulla parte esterna di alluminio.

Tolleranze dimensionali e spessori: UNI EN 12020-2

Lunghezza commerciale barre profilati: mm. 6500

I profilati a taglio termico della serie EKU WOODART TT THERMOPLUS 98 devono essere trattati superficialmente osservando i criteri previsti dalle direttive per l'ottenimento del marchio Qualanod, per l'anodizzazione e Qualicoat per la verniciatura; in ogni caso non dovrà essere superata la temperatura max di 190 °C per oltre 15 minuti, al fine di non pregiudicare le caratteristiche meccaniche e dimensionali delle barrette in poliammide.

Caratteristiche principali del Sistema:

<i>Dimensione base:</i>	- sezione del telaio fisso	mm. 70,5
	- sezione dell'anta	mm. 90,5 / 98
	- sovrapposizione a muro dei telai fissi	mm. 28
	- altezza sede vetro	mm. 19
	- larghezza massima per vetro o pannello	mm. 52

Vetrazione effettuata con fermavetro in alluminio fissato a vite, sul quale si inserisce il fermavetro di finitura in legno;

Accoppiamento tra alluminio e legno: mediante appositi nottolini in nylon avvitati ai sagomati in legno;

Sedi alloggiamento accessori: a dimensioni standard ferramenta a nastro 12/20 - 13;

Tenuta aria/acqua ottenuta tramite guarnizione centrale a giunto aperto, con guarnizione di tenuta parapolvere e antirumore inserita nella cava dell'aletta interna dell'anta;

Possibilità d'impiego: i profilati consentono la costruzione di serramenti a superfici piane, complanari sul lato esterno e sormonto interno, con aletta di vetrazione dritta; si possono fabbricare porte e finestre a battente, con apertura ad una o più ante, a wasistas, ad anta ribalta, vetrate fisse, vetrine per negozi.

NOTE TECNICHE

Il peso dei profilati è quello teorico e potrà variare in funzione delle tolleranze dimensionali e di spessore previste dalla norma UNI EN 12020-2; le dimensioni di taglio indicate nelle apposite distinte inserite nel catalogo, sono calcolate in base alle dimensioni nominali: nella pratica potranno essere influenzate dalle tolleranze di estrusione, pertanto dovranno essere arrotondate secondo la precisione ed il tipo di impostazione delle misure nelle macchine impiegate. Gli schemi, le sezioni e gli attacchi a muro riportati sul catalogo, non hanno valore limitativo, ma solo di esemplificazione di alcune delle situazioni che più comunemente si trovano nella realtà e di soluzione consigliabile. La posa del serramento va eseguita rispettando la normativa, le prescrizioni e le raccomandazioni specifiche esistenti in Italia.

I momenti di inerzia riportati sono teorici.

Il Sistema di profilati riportato in questo catalogo è brevettato; tutti i dati riportati nel presente catalogo sono indicativi e non impegnano la Profilati S.p.A. e la Trafilerie Emiliane Sud S.p.A. che si riservano di apportare in qualsiasi momento quelle modifiche che riterranno opportune al fine di migliorare i prodotti.

Quanto illustrato nel presente catalogo è di esclusiva proprietà di Profilati S.p.A. e, a termine di legge, ne è vietata la riproduzione, anche parziale, se non esplicitamente autorizzata.

TECHNICAL DESCRIPTION OF THE EKU WOODART TT THERMOPLUS 98 SYSTEM FOR ALUMINIUM WOOD THERMAL BREAK WINDOWS

Aluminium alloy EN AW-6060 (UNI EN 573-3) extruded sections

Temper: T5

Thermal insulation obtained through polyamide bars of mm. 24 for fixed part profiles and of mm. 32 for opening part profiles, inserted in suitable seats between the two sides of the aluminium profiles and then locked by means of rolling on the external aluminium part.

Dimensional tolerances and thicknesses: UNI EN 12020-2

Commercial length of the bars: 6500 mm

The thermal break sections of the system EKU WOODART TT THERMOPLUS 98 have to be treated on the surface in compliance with the criteria set forth by the Qualanod Mark directives for anodizing and Qualicoat for varnishing . The max. 190 °C temperature shall not be exceeded in any case for more than 15 minutes, in order not to jeopardize the mechanical and dimensional characteristics of the polyamide bars.

Main characteristics of the system:

<i>Basic dimensions:</i>	<i>- fixed frame cross-section</i>	<i>mm. 70,5</i>
	<i>- wing cross-section</i>	<i>mm. 90,5 / 98</i>
	<i>- fin of rabbet for fixed frames</i>	<i>mm. 28</i>
	<i>- glass seat space</i>	<i>mm. 19</i>
	<i>- maximum width for glass or panel</i>	<i>mm. 52</i>

Glass application by screwed aluminium glass beading on which is inserted wooden glass beading;

Coupling of aluminium and wood: by specific nylon clips screwed into the wooden forms;

Accessory housing seats: standard 12/20 - 13 mm groove;

Sealing obtained through central open joint gasket with weather strip inserted in the slot on the internal fin of the wing;

Application: the system allows for construction of plane surface fixtures, coplanar on the external side and the internal overlap, with straight glass beading. It is possible to manufacture door and casement, or top-hung, one or more wing opening windows, fixed glazing panels, shop-windows.

TECHNICAL NOTES

The weight of the sections is theoretical and can vary according to the dimensional and thickness tolerances specified by UNI EN 12020-2 standard; The cutting dimension indicated in the appropriate forms are calculated on the basis of the nominal size. In practice these dimensions can be affected by extrusion tolerances; therefore they shall be rounded according to accuracy and type of measures set in the machines used. Diagrams, sections and wall situations which are most commonly found in practice and recommended solutions. Fixture mounting shall be in compliance with standards, requirements and specific recommendations existing in Italy.

The moments of inertia shown are theoretical.

The system of sections shown in this catalogue is patented; all data given in this catalogue are an indication and do not bind Profilati S.p.A. and Trafilerie Emiliane Sud S.p.A. which reserve the right to make any modifications deemed appropriate to improve products.

All that is shown in this catalogue is property of Profilati S.p.A. Any reproduction, even if partial, is forbidden by law unless expressly authorized.

DILATAZIONE TERMICA LINEARE

Qualunque corpo solido di qualsivoglia materiale, sottoposto ad una variazione di temperatura subisce una variazione di volume. Un aumento della temperatura del corpo solido comporta un corrispondente incremento di volume e viceversa

una riduzione della temperatura genera un decremento di volume.

Normalmente le suddette variazioni di volume avvengono isotropicamente, ovvero il corpo solido subisce la stessa variazione percentuale di volume nelle tre dimensioni dello spazio.

Esistono comunque moltissimi casi in cui una dimensione del corpo solido prevale in maniera così evidente sulle rimanenti da rendere trascurabili, su queste ultime, gli effetti delle deformazioni conseguenti a variazioni della temperatura.

Questo è proprio il caso dei profili estrusi in alluminio dove la lunghezza del profilato è notevolmente superiore alle dimensioni della sezione ortogonale alla lunghezza stessa.

In tal caso si può parlare di **dilatazione termica lineare**.

Il coefficiente di dilatazione termica lineare, indicato con il simbolo λ , in prima approssimazione può essere considerato una costante dipendente dal materiale ed esprime la variazione di lunghezza subita da una barra di un metro in seguito ad una variazione di temperatura di un grado centigrado.

L'entità della deformazione subita viene calcolata confrontando le dimensioni spaziali del corpo prima e dopo la variazione della temperatura.

L'allungamento ΔL è proporzionale all'aumento di temperatura ed alla lunghezza iniziale della barra e si calcola con la seguente equazione:

$$\Delta L = L_t - L_o = \lambda L_o (t - t_o)$$

ovvero:

$$L_t = L_o + \lambda L_o (t - t_o) = L_o [1 + \lambda (t - t_o)]$$

dove:

t_o = temperatura iniziale ;

t = temperatura finale ;

L_t = lunghezza alla temperatura t ;

L_o = lunghezza alla temperatura t_o ;

λ = coefficiente di dilatazione termica (vedi tabella seguente) ;

Tabella coefficienti di dilatazione lineare: la tabella indica per alcuni tipi di materiale, in rapporto al proprio coefficiente di dilatazione lineare, di quanti mm si allunga una sbarra lunga 1 metro in seguito all'aumento di 1°C di temperatura.

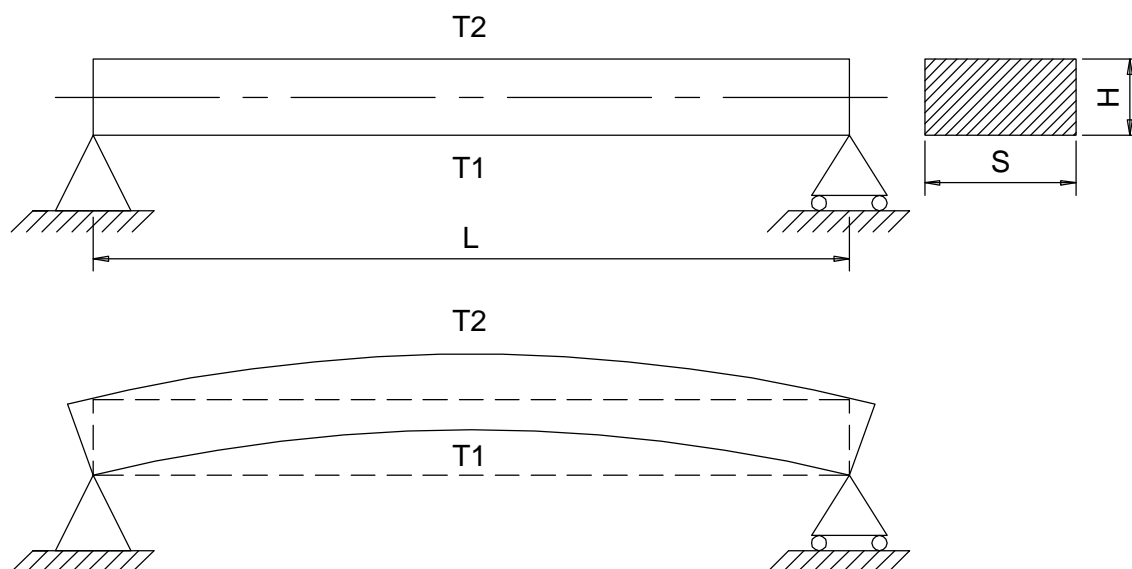
Materiale	λ (°C ⁻¹)	Allungamento per aumento di 1°C per 1m di lunghezza (mm)
Acciaio	$11 \cdot 10^{-6}$	0,011
Alluminio	$24 \cdot 10^{-6}$	0,024
Ferro	$12 \cdot 10^{-6}$	0,012
P.V.C.	$70 \cdot 10^{-6}$	0,070
Vetro	$9 \cdot 10^{-6}$	0,009

DISTORSIONE TERMICA

I serramenti e le facciate continue tra le varie funzioni hanno anche quella, ben nota per il risparmio energetico, di separare ambienti aventi condizioni climatiche differenti. I profili estrusi in alluminio, siano essi a taglio termico o meno, sono quindi sottoposti a variazioni termiche notevoli. Queste variazioni sono particolarmente elevate nel periodo estivo quando la superficie esterna dei profilati è soggetta ad una elevata esposizione solare che, per il fenomeno dell'irraggiamento, genera un incremento di temperatura superficiale.

A causa di questo maggiore riscaldamento la parte esterna del profilo si dilata maggiormente rispetto a quella interna, generando una inflessione della barra, con estradosso rivolto verso l'esterno, che aumenta all'aumentare della differenza di temperatura tra le due superfici interna ed esterna del profilo stesso.

La situazione è illustrata nelle figure 1 e 2 dove il profilo è appoggiato alle estremità, è sottoposto ad una variazione termica lineare ΔT tra la superficie esterna, a temperatura T_2 esposta all'irraggiamento solare, e quella interna non esposta, a temperatura $T_1 < T_2$, e, a causa delle tensioni generate, subisce una inflessione con estradosso rivolto verso la superficie con temperatura più elevata.



Questo fenomeno, particolarmente visibile nelle aperture a nei profilati molto lunghi, è noto come **distorsione termica**, e questa deformazione, nei casi peggiori e durante le ore di maggiore irraggiamento solare, può causare difficoltà di apertura e chiusura di finestre e porte o generare altri tipi di malfunzionamento.

Il presente documento è da considerarsi di natura informativa ed ha l'unico scopo di informare i nostri clienti del fenomeno sopra descritto. La distorsione termica è sempre presente, in misura maggiore o minore, e non è completamente risolvibile con i materiali e le tecnologie attualmente disponibili per la costruzione di profilati per il settore edilizio.

La distorsione termica è ancor più evidente nei profili dotati di taglio termico che sono dotati di maggiori capacità isolanti e di conseguenza portano ad una maggiore differenza di temperatura tra le superfici interna ed esterna.

Esistono comunque alcune semplici procedure che, quando applicabili, possono considerevolmente ridurre gli effetti della deformazione termica:

- 1) la riduzione dell'esposizione diretta ai raggi solari
- 2) la riduzione della dimensione S della superficie esposta del profilo
- 3) l'utilizzo di finiture chiare del profilo
- 4) la riduzione della lunghezza L del profilo
- 5) l'utilizzo di profili aventi sezione di altezza H maggiore lungo il flusso di calore

Per ogni altra informazione o consulenza sulla correttezza di utilizzo dei profili, preghiamo di contattare l'Ufficio Tecnico di Profilati S.p.A.

THERMAL LINEAR EXPANSION

Every solid body, irrespective of the material, when exposed to temperature variations, undergoes a change in volume. An increase in temperature of the solid body means a corresponding increase in volume, whereas a decrease in temperature creates a reduction in volume.

Normally, the variations in volume are uniformly distributed, in other words the solid body has an equal change of volume in all three dimensions.

However, many cases exist where one dimension of the solid body is particularly affected thus rendering the deformations caused by temperature variations of the other dimensions almost negligible. This is exactly the case with extruded aluminium profiles where the length of the profiles is much greater compared to the orthogonal section of the same profile.

In this situation, the change in volume is referred to as **thermal linear expansion**

The coefficient of thermal linear expansion, indicated by the symbol λ , in general terms, can be considered a constant that depends on the material and represents the variation in length of a bar of one metre having undergone a temperature change of one degree.

The size of the deformation is calculated by comparing the dimensions of the bar before and after the temperature variation.

The increase in length ΔL is proportional to the increase in temperature and the initial length of the bar, it is calculated by using the following equation:

$$\Delta L = L_t - L_o = \lambda L_o (t - t_o)$$

or:

$$L_t = L_o + \lambda L_o (t - t_o) = L_o [1 + \lambda (t - t_o)]$$

where:

t_o = initial temperature ;

t = final temperature ;

L_t = length at temperature t ;

L_o = length at temperature t_o ;

λ = coefficient of thermal expansion (see following table) ;

The table below indicates for five materials the coefficient of thermal linear expansion, how many millimetres a one metre length bar expands having undergone a temperature increase of one degree.

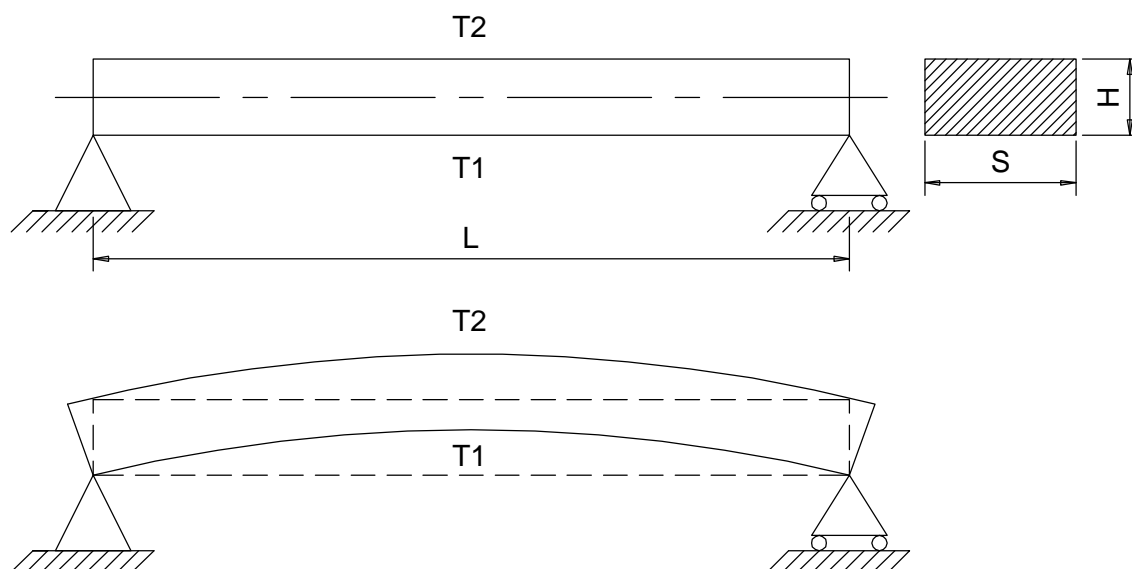
Material	λ ($^{\circ}\text{C}^{-1}$)	Material length increase, 1 degree per 1m (mm)
Steel	$11 * 10^{-6}$	0,011
Aluminium	$24 * 10^{-6}$	0,024
Iron	$12 * 10^{-6}$	0,012
P.V.C.	$70 * 10^{-6}$	0,070
Glass	$9 * 10^{-6}$	0,009

THERMAL DISTORSION

Window and door frames as well as curtain walling, among their many functions, well known for their energy-saving properties, to separate completely different environmental conditions. Extruded aluminium profiles that are used for window and door frames, either thermal break or not, are therefore exposed to large thermal variations. These variations are normally particularly extreme in the summer period, when the surface of the frames is subjected to strong sunlight that causes a substantial increase in temperature.

As a consequence of this heating, the surface exposed to the sun expands more compared to the side not exposed, thus causing an inflexion of the bar outward towards the external exposed surface, that increase with the difference of temperature between the internal and external surfaces of the profile.

The situation is illustrated in figure 1, where the profile is anchored at the ends, undergoes a temperature variation ΔT between the external exposed surface, at temperature T_2 , and the internal non-exposed surface, at temperature $T_1 < T_2$, and, because of the stress generated, an inflexion of the bar is caused, outward towards the more higher temperature surface.



This phenomenon, which is particularly visible on wing-opening and on very long transom, is known as **thermal distortion** and is the deformation that, in the worst cases and during the hours of max sunlight, can cause difficulty in opening and closing windows and doors or generate other types of malfunctioning.

The present document is intended to be only informative and has the purpose to inform all of our clients of the phenomenon described herein. The thermal distortion is always present, to a greater or lesser degree, and is not completely resolvable with the materials and technology currently available for the construction of profiles in the building sector.

The thermal distortion is even more evident in thermal break profiles as they have a larger insulating capacity, and as a consequence a greater difference in temperature between the exposed and non-exposed surfaces. Nevertheless, there are some simple procedures, where it is possible to apply them, that can considerably reduce the effects of the thermal distortion:

- 1) the reduction of the exposure to direct sunlight
- 2) the reduction in size S of the exposed surfaces of the profile
- 3) the use of light colour finishing on the profile
- 4) the reduction of the length L of the profile
- 5) the use of a higher profile width H where there is the heat flow

For any further information or advice on the correctness of specific building systems, please contact the Technical Office of Profilati S.p.A.

SPECIFICHE TECNICHE LEGNO

PRESCRIZIONI PER LA LAVORAZIONE ED IL MONTAGGIO

Le peculiarità del sistema alluminio-legno impongono l'osservanza degli accorgimenti sotto indicati, sia per ottenere validi risultati durante le fasi di lavorazione, sia per ridurre al minimo i rischi di formazione di condensa od infiltrazioni di umidità tra l'alluminio ed il legno, con i danni che queste eventualità provocano:

TUTTE LE PARTI DEL LEGNO RESE VIVE DAL TAGLIO VANNO PROTETTE CON L'APPLICAZIONE DELLA VERNICE POLIURETANICA TRASPARENTE 238-OP390 MISCELATA AL 50% CON IL CATALIZZATORE 238-C266;

LE GIUNZIONI DEGLI ANGOLI TAGLIATI A 45° NEI TELAI IN LEGNO CHE FORMANO LE CORNICI DA ACCOPPIARE A QUELLI IN ALLUMINIO, VANNO AGGRAFFATE CON GLI OPPORTUNI PUNTI METALLICI;

SUI TELAI DELLE ANTE VANNO ESEGUITE LE APPOSITE ASOLATURE PER LA VENTILAZIONE DEI VETRI;

SU TUTTO IL PERIMETRO ESTERNO DEI VETRI DEVE ESSERE ESEGUITA UNA PERFETTA SIGILLATURA CHE IMPEDISCA QUALSIASI INFILTRAZIONE DI ACQUA PIOVANA

NELLE OPERAZIONI DI POSA VANNO ELIMINATI I PONTI TERMICI TRA VANO MURARIO E TELAIO D'ALLUMINIO, pertanto è indispensabile porre la massima attenzione al fine di ottenere un efficace isolamento: a questo scopo si possono usare distanziali in poliuretano espanso a supporto della sigillatura finale in silicone (vedi schemi indicati nei vari disegni di attacchi a muro);
in ogni caso si consiglia di rispettare la normativa, le prescrizioni e le raccomandazioni specifiche esistenti;
INOLTRE, VA ASSOLUTAMENTE EVITATA LA POSA DEI SERRAMENTI IN COSTRUZIONI ANCORA DA TERMINARE, DOVE I LOCALI NON SONO SUFFICIENTEMENTE ASCIUTTI.

Profilati S.p.A. e Trafilerie Emiliane Sud S.p.A., invitando a rispettare la tecnologia costruttiva ed a usare la componentistica indicata, si ritengono sollevate da ogni responsabilità per difetti dovuti all'osservanza di quanto prescritto ed illustrato nel presente catalogo.

Il Sistema di profilati riportato in questo catalogo è brevettato; quanto vi è illustrato è di esclusiva proprietà di Profilati S.p.A. e a termine di legge ne è vietata la riproduzione, anche parziale, se non esplicitamente autorizzata; tutti i dati riportati sono indicativi e non vincolano Profilati S.p.A. e Trafilerie Emiliane Sud. S.p.A. che si riservano di apportare in qualsiasi momento quelle modifiche che riterranno opportune al fine di migliorare i prodotti.

Profilati S.p.A.

WOOD TECHNICAL PRESCRIPTION

INSTRUCTIONS FOR WORKING AND ASSEMBLING

The peculiarity of the wood-aluminium system oblige the following warnings to be observed, both in order to obtain valid results during the construction phases and to reduce to a minimum the risk of condensation or infiltrations of humidity between the aluminium and the wood, and consequently damage that may arise:

ALL THE PARTS IN WOOD EXPOSED BY CUTTING MUST BE PROTECTED BY A COAT OF POLYURETHANIC VARNISH 238-OP 390 MIXED AT 50% WITH A CATALYST 238-C266;

JOINS OF THE CORNERS CUT AT 45° IN WOODEN FRAMES WHICH FORM THE FRAMES TO BE INSERTED IN THE ALUMINIUM ONES MUST BE STAPLED WITH THE APPROPRIATE METAL PARTS;

APPROPRIATE SLOTS MUST BE EXECUTED ON THE WING FRAMES TO ENSURE VENTILATION OF THE GLASS;

A PERFECT SEAL MUST BE EXECUTED ALONG THE ENTIRE EXTERNAL PERIMETER OF THE GLASS, THAT IMPEDES ANY INFILTRATION OF RAIN-WATER;

DURING PLACEMENT, ANY THERMAL BRIDGES BETWEEN THE WALL AND THE ALUMINIUM FRAME MUST BE ELIMINATED, thus it is vital that the maximum attention is paid to obtaining an effective insulation: to this end, expanded polyurethane thicknesses may be used to hold final silicon sealing (see the diagrams shown in the various drawings for wall coupling);

In any case we advise to keep to the standards, specific existing rules and suggestions;

FURTHERMORE THE PLACEMENT OF THE FIXTURES UNDER CONSTRUCTION MUST ABSOLUTELY BE AVOIDED WHERE THE ROOMS ARE NOT SUFFICIENTLY DRY;

Profilati S.p.A. and Trafilerie Emiliane Sud S.p.A., inviting to comply with the constructive technology and using the indicated components, decline any responsibility for defects due to neglecting that which is illustrated and indicated in the present catalogue.

The system of profiles shown in this catalogue is patented; that illustrated is exclusively of property of Profilati S.P.A. and the law forbids the reproduction, even partial, without explicit authorization; all the data shown are indicative and do not bind Profilati S.P.A and Trafilerie Emiliane Sud S.P.A., who reserve the rights to carry out, at any moment, modifications that they deem necessary to improve the products.

Profilati S.p.A.

SPECIFICHE TECNICHE LEGNO

SPECIFICHE TECNICHE RICHIESTE PER L' APPROVVIGIONAMENTO DEI SAGOMATI IN LEGNO DA UTILIZZARE NELLA SERIE EKU WOODART TT THERMOPLUS 98

Tipo di legno e caratteristiche dei sagomati normalmente previsti:

sagomati in Frassino americano (American White Ash) verniciati tinto noce, tinto ciliegio, tinto rovere;

selezione del prodotto:

non oltre il 15% del prodotto fornito potrà riportare sui lati in vista n° 1 difetto (scheggiatura, setolatura, fori di tarlo, ecc.) di lunghezza inferiore a cm. 30, mentre in via eccezionale, non più del 3% di questo potrà presentare n° 3 difetti di lunghezza inferiore a cm. 10; in tutti i casi, i difetti non potranno essere ad una distanza minore di mm. 800 dall' estremità della barra;

le barre saranno lunghe mm. 3300-3600, con una percentuale di misure più corte non inferiore a mm. 3000, non eccedente il 15-20 % della quantità totale fornita;

verniciatura:

dovrà essere eseguita a spruzzo su tutti i lati con due mani di vernice poliuretanica trasparente preceduta da una mano di impregnante antibatterico e, per i colori noce e ciliegio, una mano di tinta a base di pigmenti resistenti alla luce, mentre per il colore naturale (tinto rovere) dovrà essere usata una vernice trasparente opaca;

il tavolame utilizzato dovrà essere opportunamente selezionato al fine di ottenere la massima omogeneità nella tonalità di colore tra un sagomato e l'altro;

applicazione di pellicola protettiva pelabile:

su ogni sagomato dovrà essere applicata una pellicola protettiva pelabile, che verrà tolta al termine delle lavorazioni per la costruzione del serramento;

marchiatura di riconoscimento:

sulla superficie non in vista di ogni sagomato dovrà essere stampigliato, con passo di mm. 300 l' uno dall' altro, il codice di riconoscimento dell' articolo, del fornitore e del lotto di produzione;

imballaggio:

i sagomati dovranno essere imballati in adeguate scatole di cartone, con etichetta adesiva e relativa descrizione del contenuto;

le barre in misura più corta rispetto allo standard nonché quelle con eventuali difetti del tipo e nella quantità massima precedentemente definiti, dovranno essere distribuite in maniera omogenea scatola per scatola, onde evitare concentrazioni di materiale con scostamenti di lunghezza e difetti qualitativi eccedenti le percentuali previste.

In ogni caso, relativamente all'idoneità tecnica delle specie legnose da utilizzare, si farà riferimento alla tabella UNI 8938, nonché alle UNI 2853-2854-3917-4390-8662/1-8789-8940 per quanto concerne le nomenclature delle specie legnose, le loro caratteristiche, i segati ed i trattamenti del legno e alla norma UNI EN 942 per la classificazione della qualità del legno.

WOOD TECHNICAL PRESCRIPTION

TECHNICAL REQUIREMENTS FOR SUPPLYING OF WOOD SHAPES TO BE USED FOR THE BUILDING SYSTEM EKU WOODART TT THERMOPLUS 98

The following types of wood and shaped materials are normally utilized:

America White Ash profiles, painted in walnut, cherry and oak colours;

selection of the product:

no more than 15% of the product supplied may present n°1 defect on the visible side (splintering, brushing and worm-holes etc.), less than 30 cm long, exceptionally and in any case no more than 3% of this may present no more than n°3 faults with defects less than 10 cm long; in all instances, the defects have to be at least 800 mm from the ends;

the bars shall be 3300-3600 mm long, with a percentage of measures not shorter than 3000 mm and in any case no more than 15-20 % of the total batch of every type of product.

painting:

shall be spray-painted on all sides with two coating of polyurethanic varnish preceded by a hand-brushed antibacterial impregnation and, for nut and cherry colours, a hand-applied coat of colour based on light resistant pigments; for natural colours (oak dye) a transparent opaque paint is used; the utilised planking has to be carefully selected in order to obtain the highly homogeneity in the colour shades among the wood shapes.

protective peelable layer application:

a protective peelable layer shall be applied to every profile that is taken off at the end of the process, ready for the construction of the fixture.

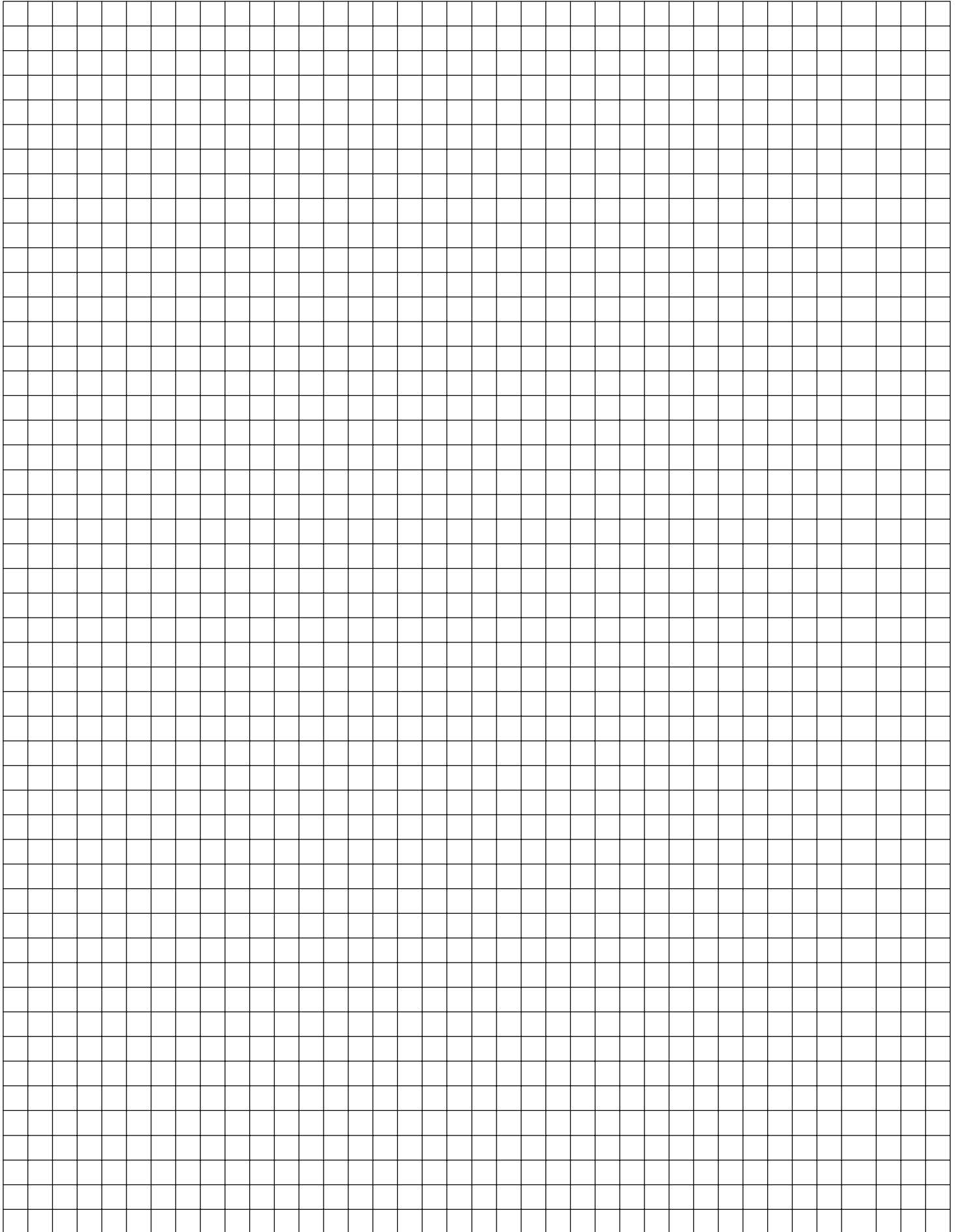
identification mark:

On every wood shape surface which is not in view, have to be marked the identification codes of article, supplier and production batch. These codes have to be marked at a distance of 300 mm from each other.

packaging:

The wood shapes has to be packed in suitable carton boxes, with label and related description of contents; the wood shapes which are shorter than the standard length and those presenting the kind of defects named before and in the maximal number mentioned, have to be handed out in homogenous quantity in each box, in this way we will avoid the concentration of faulty material exceeding the foreseen quantities.

In any case, regarding any technical applicability concerning wooden items to be used, reference is made to UNI 8938, as well as UNI 2853-2854-3917-4390-8662/1-8789-8940 concerning wooden nomenclature, wood characteristics, sawing and wood treatments and reference to UNI EN 942 for wooden quality classification


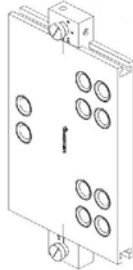


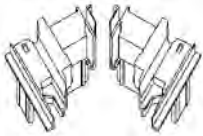


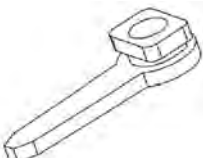


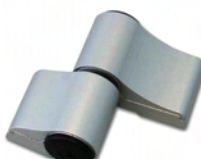




ELENCO ACCESSORI GUARNIZIONI








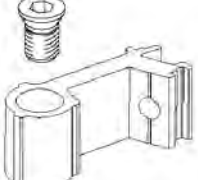

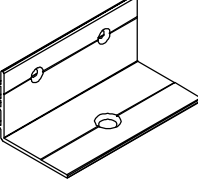

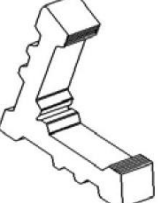


ACCESSORIES GASKET LIST

Accessori - Accessory

	<p>art. 100-2328 2144 MASTER Cappetta di drenaggio Cover cap for drainage</p>		<p>art. 8000.22 MASTER Dima per interassi 93mm <i>Template fro inter-axes 93mm</i></p>
	<p>art. 142-2145 Cappetta di drenaggio Cover cap for drainage</p>		<p>art. 8010.13 MASTER Viti per cerniera 53mm <i>Screw for hinge 53mm</i></p>
	<p>art. DND-6313 Tappi di tenuta a giunto aperto per riporto centrale Seal plug for central rabbet</p>		<p>art. 535-090.17 Viti autofilettanti TPS a croce 3,5 x 16 UNI 6955 3,5 X 16 TSP screws UNI 6955</p>
	<p>art. DND-2431 Piastrina rinforzo fissaggio cerniera Reinforcement plate fixing hinge</p>		<p>art. 104-RV169 DND-RV169 Nottolini di assemblaggio legno Assembly elements for wood</p>
	<p>art. 170-892100115 Collante monocomponente per incollaggio squadrette Single component glue for corner joint</p>		<p>art. 104-600.01 2133 MASTER Rapid Block Z/P Rapid Block Z/P</p>
	<p>art. 8014 MASTER Cerniera per porte apertura esterna 46.5 + 46.5</p>		<p>art. 104-600.98 Spessore per corpo Z/P 2.5mm mm 2.5 Z/P body shim</p>
	<p><i>Hinge for external opening door 46.5 + 46.5</i></p>		<p>art. 104-600.99 Spessore per corpo Z/P 5mm mm 5 Z/P body shim</p>






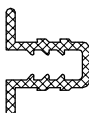
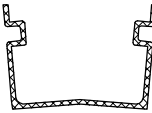
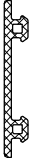




Accessori - Accessory

	<p>art. 105-0092</p> <p>Spinare in zama con manico</p> <p><i>Pin for corner joint</i></p>		<p>art. 105-2004</p> <p>Squadretta di allineamento</p> <p><i>Alignement corner joint</i></p>
	<p>art. 105-0133</p> <p>Squadretta a spinare o cianfrinare per anta</p> <p><i>Corner joint locked by pinning or crimping for wing</i></p>		<p>art. 0172 Monticelli</p> <p>Squadretta a spinare o cianfrinare per anta</p> <p><i>Corner joint locked by pinning or crimping for wing</i></p>
	<p>art. 105-0148</p> <p>Squadretta a spinare o cianfrinare per anta maggiorata</p> <p><i>Corner joint locked by pinning or crimping for oversize wing</i></p>		<p>art. 130-00A5</p> <p>Squadretta ad avvitare per anta maggiorata</p> <p><i>Corner joint locked by screw for oversize wing</i></p>
	<p>art. 105-0186</p> <p>Squadretta a spinare o cianfrinare per anta</p> <p><i>Corner joint locked by pinning or crimping for wing</i></p>		<p>art. 130-8032</p> <p>Cavallotto per traversi</p> <p><i>T-Joint for transom</i></p>
	<p>art. 105-0427 0338 MASTER 1124 COMUNELLO</p> <p>Squadretta a scatto</p> <p><i>Corner joint</i></p>		<p>art. DND-24596100</p> <p>Staffa per fissaggio telai alla muratura</p> <p><i>Wall connection bracket</i></p>
	<p>art. 105-0927</p> <p>Squadretta a scatto ad angolazione variabile</p> <p><i>Corner joint with variable angulation</i></p>		<p>art. 153-0010</p> <p>Squadretta a cianfrinare</p> <p><i>Corner joint locked by crimping</i></p>

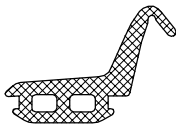

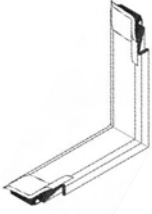
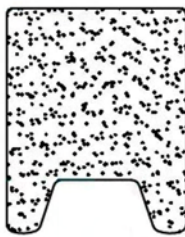
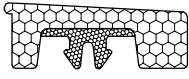
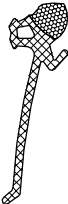
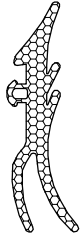


Accessori - Accessory

	<p>art. 174-1580 Squadretta di allineamento <i>Alignement corner joint</i></p>		<p>art. DND-10900 Punzonatrice <i>Punching machine</i></p>
	<p>art. Dr.Hahn K702G0000 Cerniera <i>Hinge</i></p>		<p>art. DND-10700 Punzonatrice <i>Punching machine</i></p>
	<p>art. Dr. Hahn T311A0002 Dima di foratura <i>Drilling jig</i></p>		<p>art. VELOX Aggraffatrice per telai in legno <i>Joining machine for wooden frames</i></p>
	<p>art. 238-OP390 Vernice poliuretanica trasparente <i>Transparent polyurethane paint</i></p>		<p>art. 171-NR6FE Aggraffi <i>Staples</i></p>
	<p>art. 238-C266 Catalizzatore per vernice <i>Catalyst for paint</i></p>		
	<p>art. 153-0003* Stick cera <i>Stick wax</i> * C = Ciliegio * N = Noce * R = Rovere * C = Cherry * N = Walnut * R = Oak</p>		

Accessori - Accessory

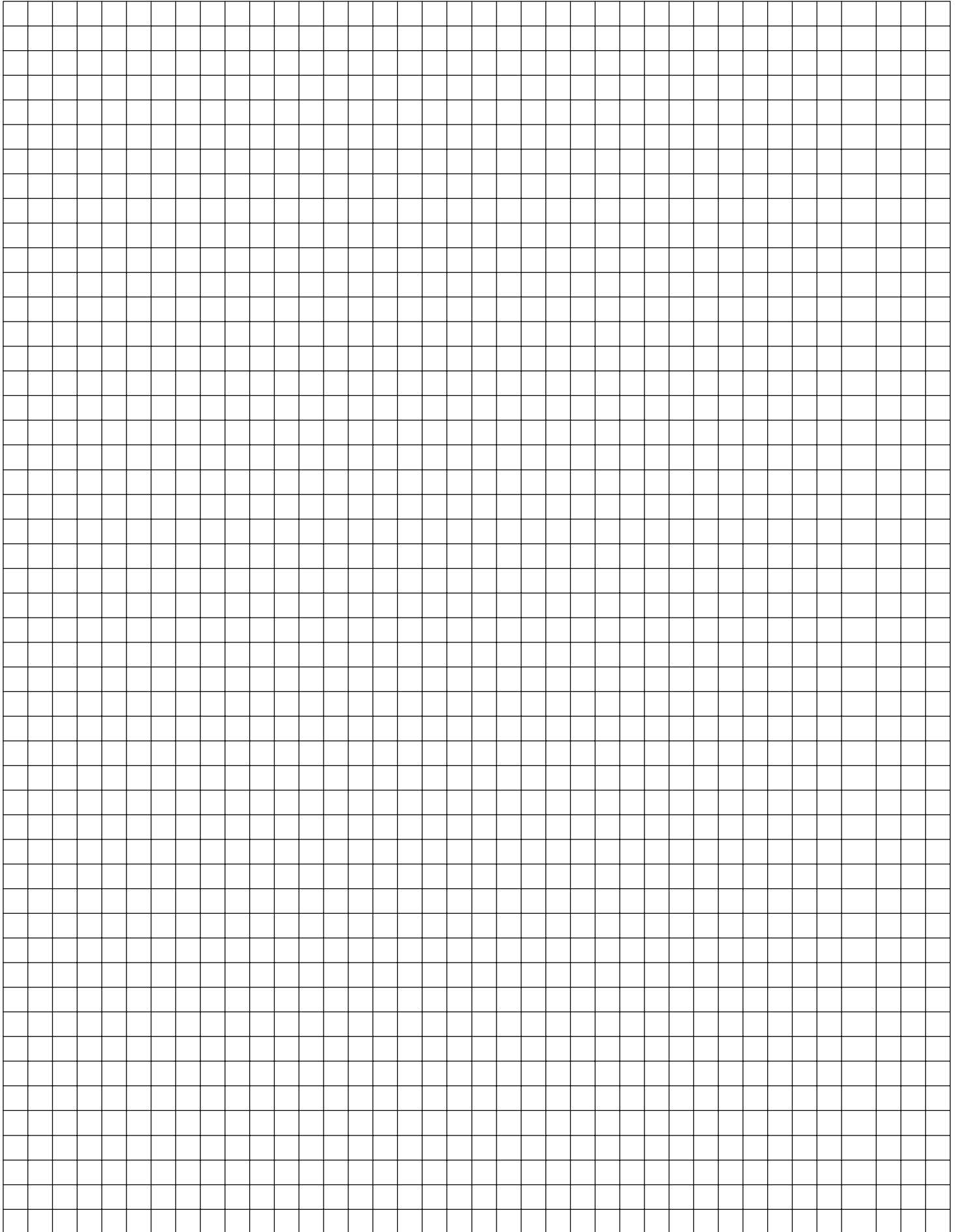
	<p>art. 102-3130 Guarnizione di battuta interna <i>Internal seal gasket</i></p>		<p>art. 126-2195 Guarnizione di vetratura interna spessore 5/6 mm <i>mm 5/6 thick internal glass beading gasket</i></p>
	<p>art. 102-6197 art. 5016 PRICAL Guarnizione distanziatrice <i>Spacing gasket</i></p>		<p>art. 126-2197 Guarnizione di vetratura interna spessore 7/8 mm <i>mm 7/8 thick internal glass beading gasket</i></p>
	<p>art. 126-8162 Guarnizione di battuta interna <i>Internal rabbet gasket</i></p>		<p>art. 126-2217 art. 5019 PRICAL Guarnizione per fissaggio fermavetro in legno <i>Wood glass beading gasket</i></p>
	<p>art. 126-1155 art. DND-1155/3335 Profilo isolatore canale accessori <i>Insulated profile for accessory groove</i></p>		<p>art. 126-2377 Guarnizione per riporto centrale <i>Central rabbet profile gasket</i></p>
	<p>art. 126-1205 Guarnizione di vetratura esterna di fondo giunto da 4mm <i>mm. 4 thick support glass external seal gasket</i></p>		<p>art. 126-2666 art. 5015 PRICAL Guarnizione di tenuta esterna <i>External seal gasket</i></p>
	<p>art. 126-2194 Guarnizione di vetratura interna spessore 3/4 mm <i>mm 3/4 thick internal glass beading gasket</i></p>		<p>art. 126-2800 Guarnizione di vetratura interna spessore 2 mm <i>mm 2 thick internal glass beading gasket</i></p>

Accessori - Accessory

	<p>art. 126-2874 art. 5040 PRICAL</p> <p>Guarnizione di tenuta centrale a giunto aperto</p> <p><i>Open joint central seal gasket</i></p>		<p>art. DND-3119</p> <p>Inserto isolante tra barrette 28X15</p> <p><i>Insulating insert between polyamide bars 28X15</i></p>
	<p>art. 126-4361</p> <p>Angolo vulcanizzato per pinna centrale</p> <p><i>Vulcanized angle for gasket 126-2874</i></p>		<p>art. DND-3123</p> <p>Inserto isolante tra barrette 22X27</p> <p><i>Insulating insert between polyamide bars 22X27</i></p>
	<p>art. DND-200.2.180</p> <p>Guarnizione termica</p> <p><i>Thermal gasket</i></p>		<p>art. EC100001 PRICAL</p> <p>Guarnizione di vetratura esterna spessore 3 mm</p> <p><i>mm 3 thick external glass beading gasket</i></p>
	<p>art. 126-20088</p> <p>Guarnizione di vetratura esterna spessore 4 mm</p> <p><i>mm 4 thick external glass beading gasket</i></p>		
	<p>art. DND-3159</p> <p>Inserto isolante sottovetro 43X13X10</p> <p><i>Insulating insert under glass 43X13X10</i></p>		
	<p>art. DND-3149</p> <p>Inserto isolante sottovetro 37X8,5X8</p> <p><i>Insulating insert under glass 37X8,5X8</i></p>		

Accessori - Accessory

	<p>art. FV603W PRICAL art. 126-OUP3W</p> <p>Guarnizione di vetratura interna spessore 3 mm</p> <p><i>mm 3 thick internal glass beading gasket</i></p>		
	<p>art. FV604W PRICAL art. 126-OUP4W</p> <p>Guarnizione di vetratura interna spessore 4 mm</p> <p><i>mm 4 thick internal glass beading gasket</i></p>		
	<p>art. FV605W PRICAL art. 126-OUP5W</p> <p>Guarnizione di vetratura interna spessore 5 mm</p> <p><i>mm 5 thick internal glass beading gasket</i></p>		
	<p>art. FV606W PRICAL art. 126-OUP6W</p> <p>Guarnizione di vetratura interna spessore 6 mm</p> <p><i>mm 6 thick internal glass beading gasket</i></p>		
	<p>art. FV607W PRICAL art. 126-OUP7W</p> <p>Guarnizione di vetratura interna spessore 7 mm</p> <p><i>mm 7 thick internal glass beading gasket</i></p>		
	<p>art. FV608W PRICAL art. 126-OUP8W</p> <p>Guarnizione di vetratura interna spessore 8 mm</p> <p><i>mm 8 thick internal glass beading gasket</i></p>		

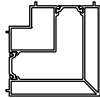
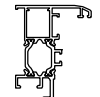
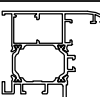
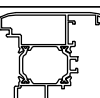
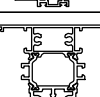
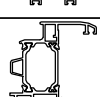
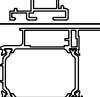
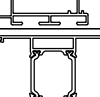
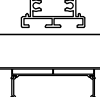
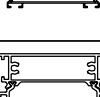
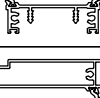
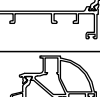
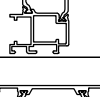
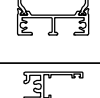
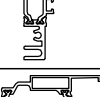


ELENCO PROFILI



PROFILES LIST

Elenco Profili - Profiles List

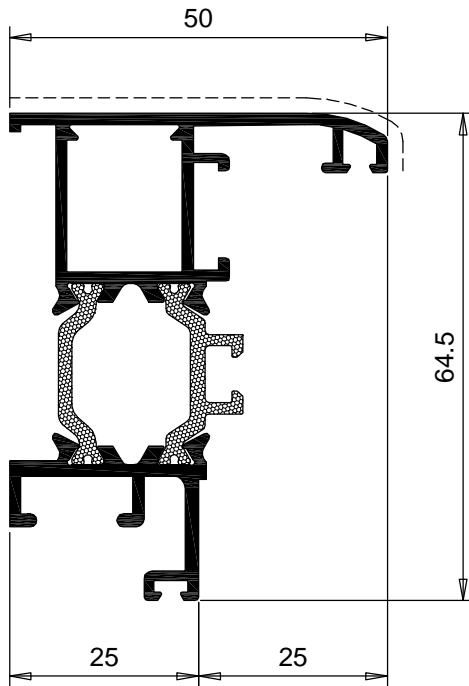
SIGLA CODE	PROFILO PROFILE	PESO Kg/m WEIGHT Kg/m	IMPIEGO USE	PAGINA PAGE
TT62-41		2.591	Montante d'angolo <i>Corner jamb</i>	4-11
TTWA51		1.163	Telaio fisso <i>Fixed frame</i>	4-01
TTWA52		1.454	Telaio fisso maggiorato <i>Oversize fixed frame</i>	4-02
TTWA53		1.584	Battuta centrale <i>Central rabbet</i>	4-10
TTWA54		1.763	T da 80 mm per telaio <i>80 mm "T" profile for frame</i>	4-04
TTWA55		1.431	Anta <i>Wing</i>	4-08
TTWA56		2.051	Anta maggiorata <i>Oversize wing</i>	4-09
TTWA57		1.690	T da 80 mm per anta <i>80 mm "T" profile for wing</i>	4-06
TTWA58		3.052	Fascia / zoccolo da 160mm <i>160 mm horizontal / lower transom</i>	4-03
TTWA60		2.240	T da 110 mm per telaio <i>110 mm "T" profile for frame</i>	4-04
TTWA63		2.131	Zoccolo riportato per telaio <i>Lower additional transom for frame</i>	4-05
TTWA67		1.568	Anta <i>Wing</i>	4-10
TTWA68		1.331	T per vetro infilare <i>"T" profile with glass to be inserted</i>	4-07
TTWA70		1.186	Soglia a pavimento <i>Floor threshold</i>	4-02
TTWA71		1.695	Zoccolo riportato per anta <i>Lower additional transom for wing</i>	4-06


PROFILI IN SCALA 1:1



PROFILES 1:1

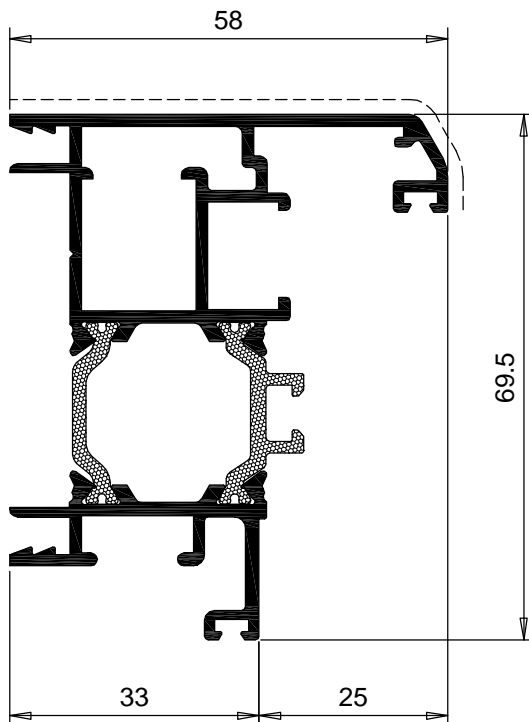
Profili 1:1 - Profiles 1:1




TTWA51	TELAIO FISSO FIXED FRAME			
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x
Kg/m	mm	mm	cm ⁴	cm ⁴
1.163	370	55	14.69	5.15

ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
BOTTONE BUTTON	CIANFRINARE CALKING	BOTTONE BUTTON	CIANFRINARE CALKING
-	-	105-0427	153-0010
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
105-2004	174-1580	-	105-0927

CODICE LEGNO / WOOD ITEM	
3200 - 3201	

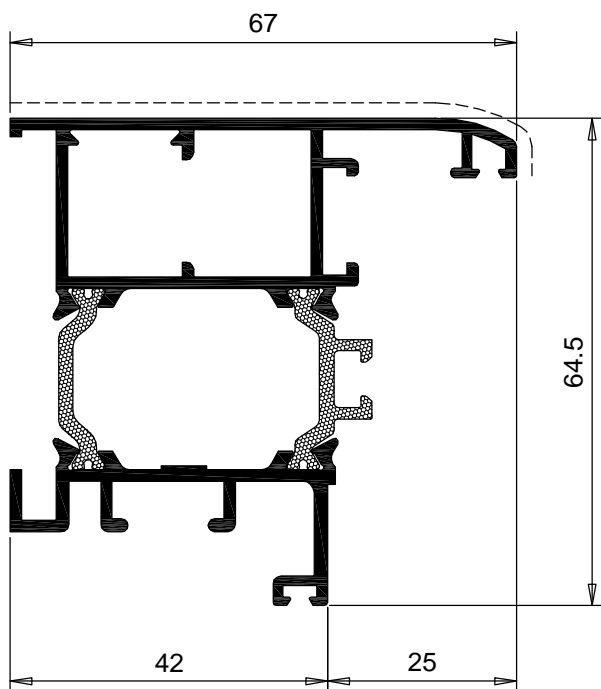



TTWA74	TELAIO MEDIO MEDIUM FRAME			
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x
Kg/m	mm	mm	cm ⁴	cm ⁴
1.449	457	68	24.42	10.04

ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
BOTTONE BUTTON	CIANFRINARE CALKING	BOTTONE BUTTON	CIANFRINARE CALKING
-	-	105-0427	153-0010
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
105-2004	174-1582	-	105-0927

CODICE LEGNO / WOOD ITEM	
3229 - 3230	

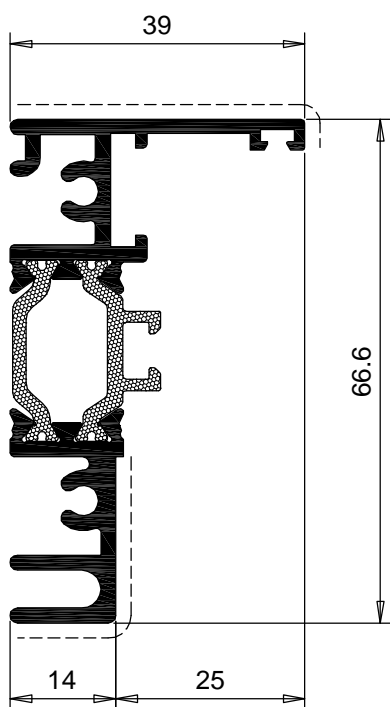
Profili 1:1 - Profiles 1:1




TTWA52	TELAIO FISSO MAGGIORATO <i>OVERSIZE FIXED FRAME</i>				
	PESO <i>WEIGHT</i>	PERIMETRO <i>PERIMETER</i>	SUP. VISTA <i>SHOWN SURF.</i>	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴	
1.454	430	72	21.06	14.03	

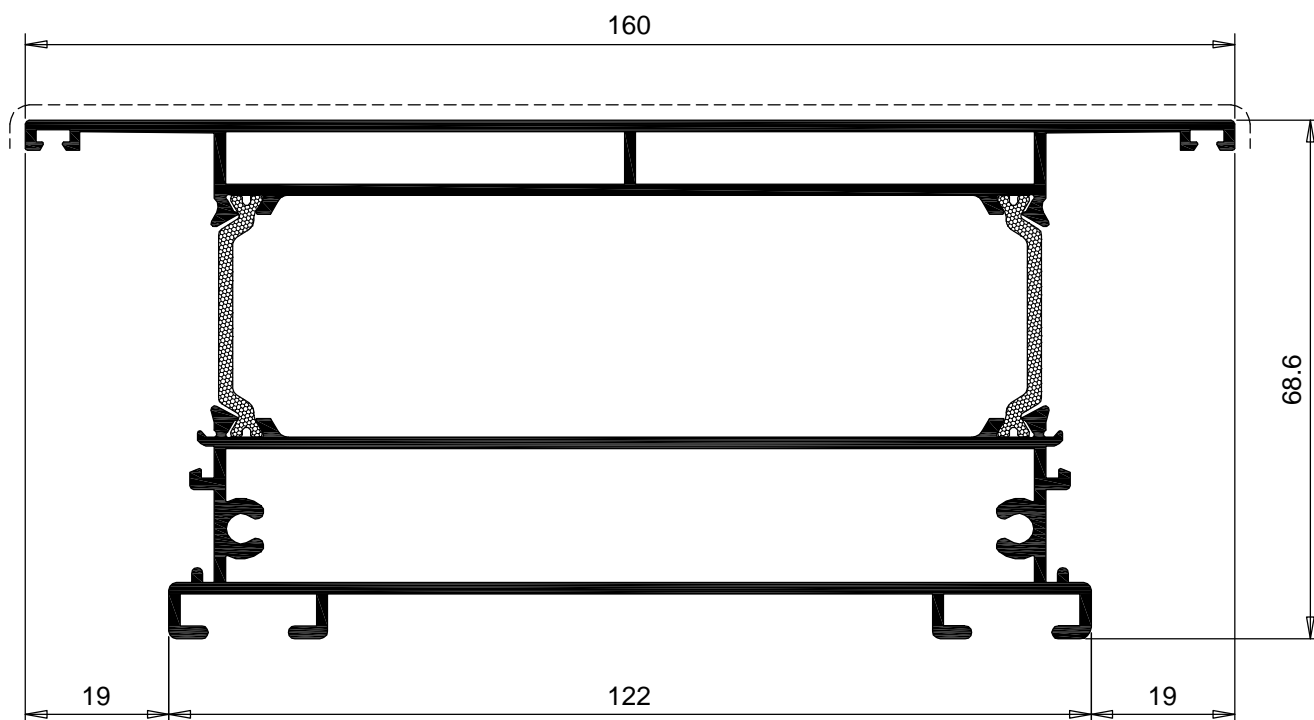
ACCESSORI / <i>ACCESSORIES</i>			
SQUADRETTE / <i>CORNER JOINT</i>			
INT.		EXT.	
BOTTONE <i>BUTTON</i>	CIANFRINARE <i>CALKING</i>	BOTTONE <i>BUTTON</i>	CIANFRINARE <i>CALKING</i>
-	-	105-0427	153-0010
ALLINEAMENTO / <i>ALIGNMENT</i>		ANG. VAR. / <i>ADJUST. CORNER</i>	
INT.	EXT.	INT.	EXT.
105-2004	174-1580	-	105-0927

CODICE LEGNO / <i>WOOD ITEM</i>	
3205 - 3206	



TTWA70	SOGLIA A PAVIMENTO <i>FLOOR THRESHOLD</i>				
	PESO <i>WEIGHT</i>	PERIMETRO <i>PERIMETER</i>	SUP. VISTA <i>SHOWN SURF.</i>	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴	
1.186	373	79	20.49	2.46	

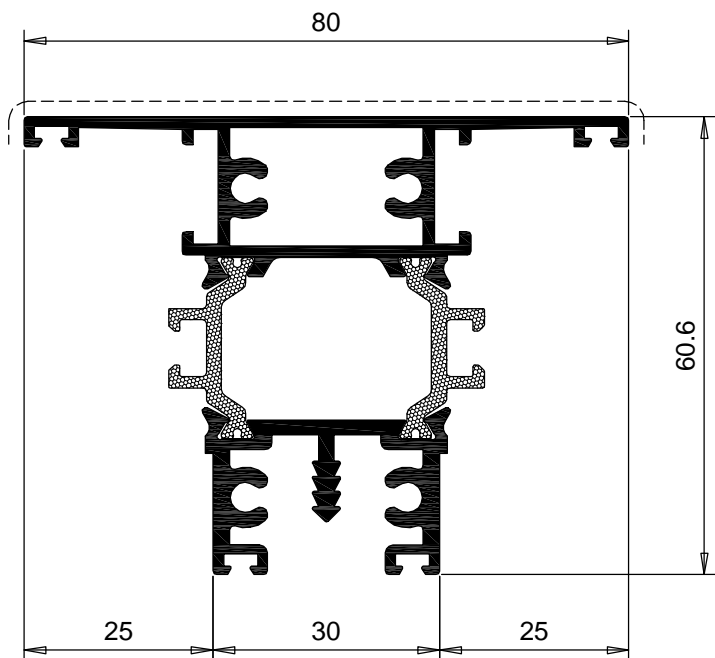
Profili 1:1 - Profiles 1:1




TTWA58	FASCIA / ZOCCOLO DA 160MM 160MM HORIZONTAL / LOWER TRANSOM		$\begin{matrix} Y \\ X \text{---} X \\ Y \end{matrix}$		
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
	Kg/m	mm	mm	cm ⁴	cm ⁴
	3.052	605	167	67.62	190.66

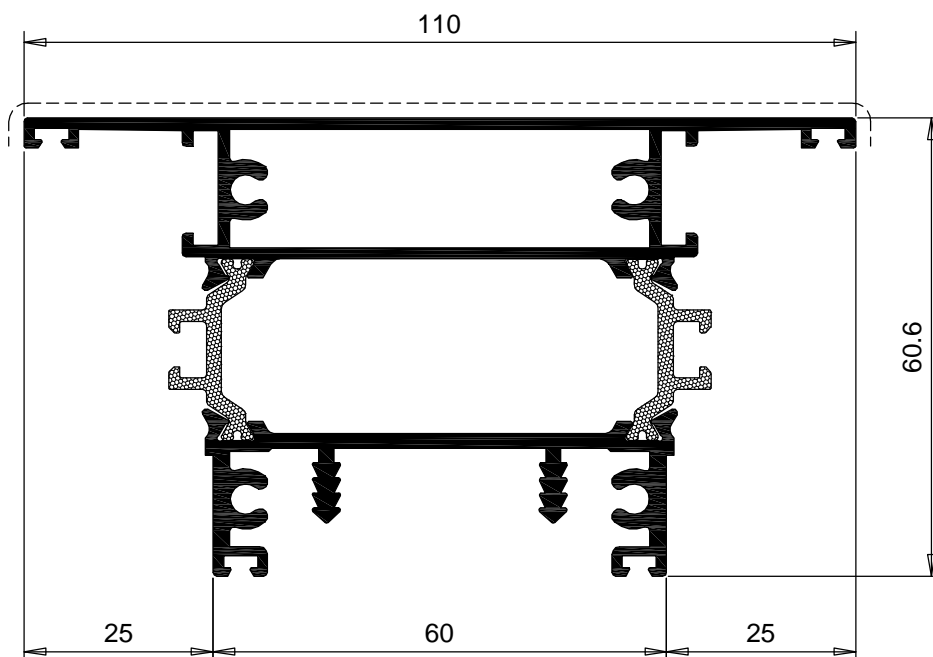
CODICE LEGNO / WOOD ITEM
3208 - 3209 - 9808 - 9809


Profili 1:1 - Profiles 1:1



TTWA54	"T" DA 80MM PER TELAIO 80MM "T" PROFILE FOR FRAME			
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
1.763	526	87	25.36	14.51

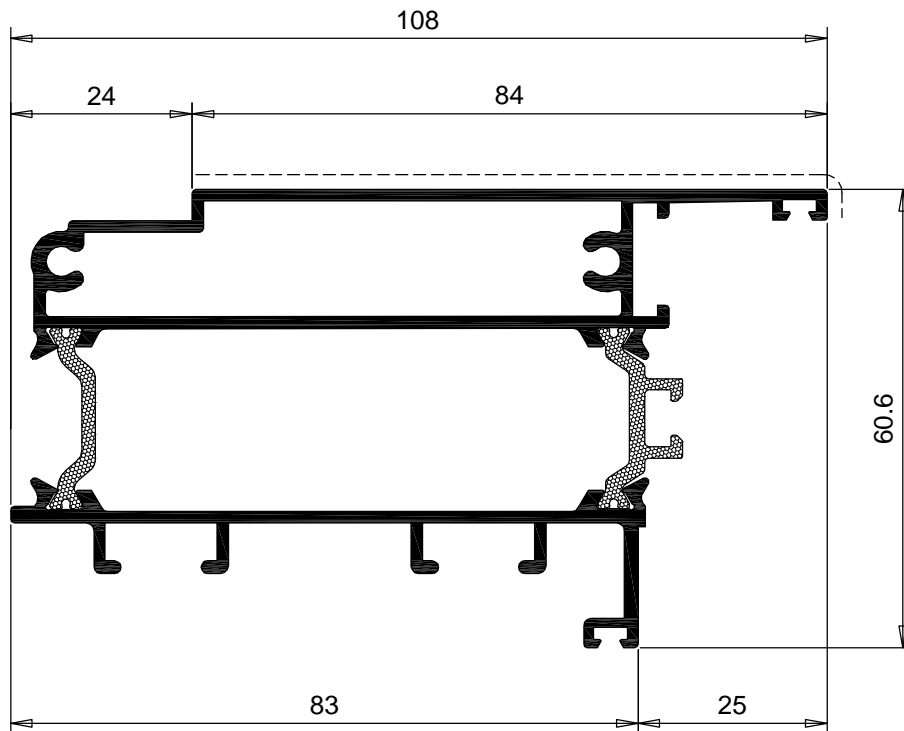
CODICE LEGNO / WOOD ITEM
3211




TTWA60	"T" DA 110MM PER TELAIO 110MM "T" PROFILE FOR FRAME			
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
2.240	607	118	31.58	52.21

CODICE LEGNO / WOOD ITEM
3211

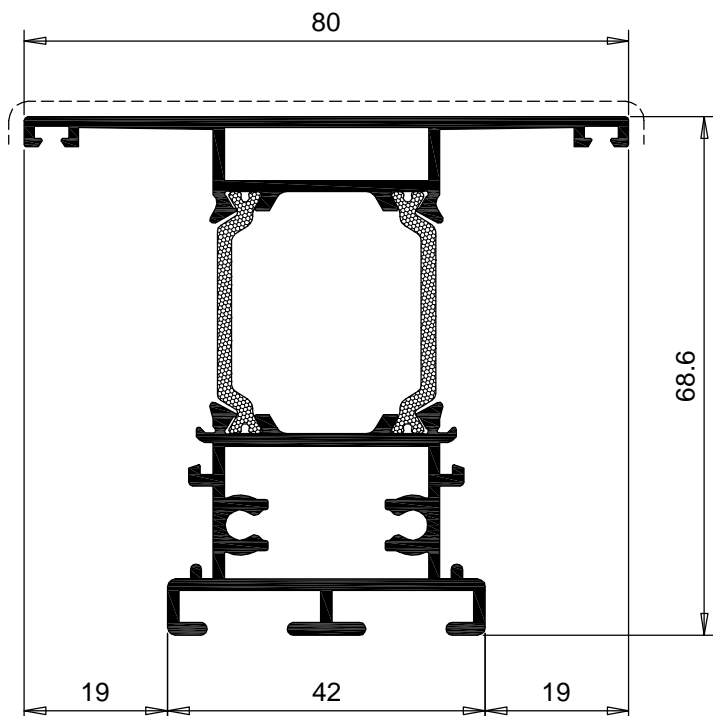
Profili 1:1 - Profiles 1:1




TTWA63	ZOCOLO RIPORTATO PER TELAIO LOWER ADDITIONAL TRANSOM FOR FRAME			
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x J _y
Kg/m	mm	mm	cm ⁴ cm ⁴	
2.131	475	88	23.42	61.85

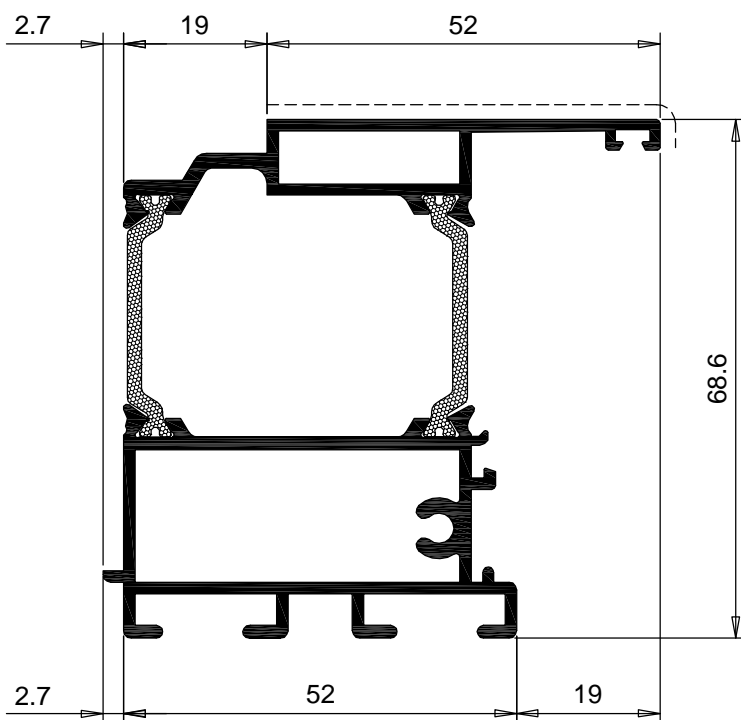
CODICE LEGNO / WOOD ITEM
3205


Profili 1:1 - Profiles 1:1



TTWA57	"T" DA 80MM PER ANTA 80MM "T" PROFILE FOR WING				
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴	
1.690	437	87	36.59	14.98	

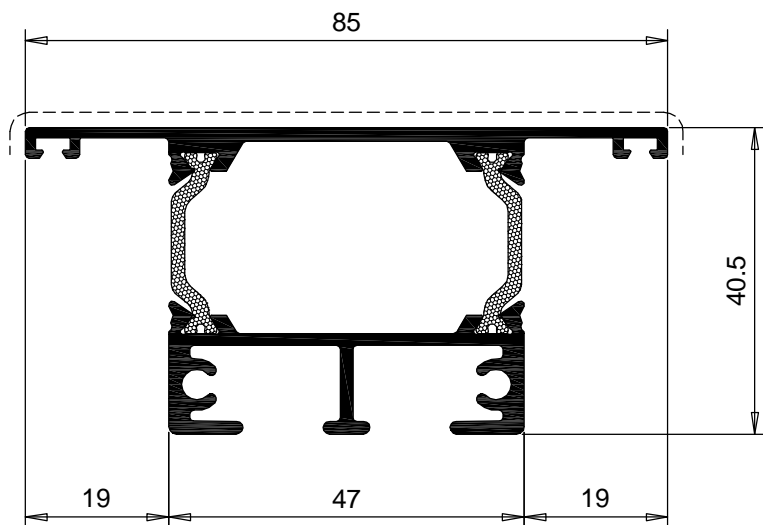
CODICE LEGNO / WOOD ITEM
3210 - 9810



TTWA71	ZOCOLO RIPORTATO PER ANTA LOWER ADDITIONAL TRANSOM FOR WING				
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴	
1.695	390	55	35.08	19.47	

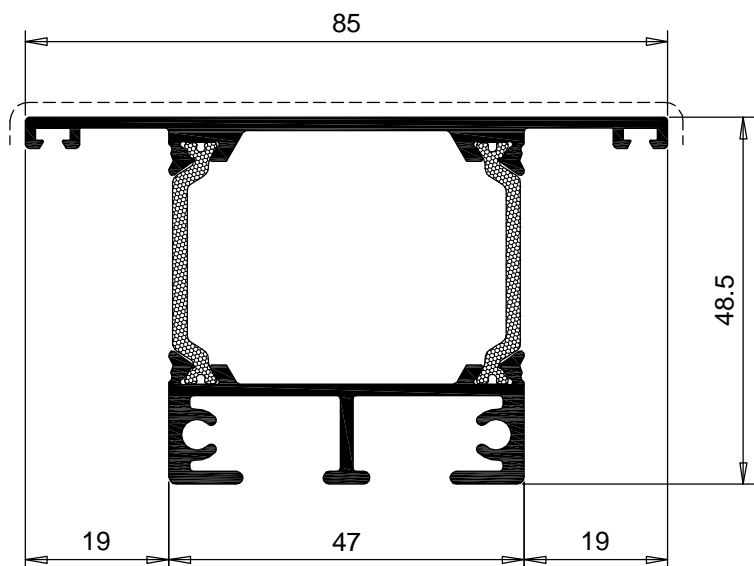
CODICE LEGNO / WOOD ITEM
3226 - 9826

Profili 1:1 - Profiles 1:1



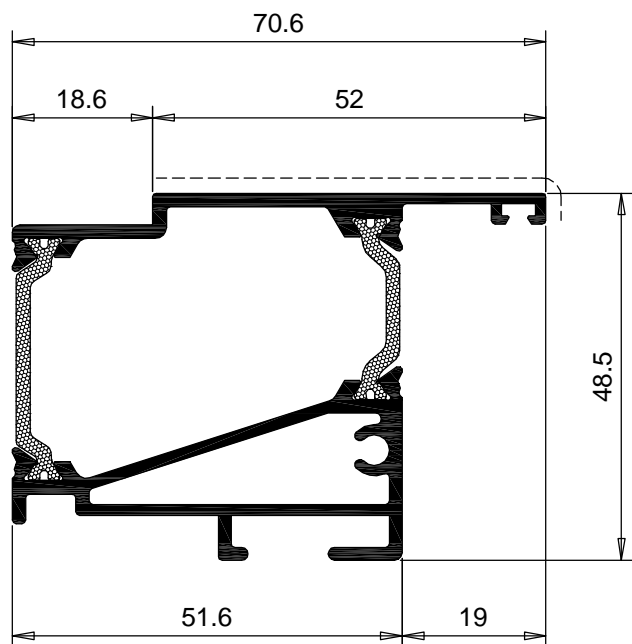
TTWA68	"T" PER VETRO INFILARE "T" PROFILE WITH GLASS TO BE INSERTED		$\begin{matrix} Y \\ X \text{---} X \\ Y \end{matrix}$	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
1.331	385	93	10.80	19.47

CODICE LEGNO / WOOD ITEM
3214



TTWA73	"T" PER VETRO INFILARE "T" PROFILE WITH GLASS TO BE INSERTED		$\begin{matrix} Y \\ X \text{---} X \\ Y \end{matrix}$	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
1.371	402	93	16.90	19.60

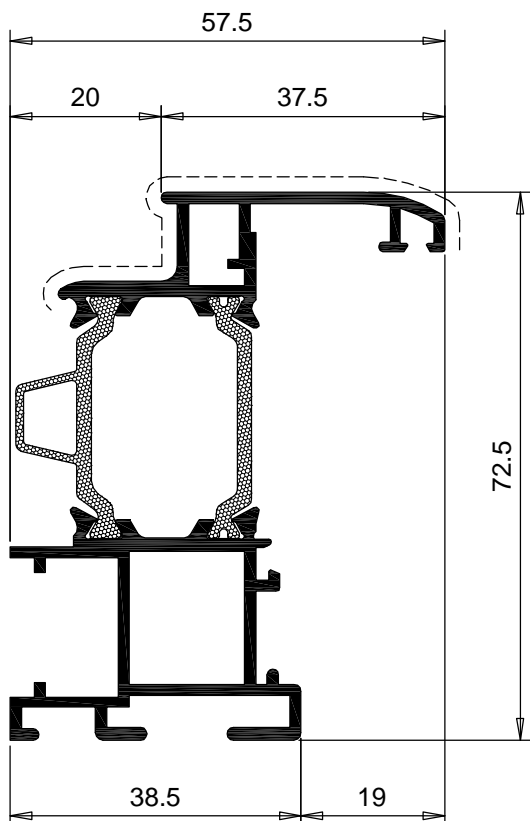
CODICE LEGNO / WOOD ITEM
3214



TTWA72	ZOCOLO RIPORTATO PER ANTA VETRO INFILARE LOWER ADDITIONAL TRANSOM FOR WING WITH GLASS TO BE INSERTED		$\begin{matrix} Y \\ X \text{---} X \\ Y \end{matrix}$	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
1.349	290	56	13.91	15.74

CODICE LEGNO / WOOD ITEM
3228

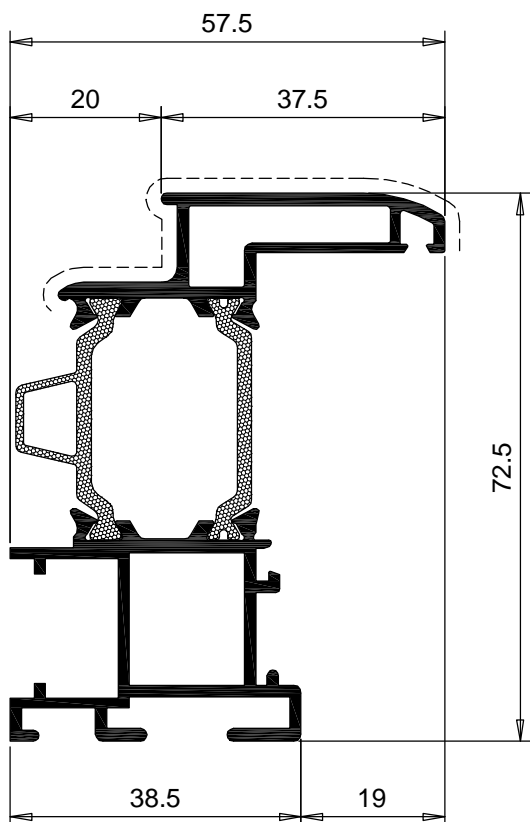
Profili 1:1 - Profiles 1:1



TTWA55	ANTA WING		$\begin{matrix} Y \\ X \rightarrow X \\ \leftarrow Y \end{matrix}$		
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
	Kg/m	mm	mm	cm ⁴	cm ⁴
	1.431	418	73	30.18	7.60

ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
BOTTONE BUTTON	CIANFRINARE CALKING	SPINARE PINNING	CIANFRINARE CALKING
105-0427	153-0010	105-0133	105-0133
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
-	174-1580	105-0927	-

CODICE LEGNO / WOOD ITEM
3202 - 9802

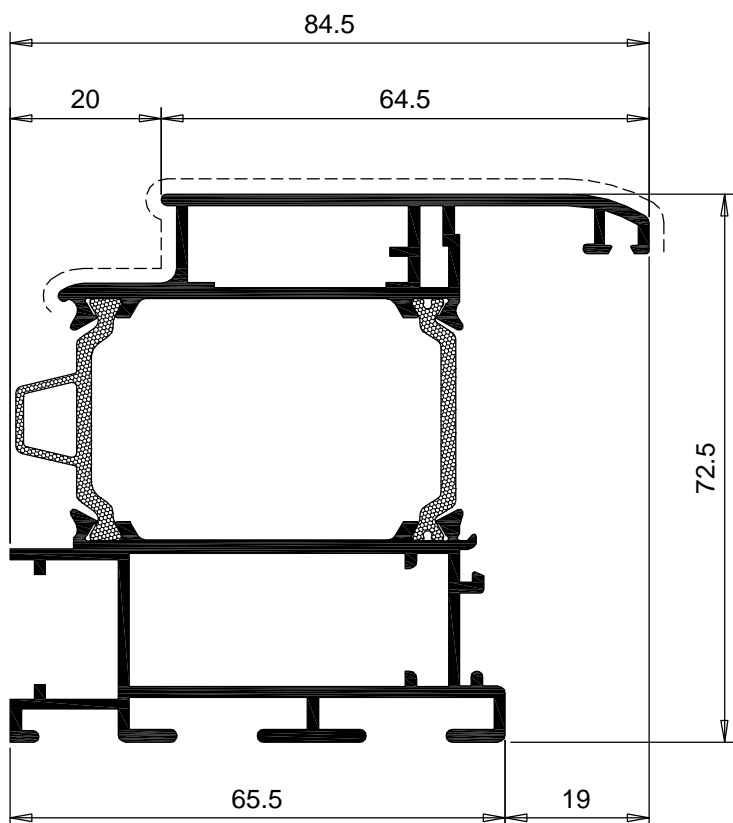



TTWA75	ANTA WING		$\begin{matrix} Y \\ X \rightarrow X \\ \leftarrow Y \end{matrix}$		
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x	J _y
	Kg/m	mm	mm	cm ⁴	cm ⁴
	1.463	406	73	31.37	8.25

ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
BOTTONE BUTTON	CIANFRINARE CALKING	SPINARE PINNING	CIANFRINARE CALKING
105-0427	153-0010	0172Mo	0172Mo
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
-	-	105-0927	-

CODICE LEGNO / WOOD ITEM
3202 - 9802

Profili 1:1 - Profiles 1:1

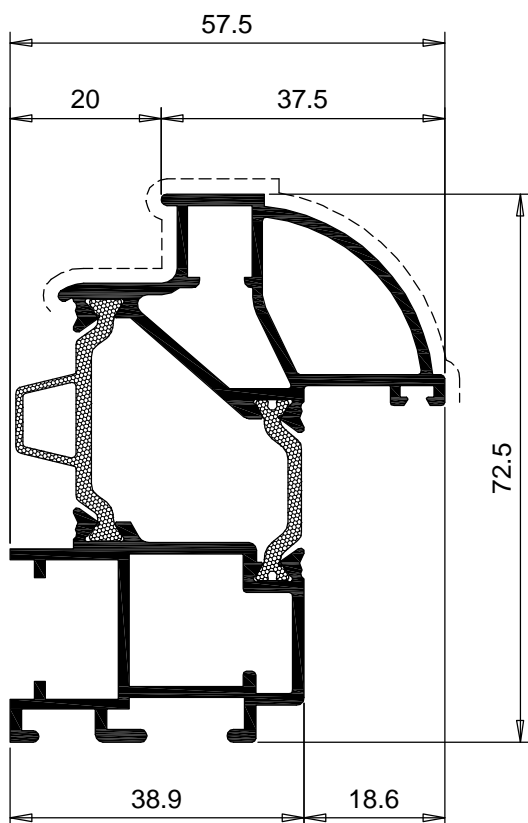


TTWA56	ANTA MAGGIORATA OVERSIZE WING			
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x
Kg/m	mm	mm	cm ⁴	cm ⁴
2.051	512	97	46.88	30.25

ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
AVVITARE SCREWING	CIANFRINARE CALKING	SPINARE PINNING	CIANFRINARE CALKING
130-00A5	-	105-0148	105-0148
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
-	174-1580	-	-

CODICE LEGNO / WOOD ITEM	
3207 - 9807	

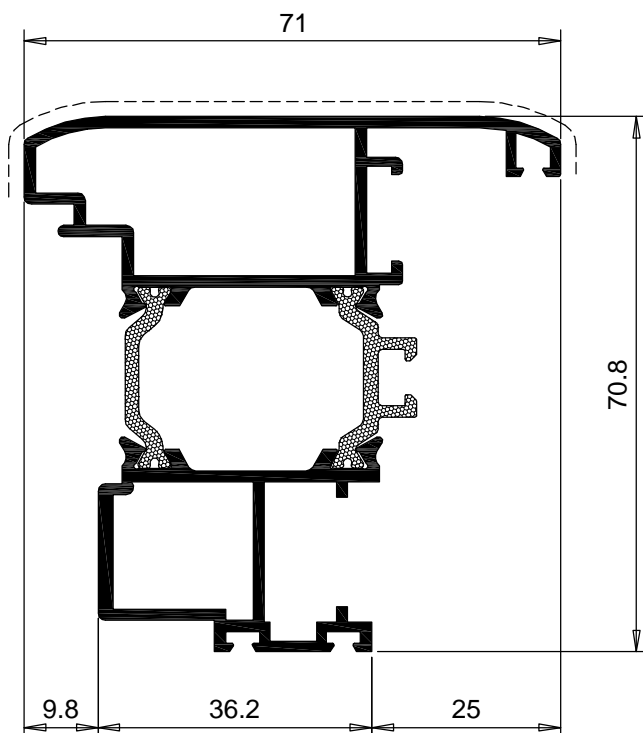
Profili 1:1 - Profiles 1:1



TTWA67	ANTA WING		$\begin{matrix} Y \\ X-X \\ Y \end{matrix}$	
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x
Kg/m	mm	mm	cm ⁴	cm ⁴
1.568	357	56	26.61	9.96

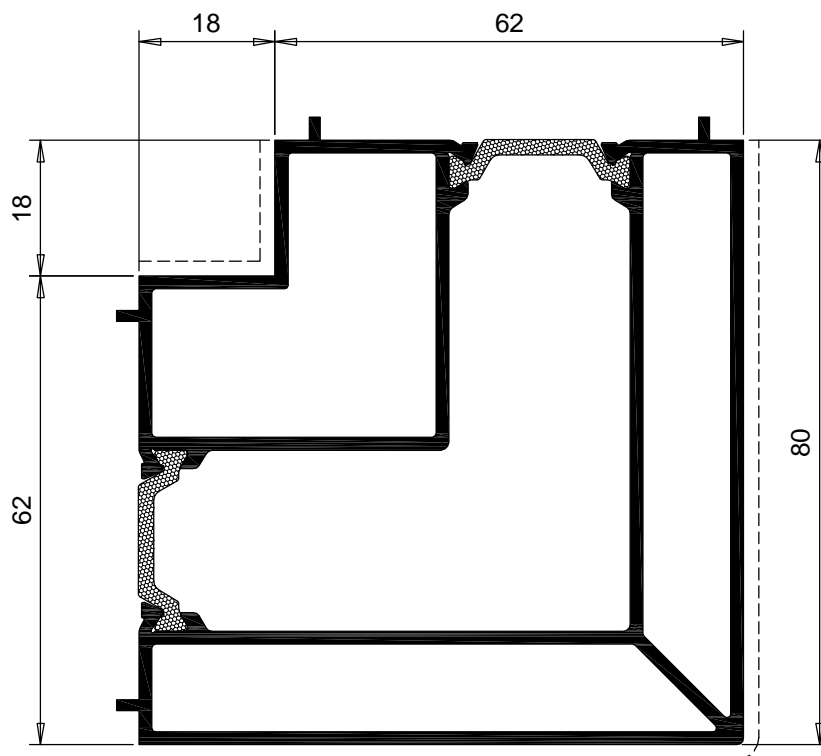
ACCESSORI / ACCESSORIES			
SQUADRETTE / CORNER JOINT			
INT.		EXT.	
BOTTONE BUTTON	CIANFRINARE CALKING	SPINARE PINNING	CIANFRINARE CALKING
105-0427	153-0010	105-0186	105-0186
ALLINEAMENTO / ALIGNMENT		ANG. VAR. / ADJUST. CORNER	
INT.	EXT.	INT.	EXT.
-	-	105-0927	-

CODICE LEGNO / WOOD ITEM	
3215 - 3222	

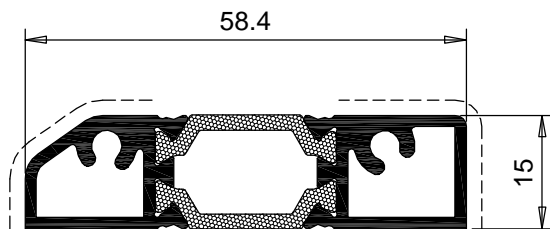


TTWA53	BATTUTA CENTRALE CENTRAL RABBET		$\begin{matrix} Y \\ X-X \\ Y \end{matrix}$	
	PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.	J _x
Kg/m	mm	mm	cm ⁴	cm ⁴
1.579	422	83	31.23	14.98

Profili 1:1 - Profiles 1:1

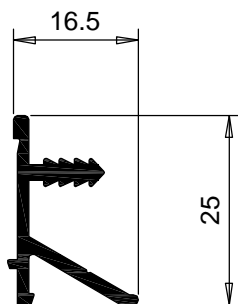


PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.		
			J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
2.591	345	196	68.07	68.07

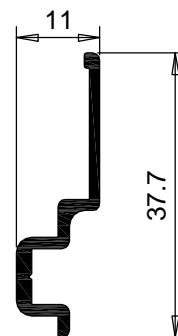


PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.		
			J _x	J _y
Kg/m	mm	mm	cm ⁴	cm ⁴
0.874	145	58	-	-

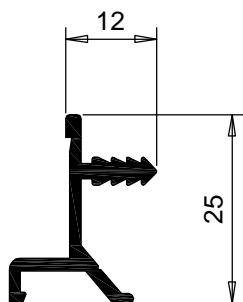
Profili 1:1 - Profiles 1:1



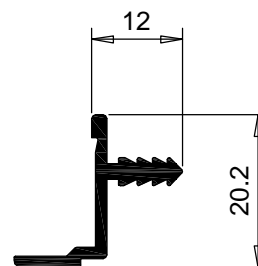
14507	FERMAVETRO GLASS BEADING	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.257	115	-



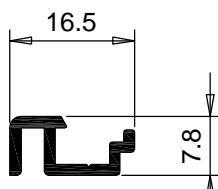
14519	FERMAVETRO GLASS BEADING	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.216	104	-



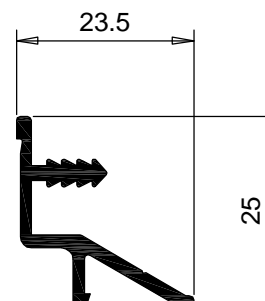
19730	FERMAVETRO GLASS BEADING	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.257	114	-



24593	FERMAVETRO GLASS BEADING	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.200	91	-

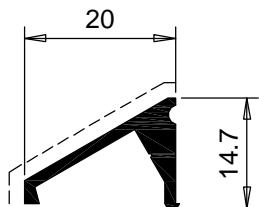


24594	COLLEGAMENTO PER FERMAVETRO GLASS BEADING CONNECTING PROFILE	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.135	71	-

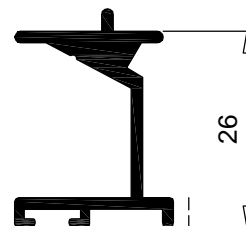


24595	FERMAVETRO GLASS BEADING	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.284	126	-

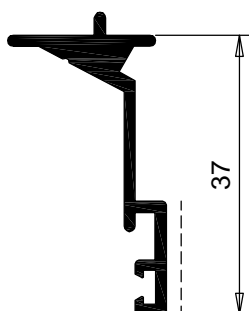
Profili 1:1 - Profiles 1:1



5767	GOCCIOLATOIO WATER DRAINAGE	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.190	75	26

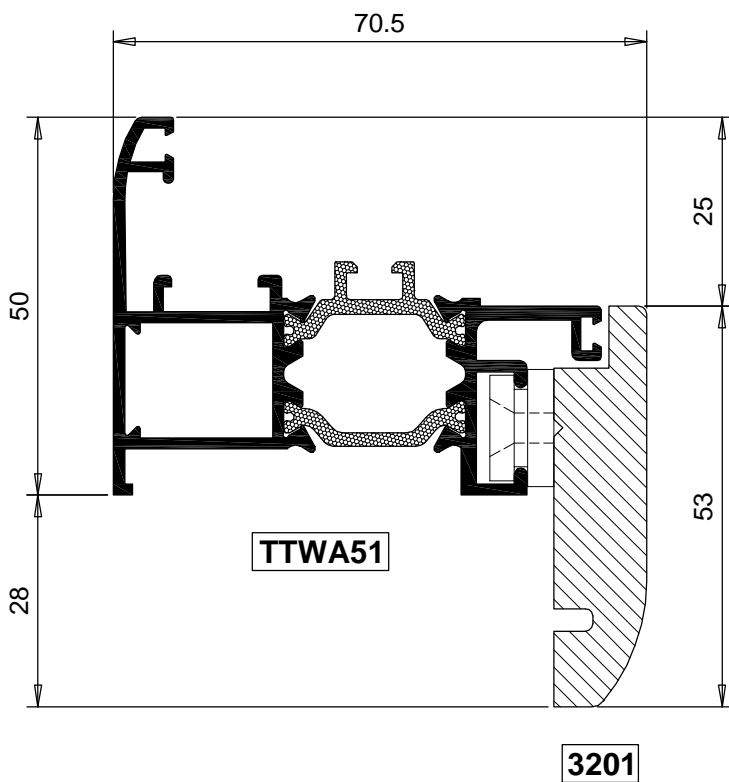
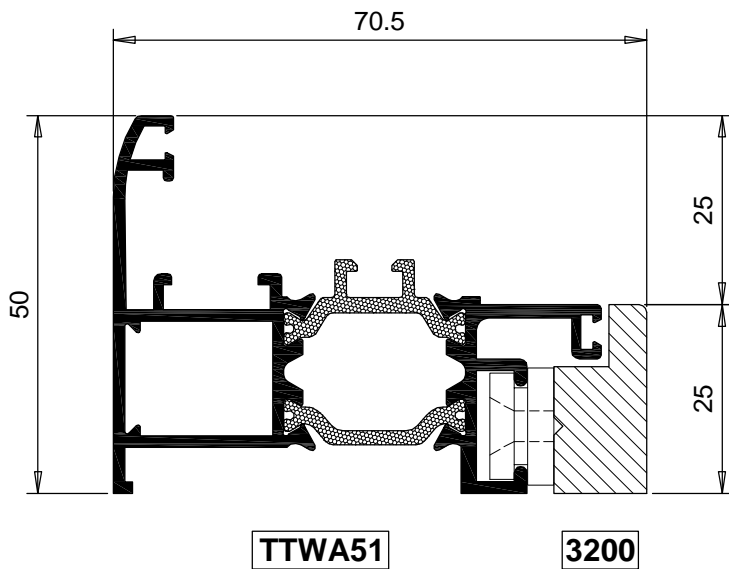


6007	TENUTA CON SPAZZOLINO PORTE DOOR BRUSH SEAL	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.369	146	4

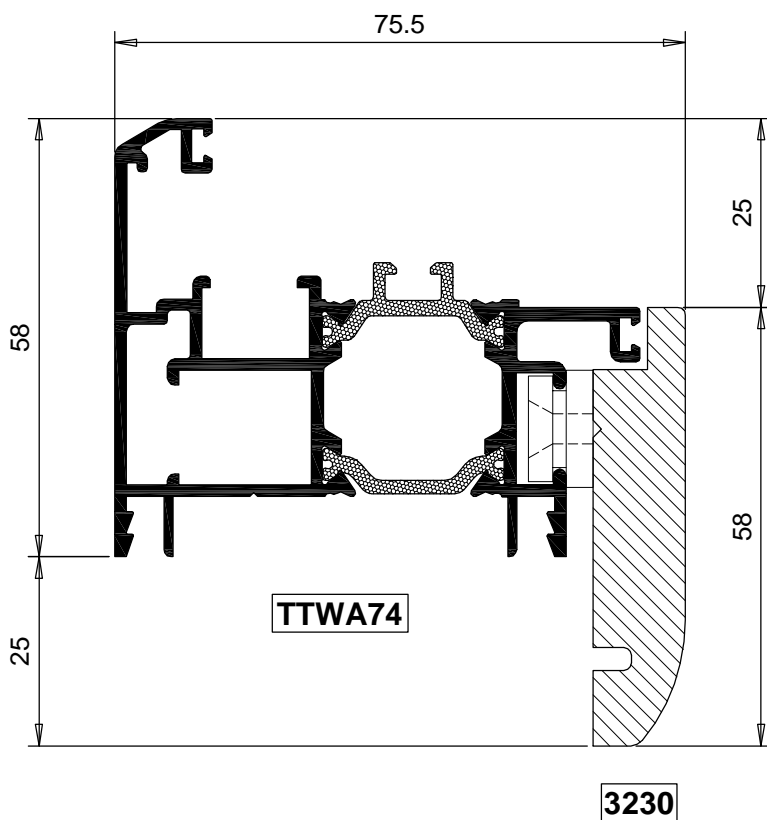
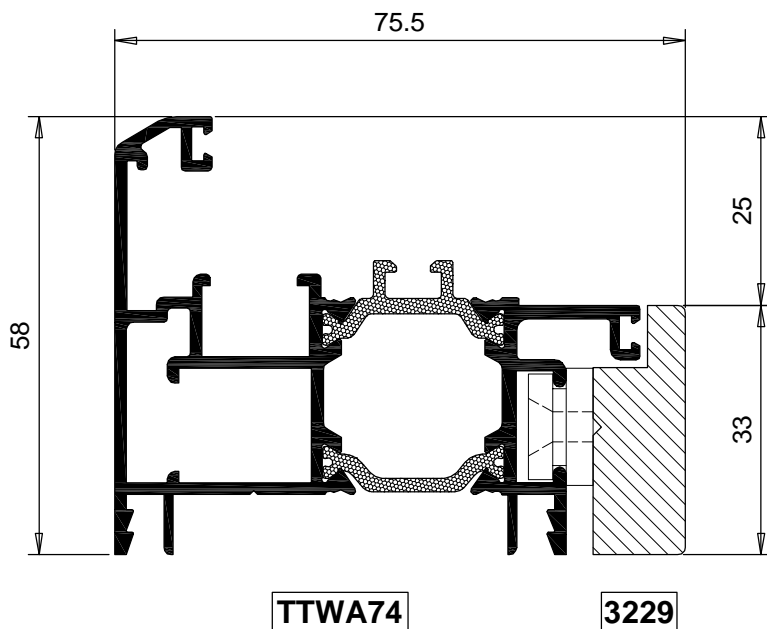


6008	TENUTA BATTUTA PORTE DOOR RABBET SEAL	
PESO WEIGHT	PERIMETRO PERIMETER	SUP. VISTA SHOWN SURF.
Kg/m	mm	mm
0.358	140	15

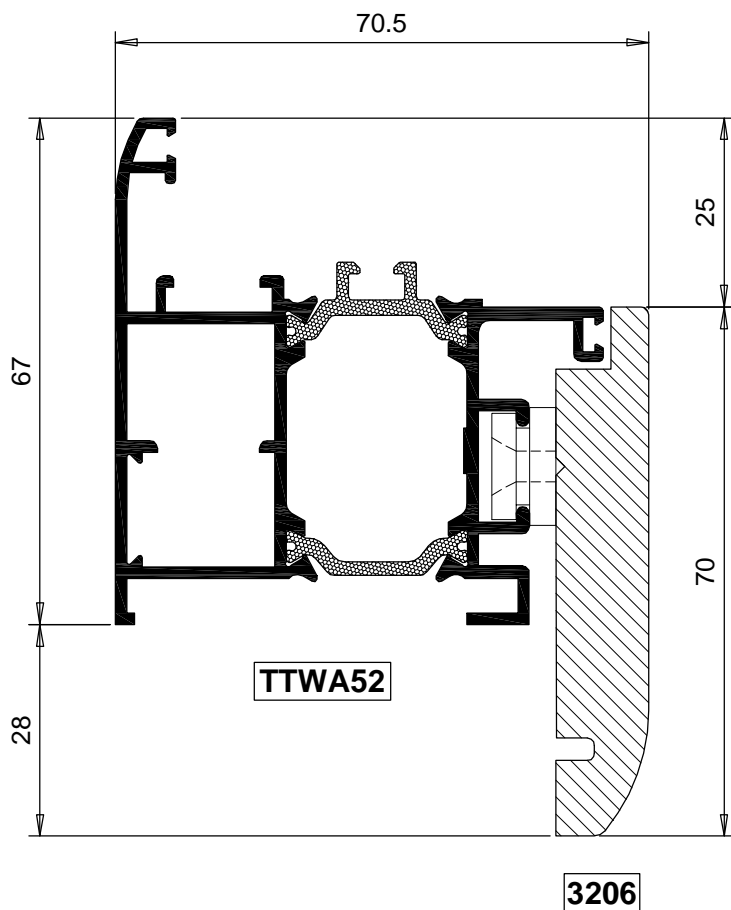
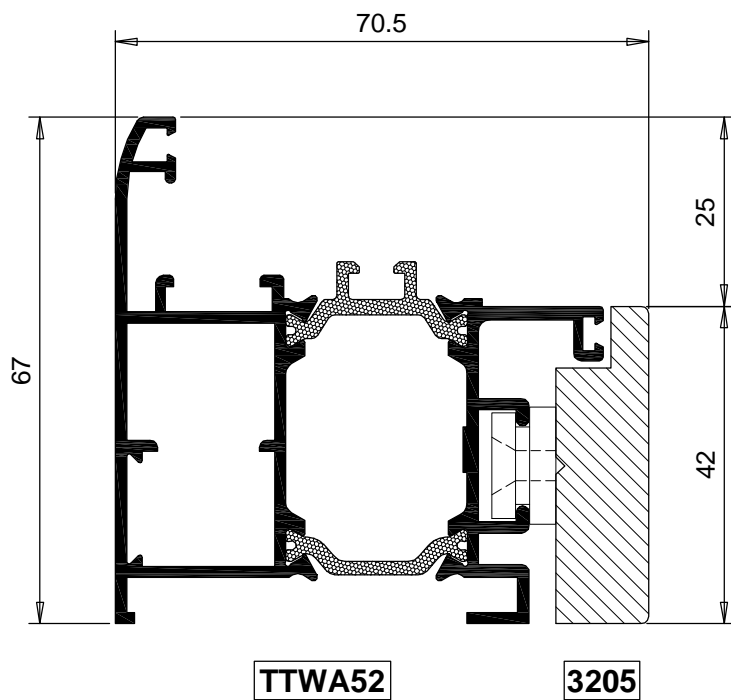
Profili 1:1 - Profiles 1:1



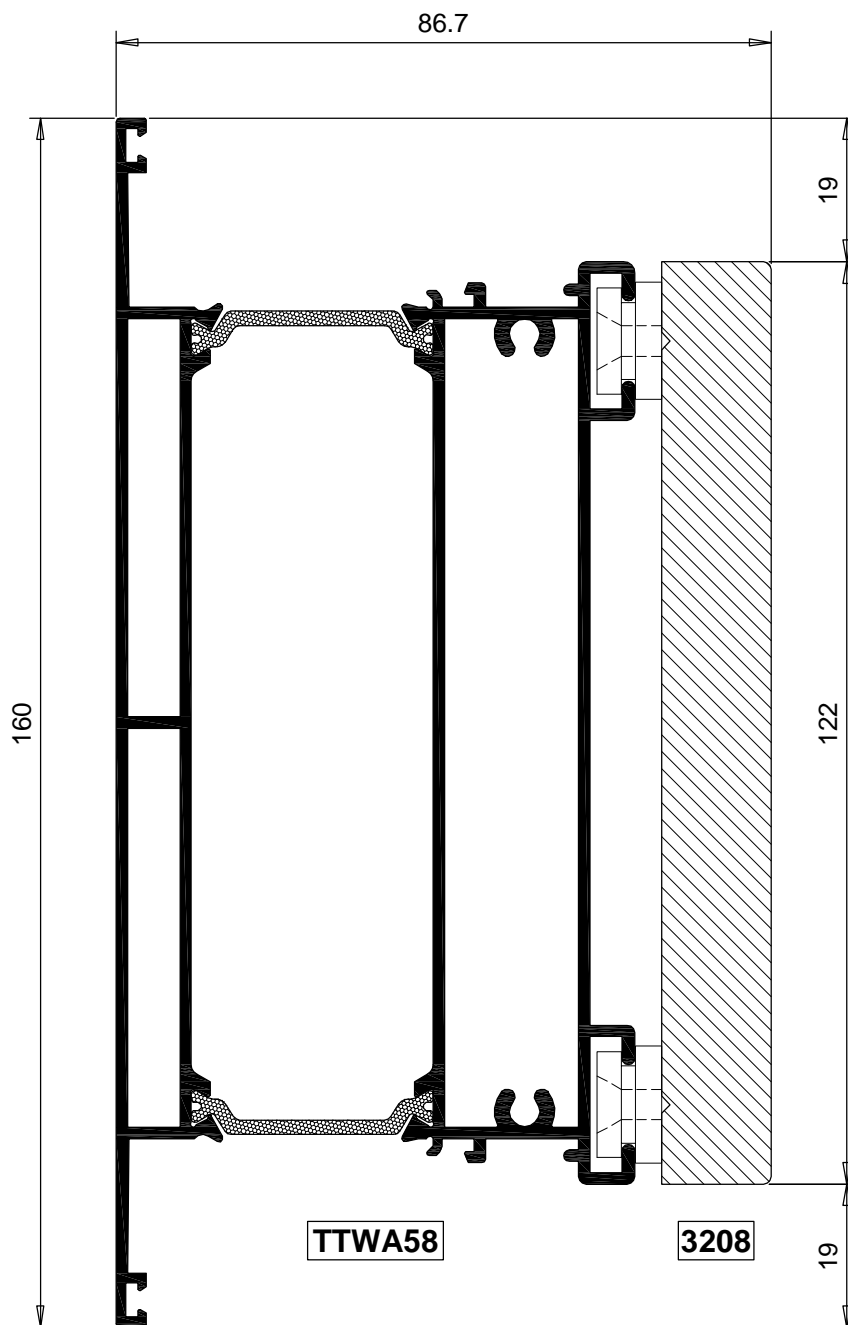
Profili 1:1 - Profiles 1:1



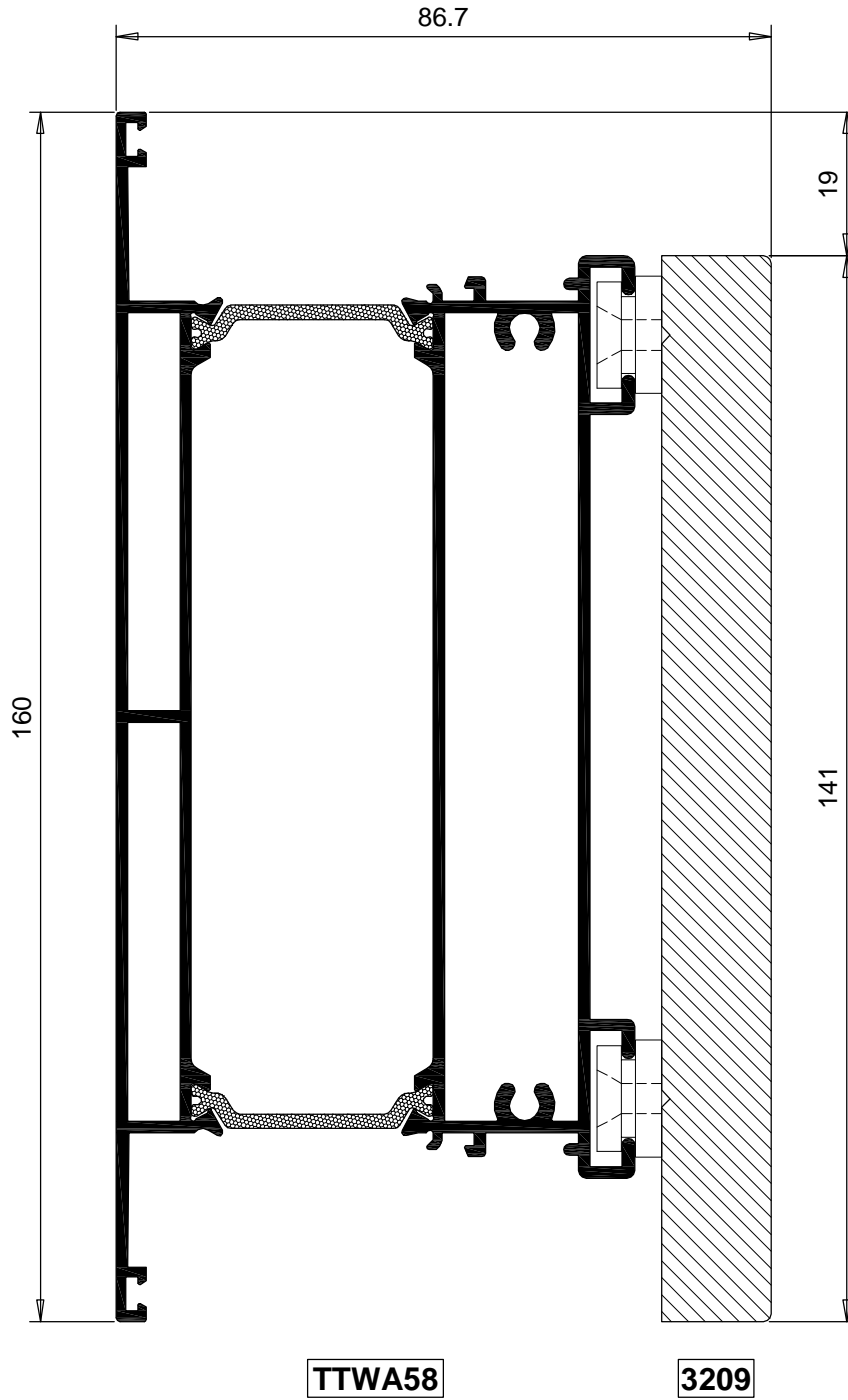
Profili 1:1 - Profiles 1:1



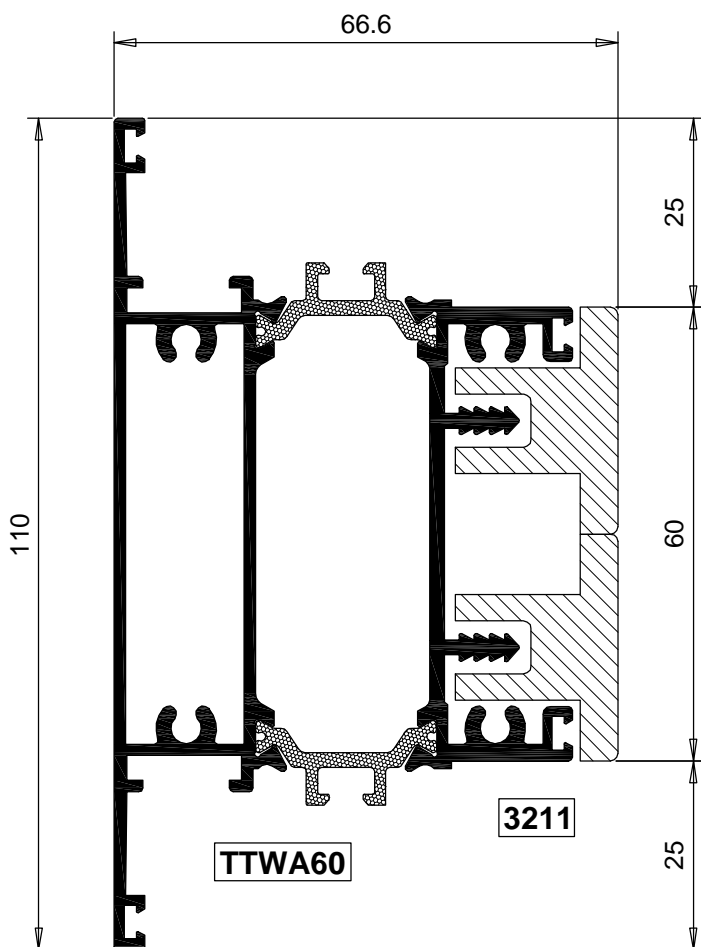
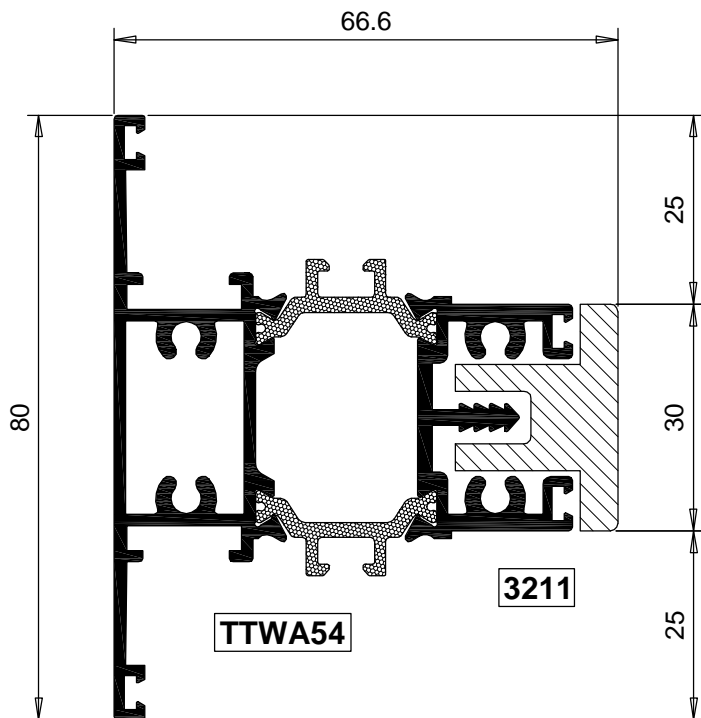
Profili 1:1 - Profiles 1:1



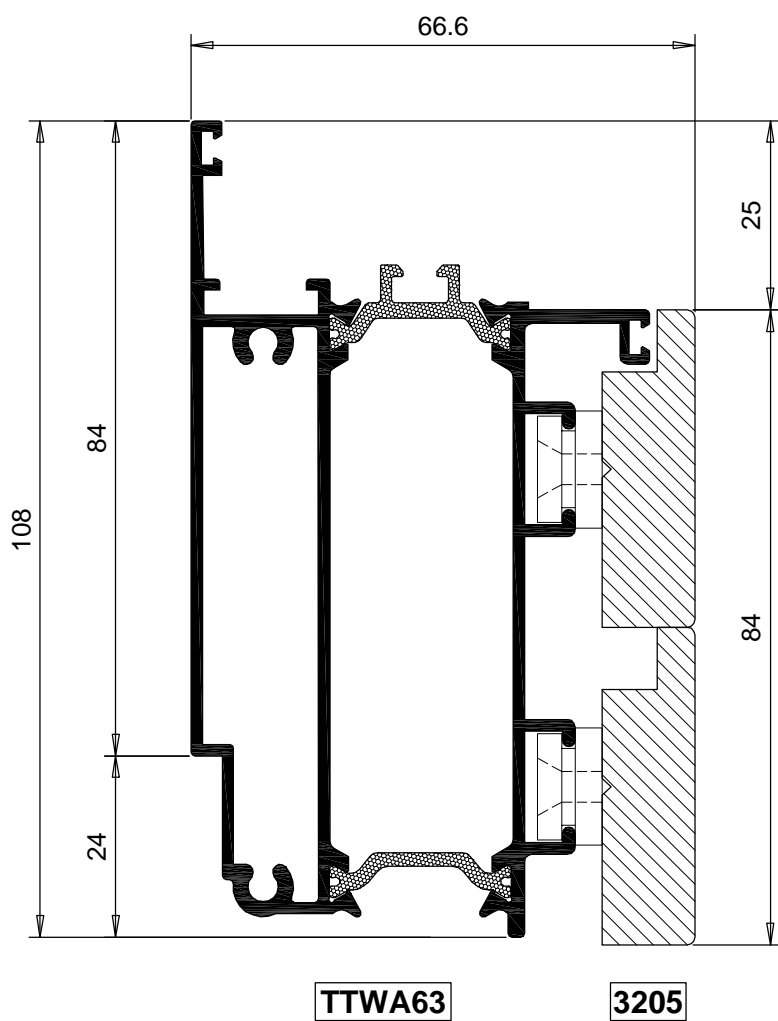
Profili 1:1 - Profiles 1:1



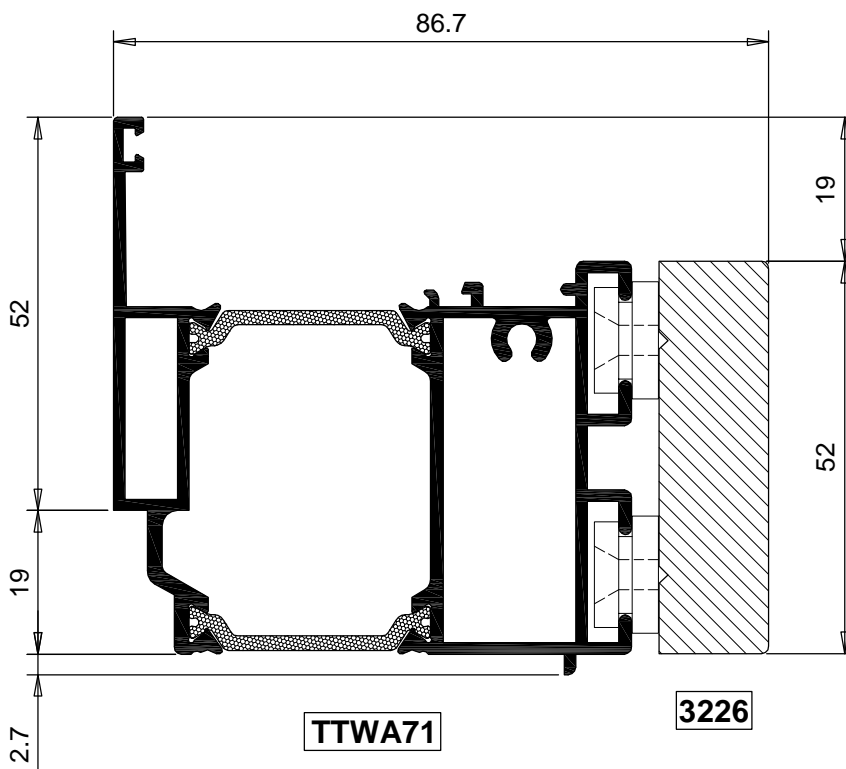
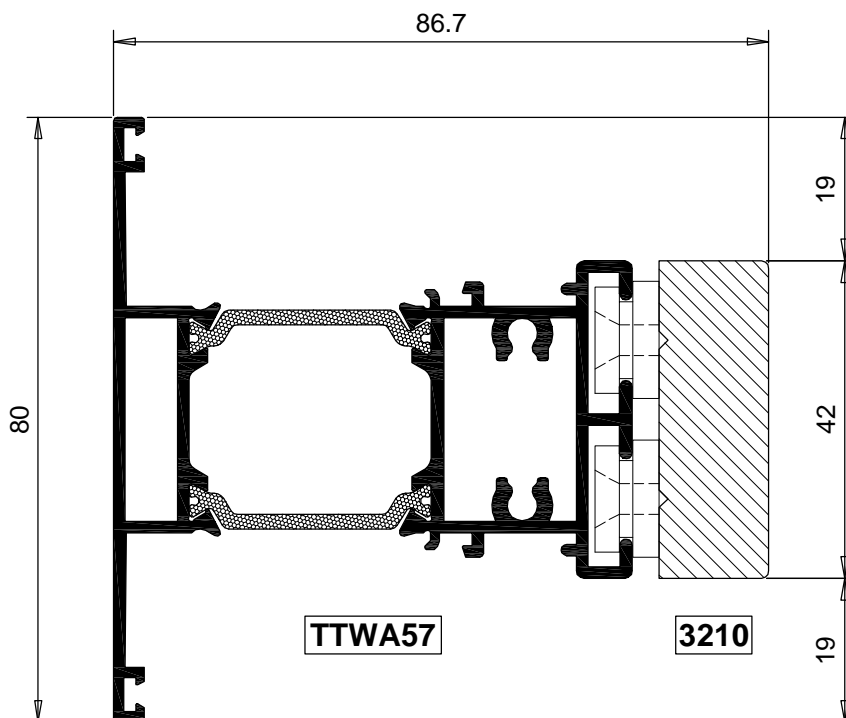
Profili 1:1 - Profiles 1:1



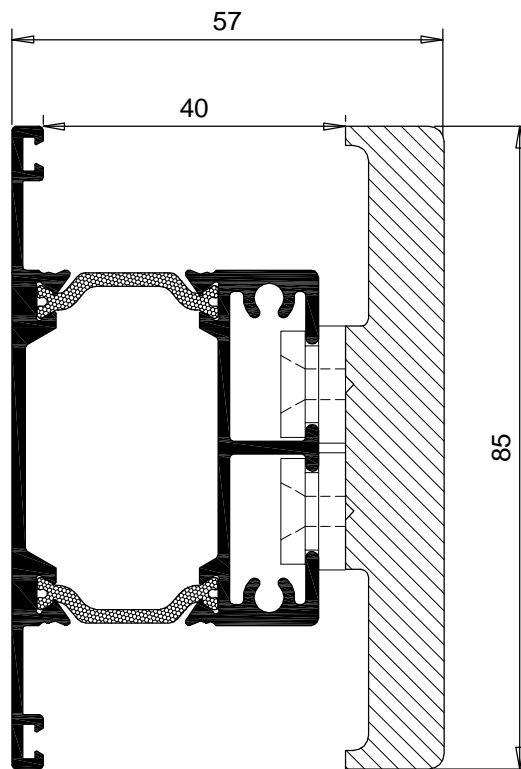
Profili 1:1 - Profiles 1:1



Profili 1:1 - Profiles 1:1



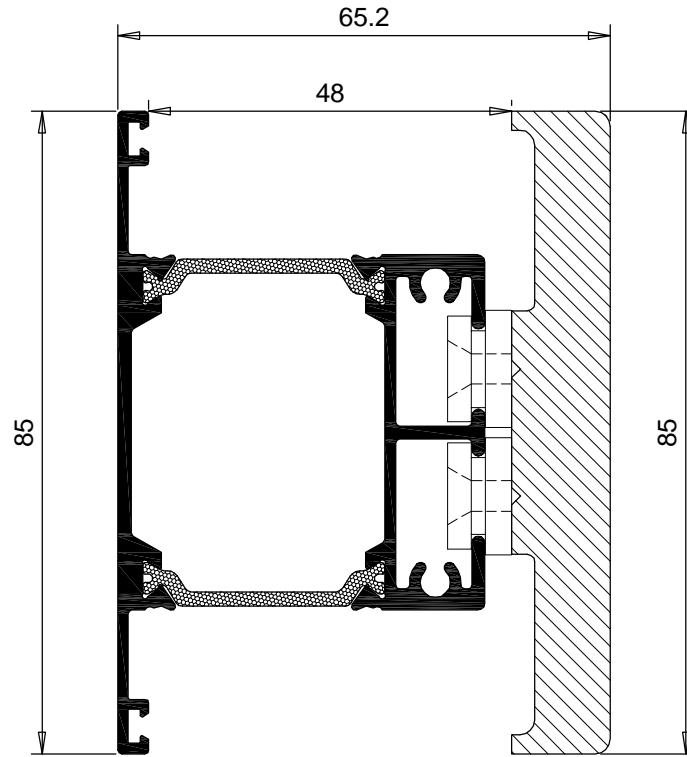
Profili 1:1 - Profiles 1:1



TTWA68

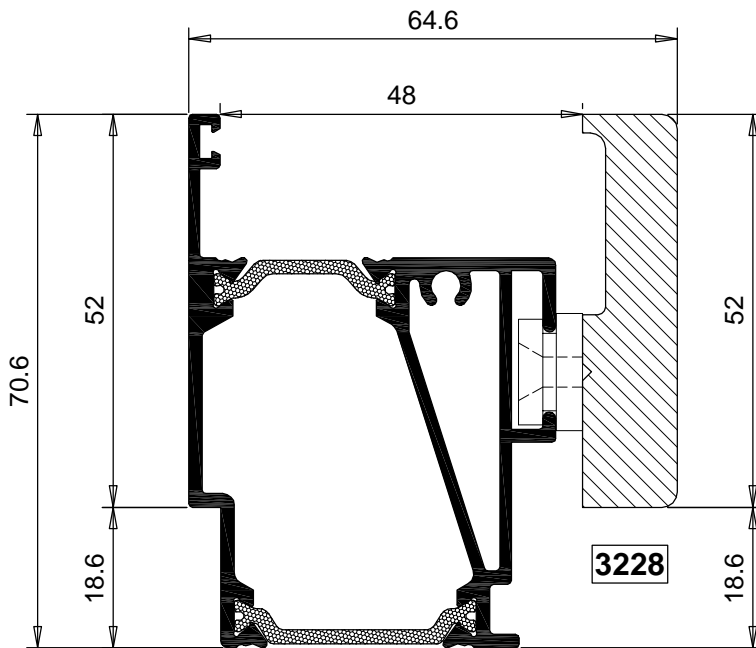
3214

Profili 1:1 - Profiles 1:1



TTWA73

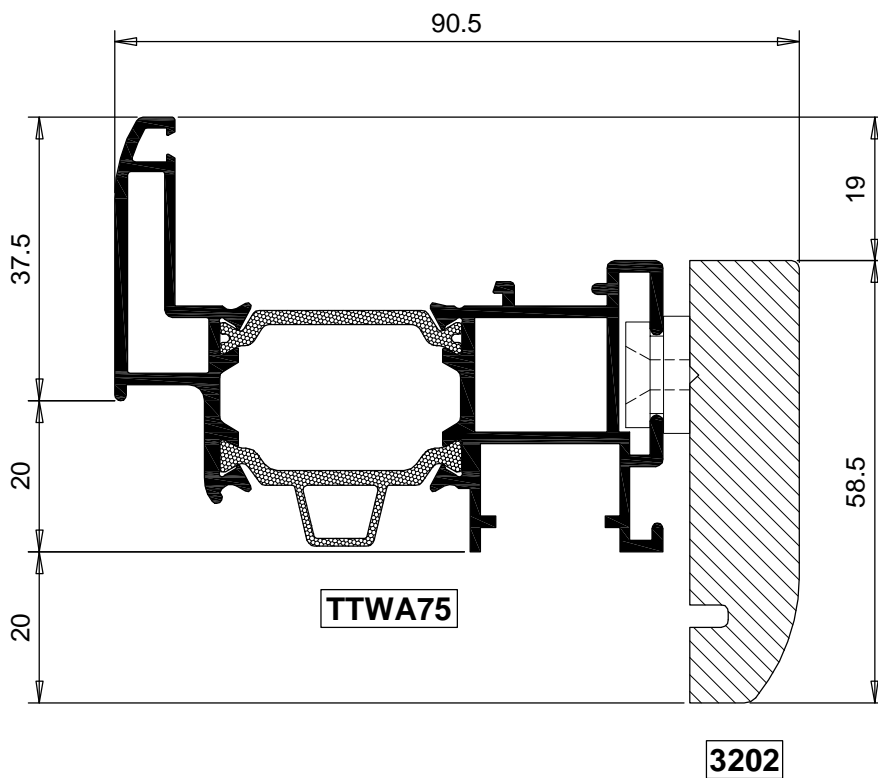
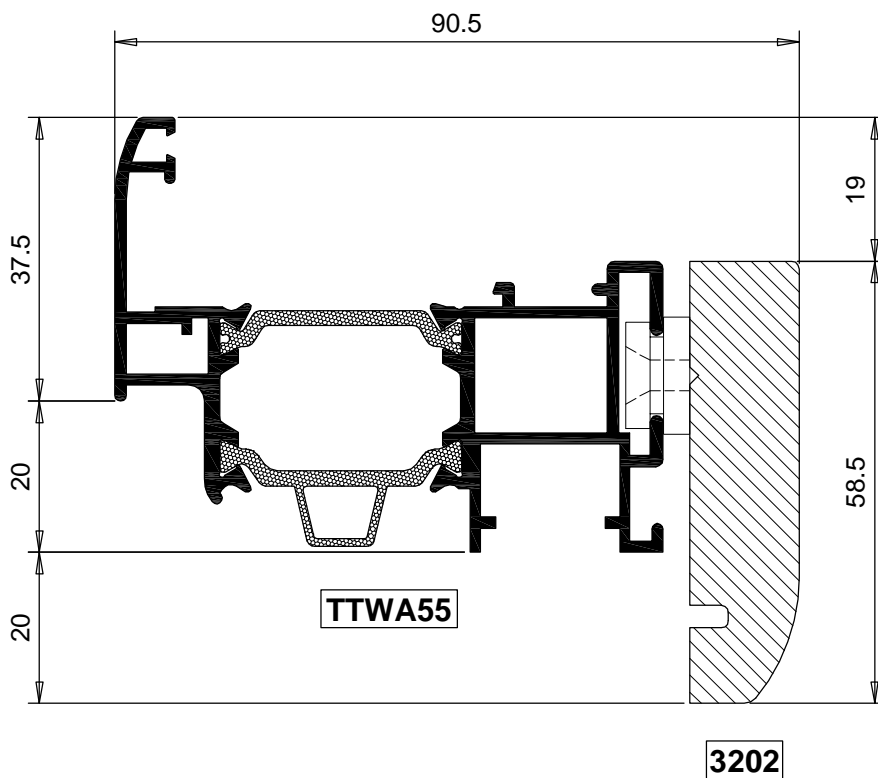
3214



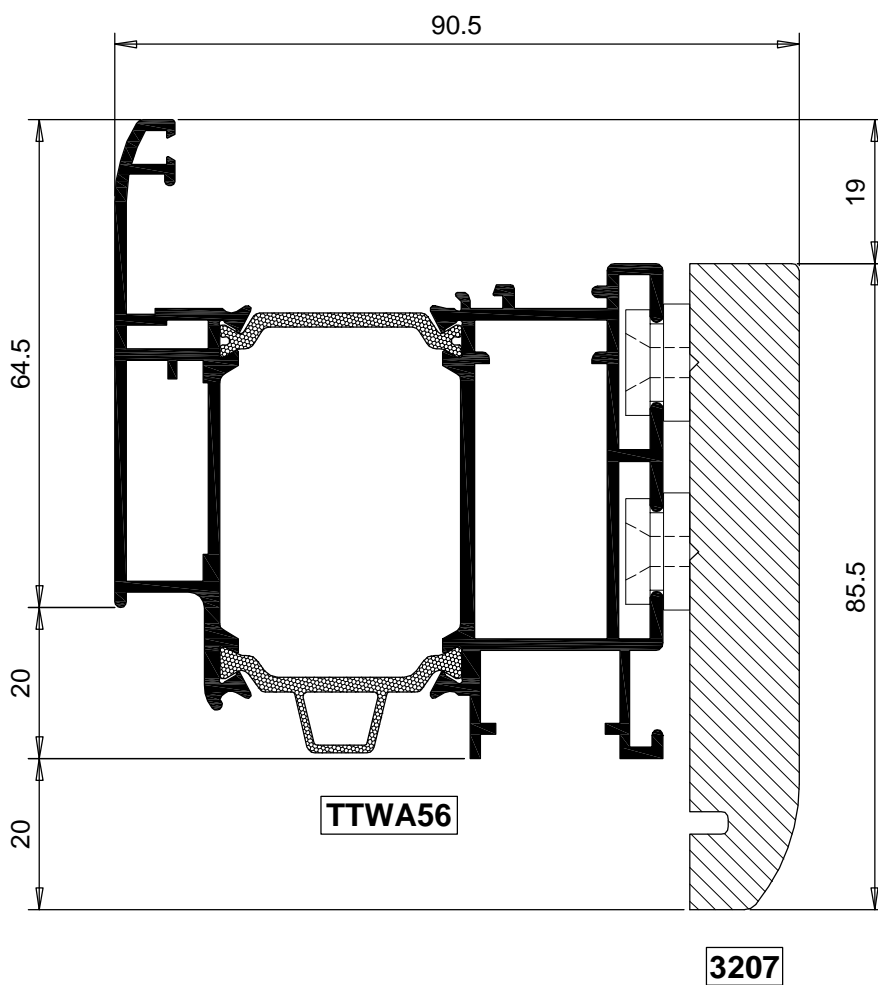
TTWA72

3228

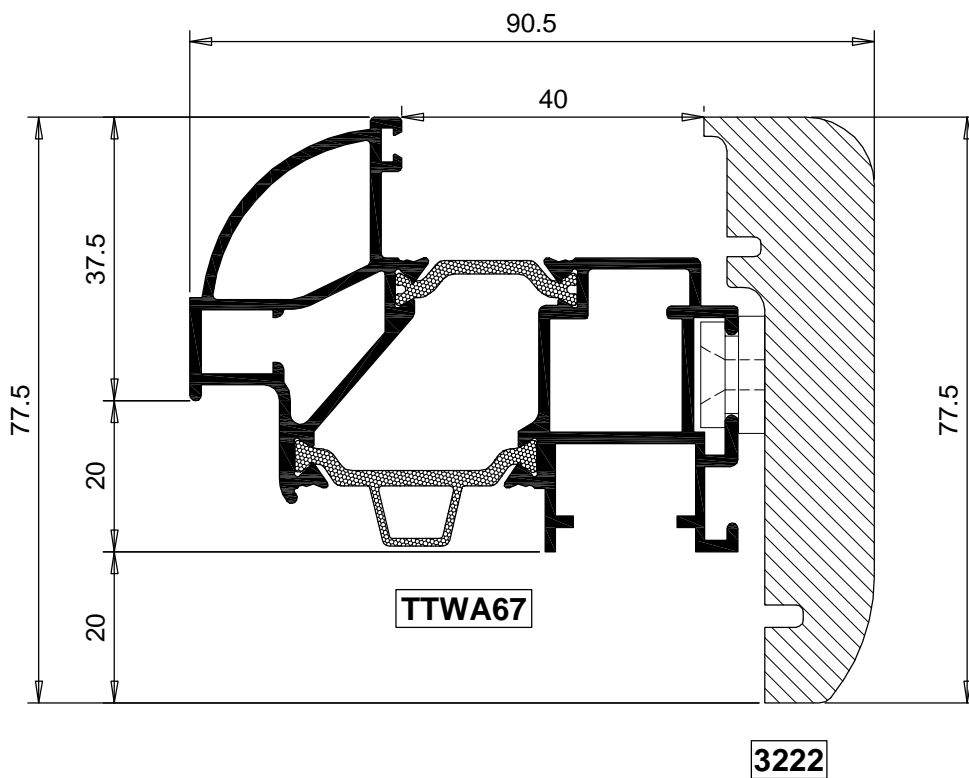
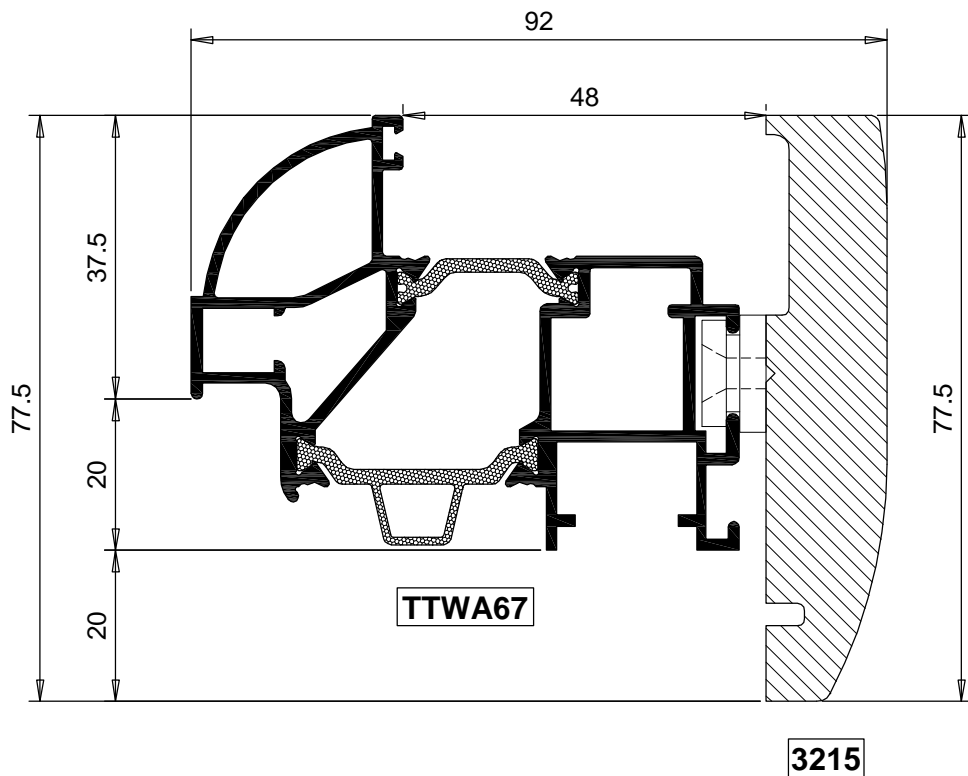
Profili 1:1 - Profiles 1:1



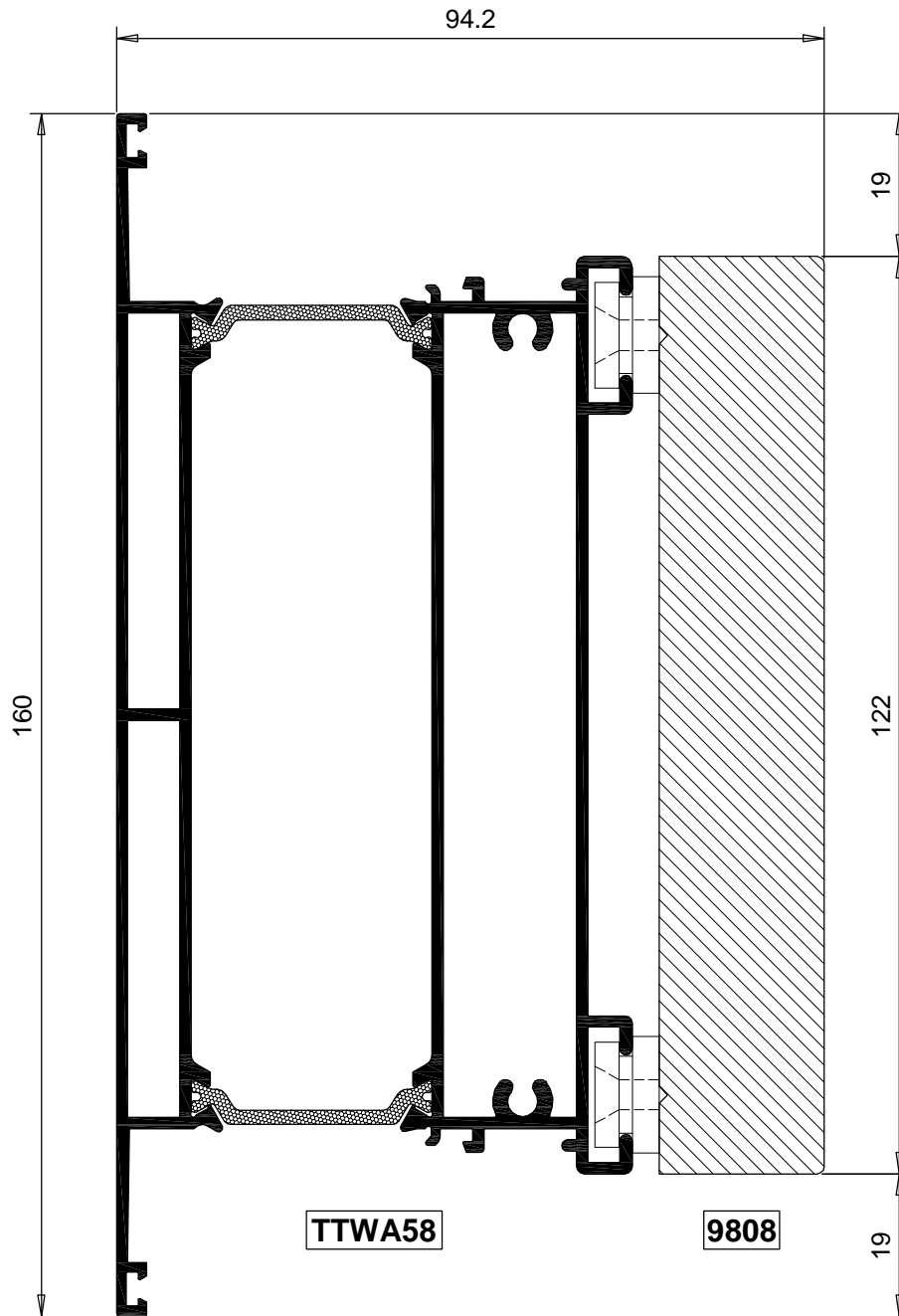
Profili 1:1 - Profiles 1:1



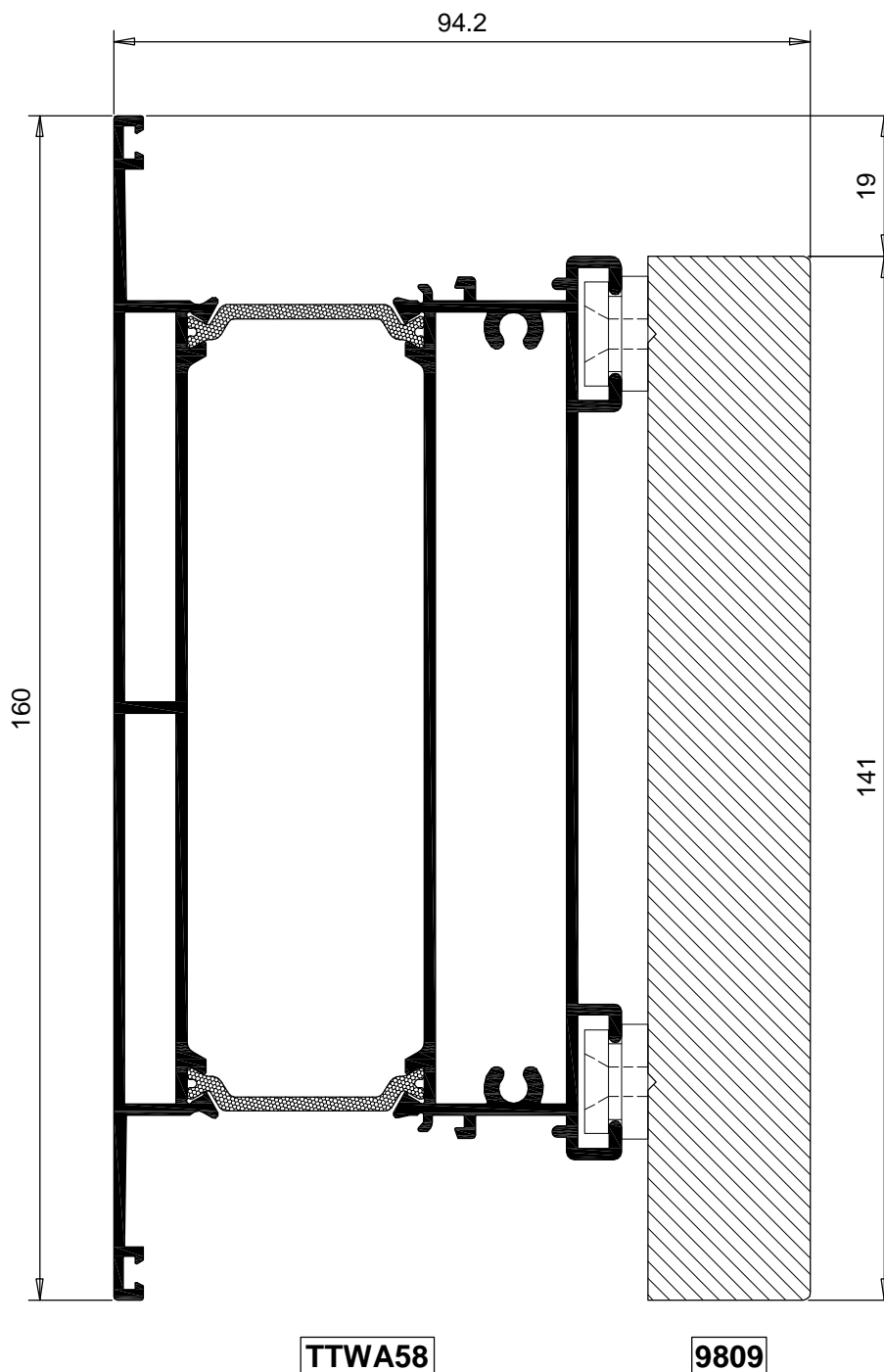
Profili 1:1 - Profiles 1:1



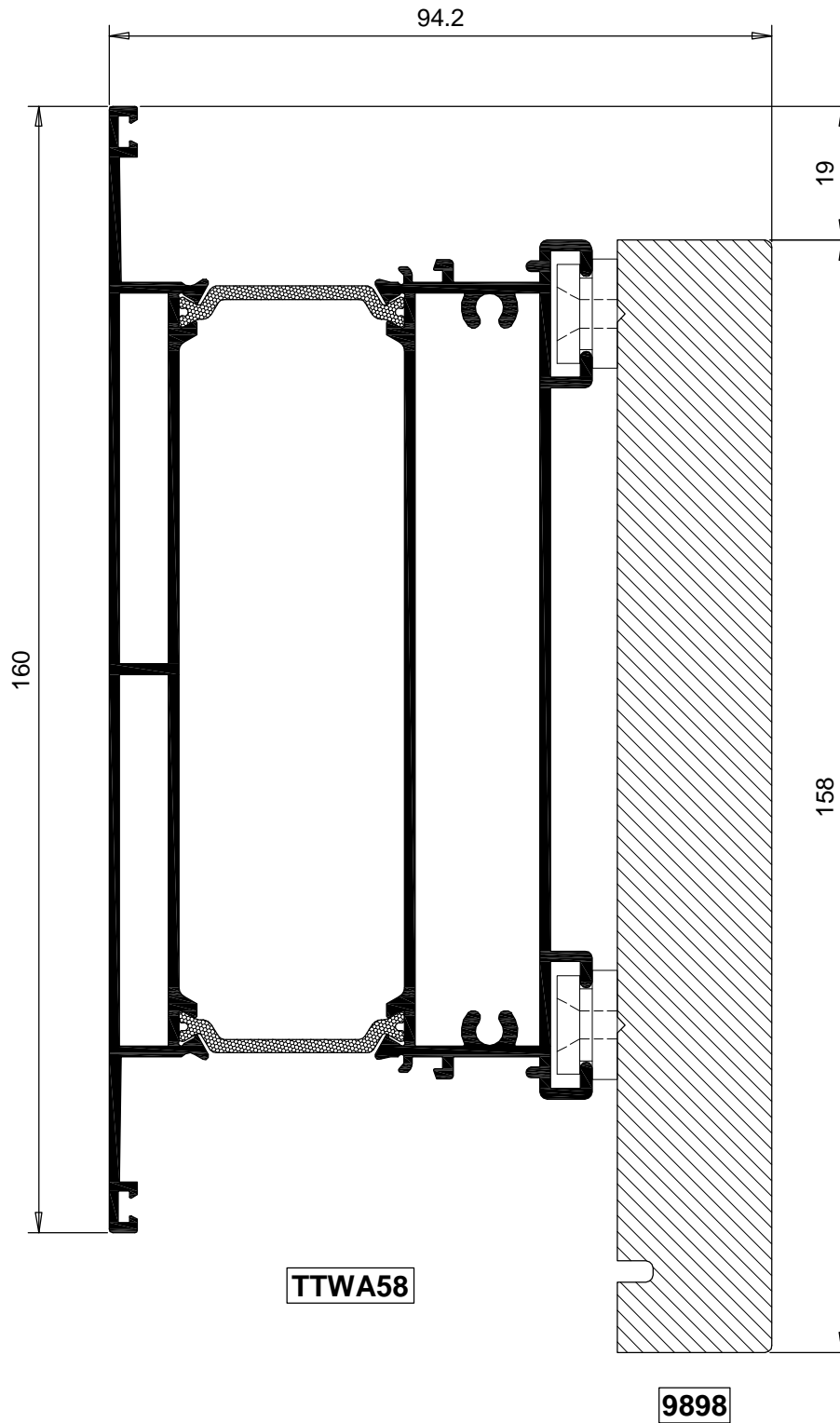
Profili 1:1 - Profiles 1:1



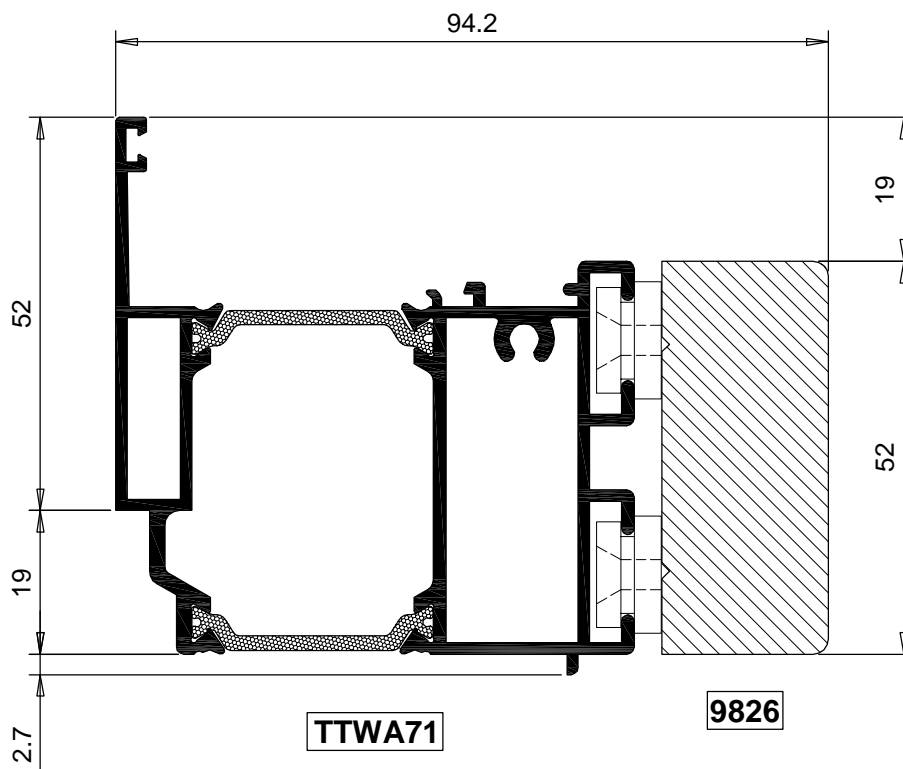
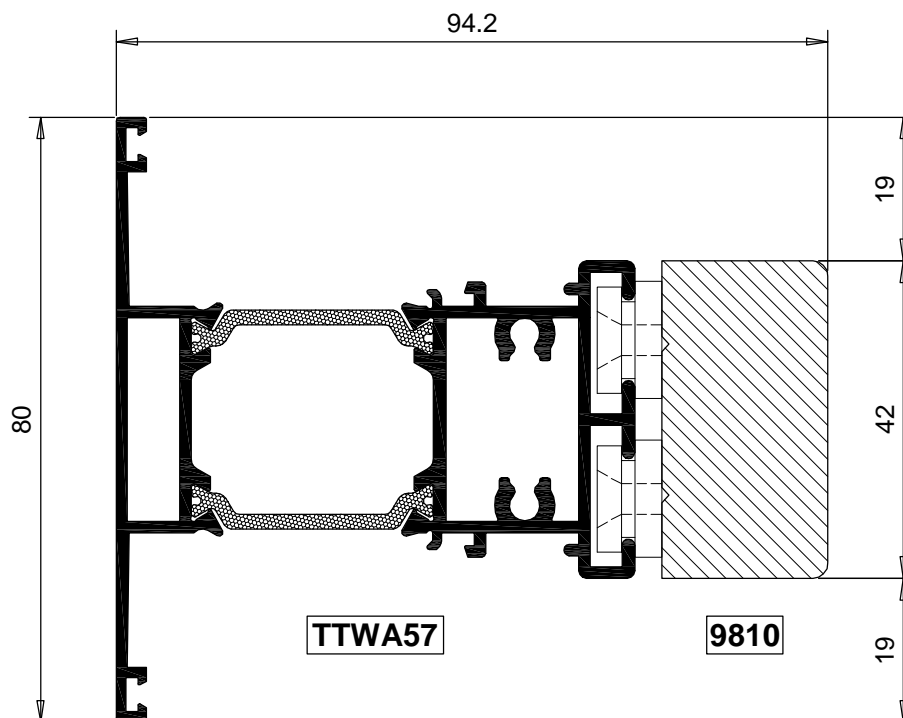
Profili 1:1 - Profiles 1:1



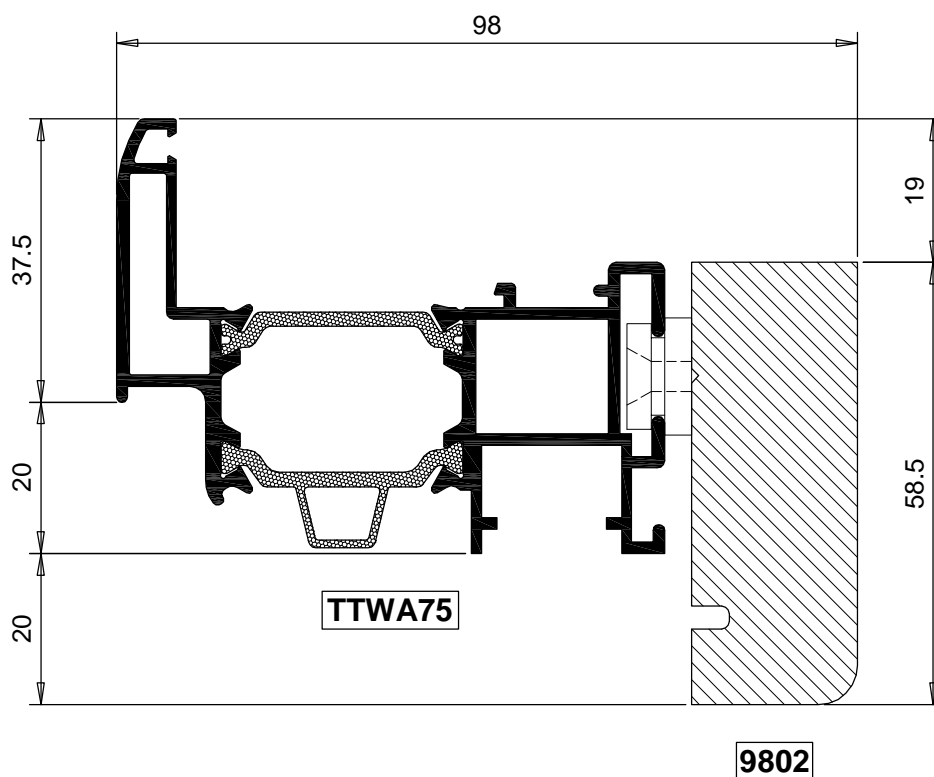
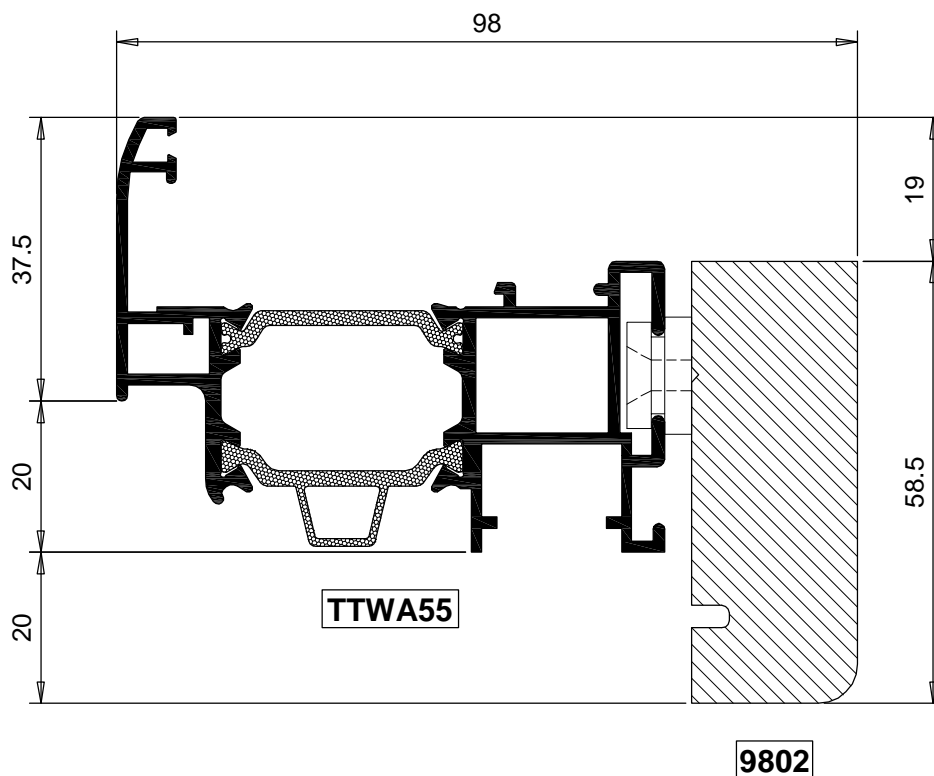
Profili 1:1 - Profiles 1:1



Profili 1:1 - Profiles 1:1



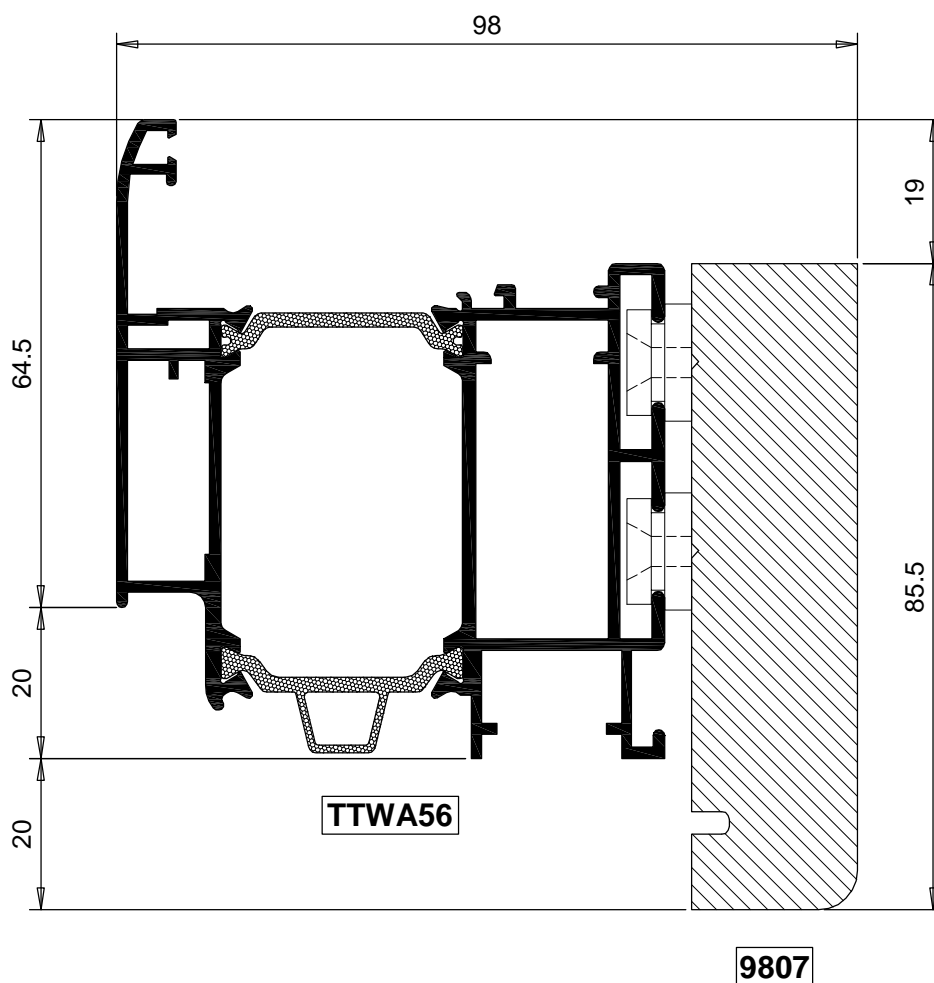
Profili 1:1 - Profiles 1:1



Nota: quando si utilizza il profilo in legno da 22mm per le ante TTWA55/56/75 il quadro $\square 7 \times 7$ per la maniglia deve essere lungo min. 43mm con viti lunghe

Note: when using the wooden profile 22mm with for the wing TTWA55/56/75 the square $\square 7 \times 7$ of the handle has to be min 43mm long, with long screw

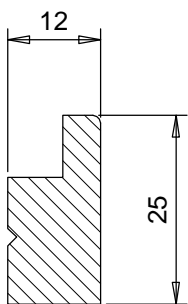
Profili 1:1 - Profiles 1:1



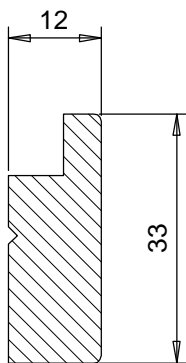
Nota: quando si utilizza il profilo in legno da 22mm per le ante TTWA55/56/75 il quadro $\square 7 \times 7$ per la maniglia deve essere lungo min. 43mm con viti lunghe

Note: when using the wooden profile 22mm with for the wing TTWA55/56/75 the square $\square 7 \times 7$ of the handle has to be min 43mm long, with long screw

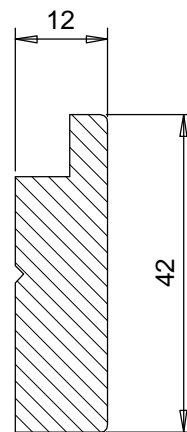
Profili 1:1 - Profiles 1:1



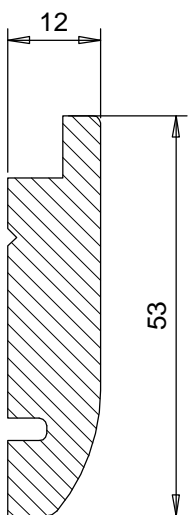
3200



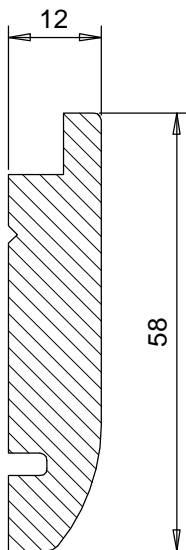
3229



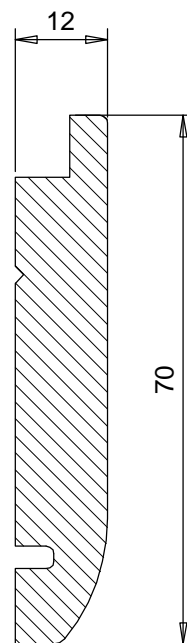
3205



3201

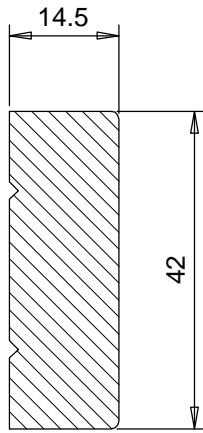


3230

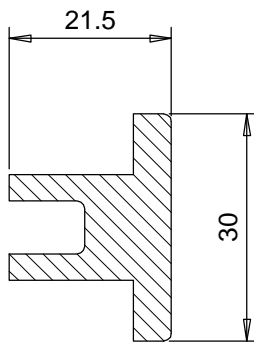


3206

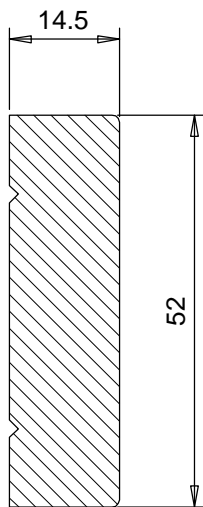
Profili 1:1 - Profiles 1:1



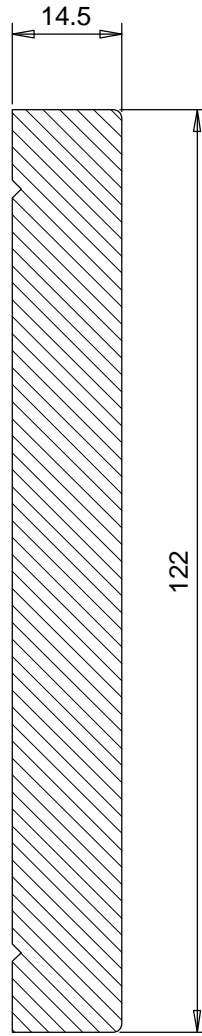
3210



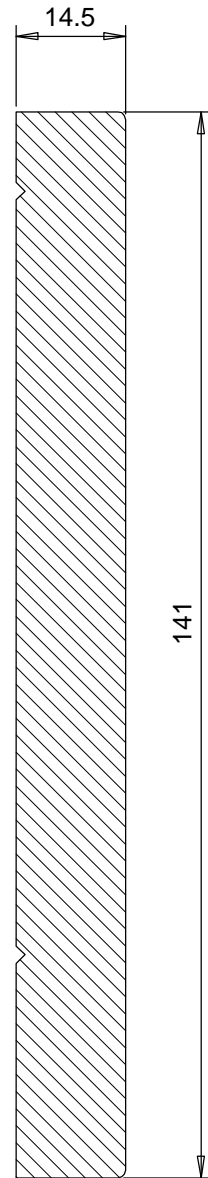
3211



3226

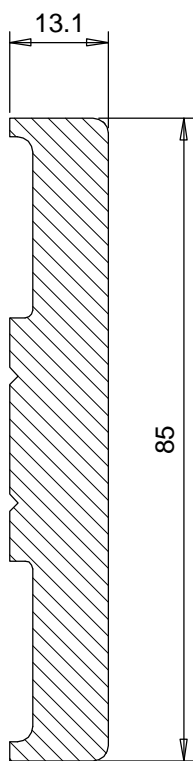


3208

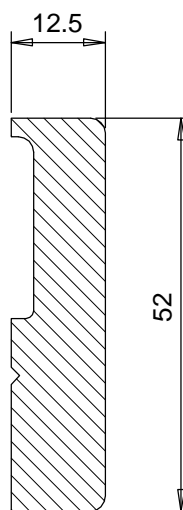


3209

Profili 1:1 - Profiles 1:1

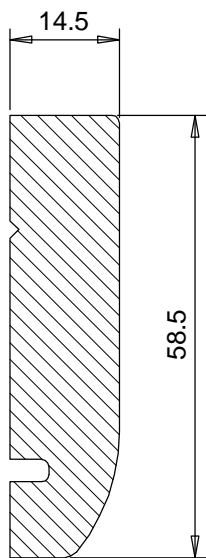


3214

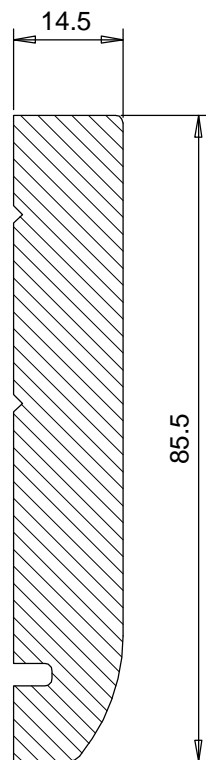


3228

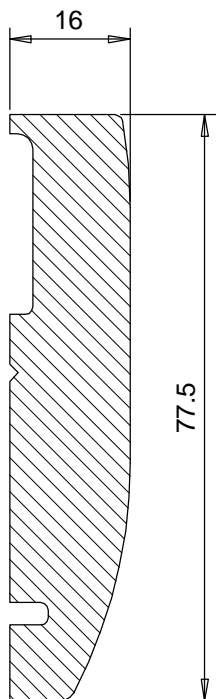
Profili 1:1 - Profiles 1:1



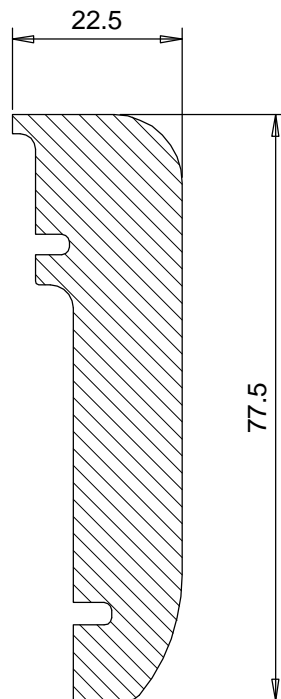
3202



3207

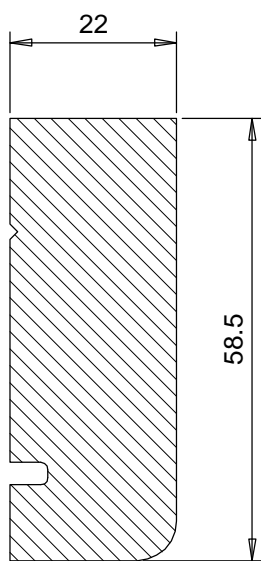


3215

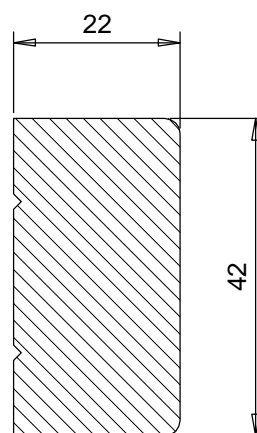


3222

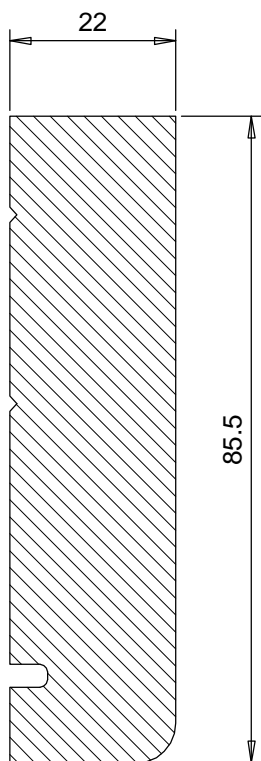
Profili 1:1 - Profiles 1:1



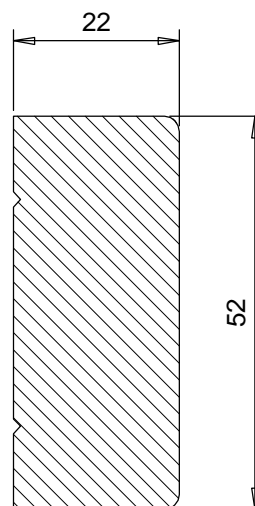
9802



9810

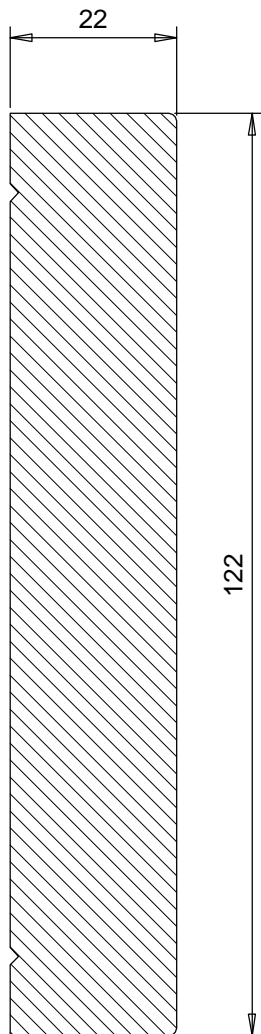


9807

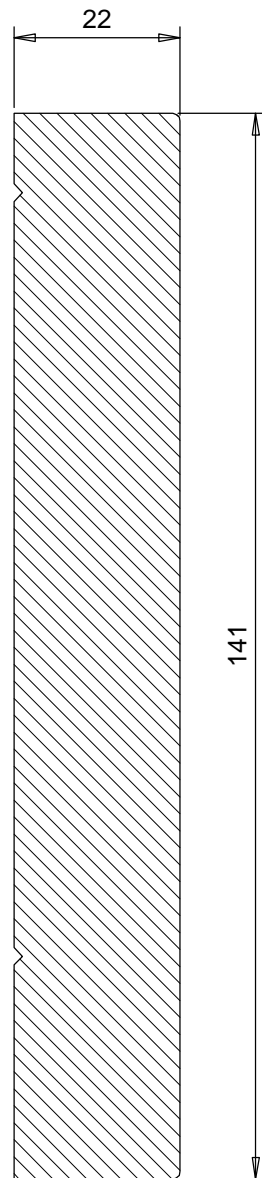


9826

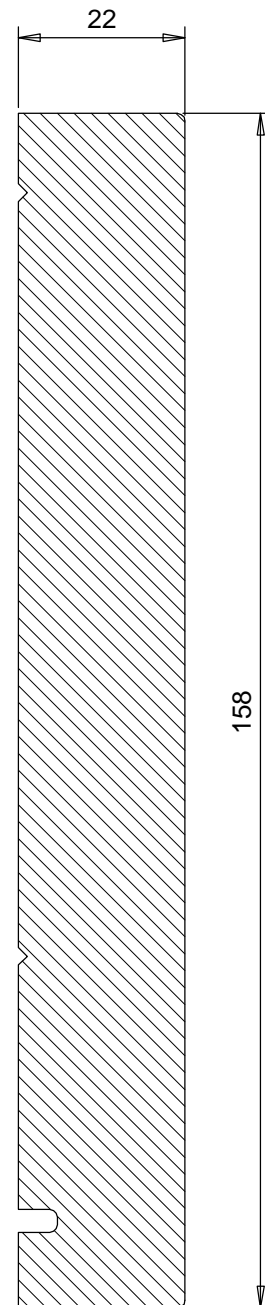
Profili 1:1 - Profiles 1:1



9808

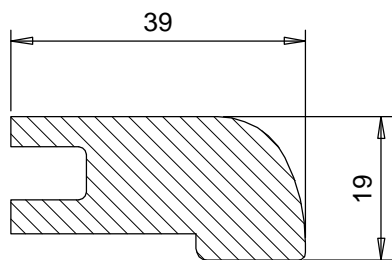


9809

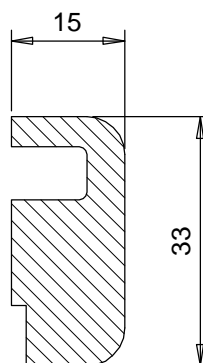


9898

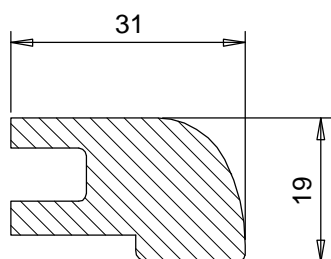
Profili 1:1 - Profiles 1:1



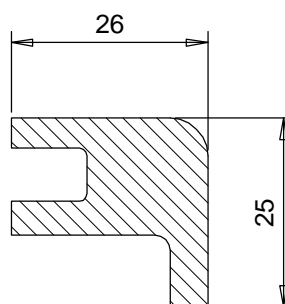
3203



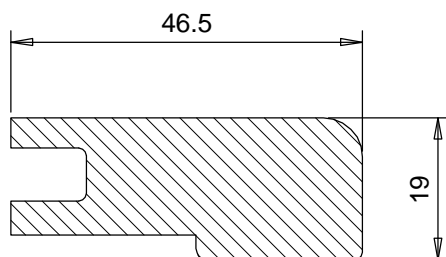
9893



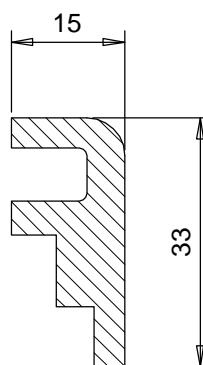
3225



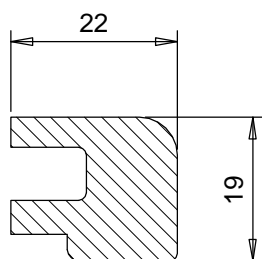
9895



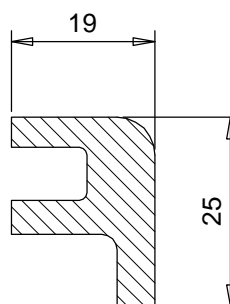
9803



9831

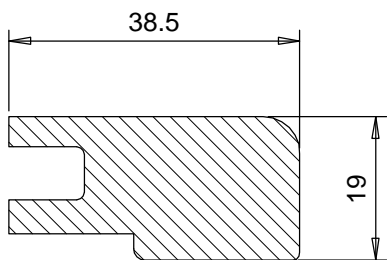


9832

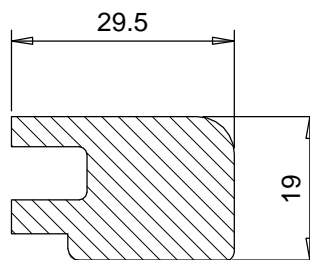


9804

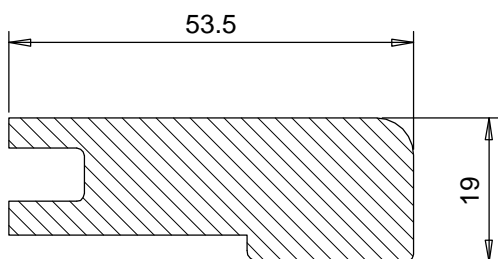
Profili 1:1 - Profiles 1:1



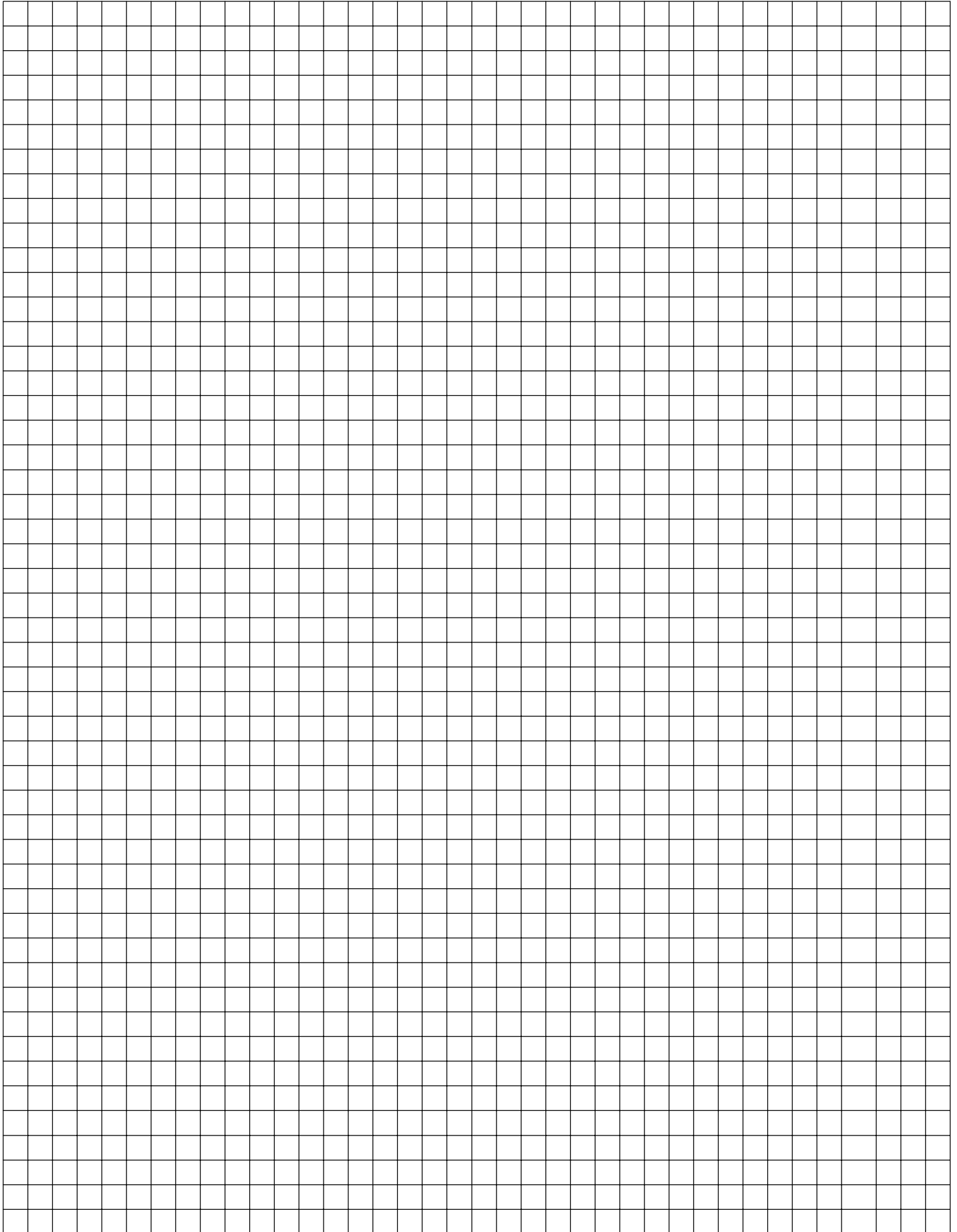
9825



9894



9896

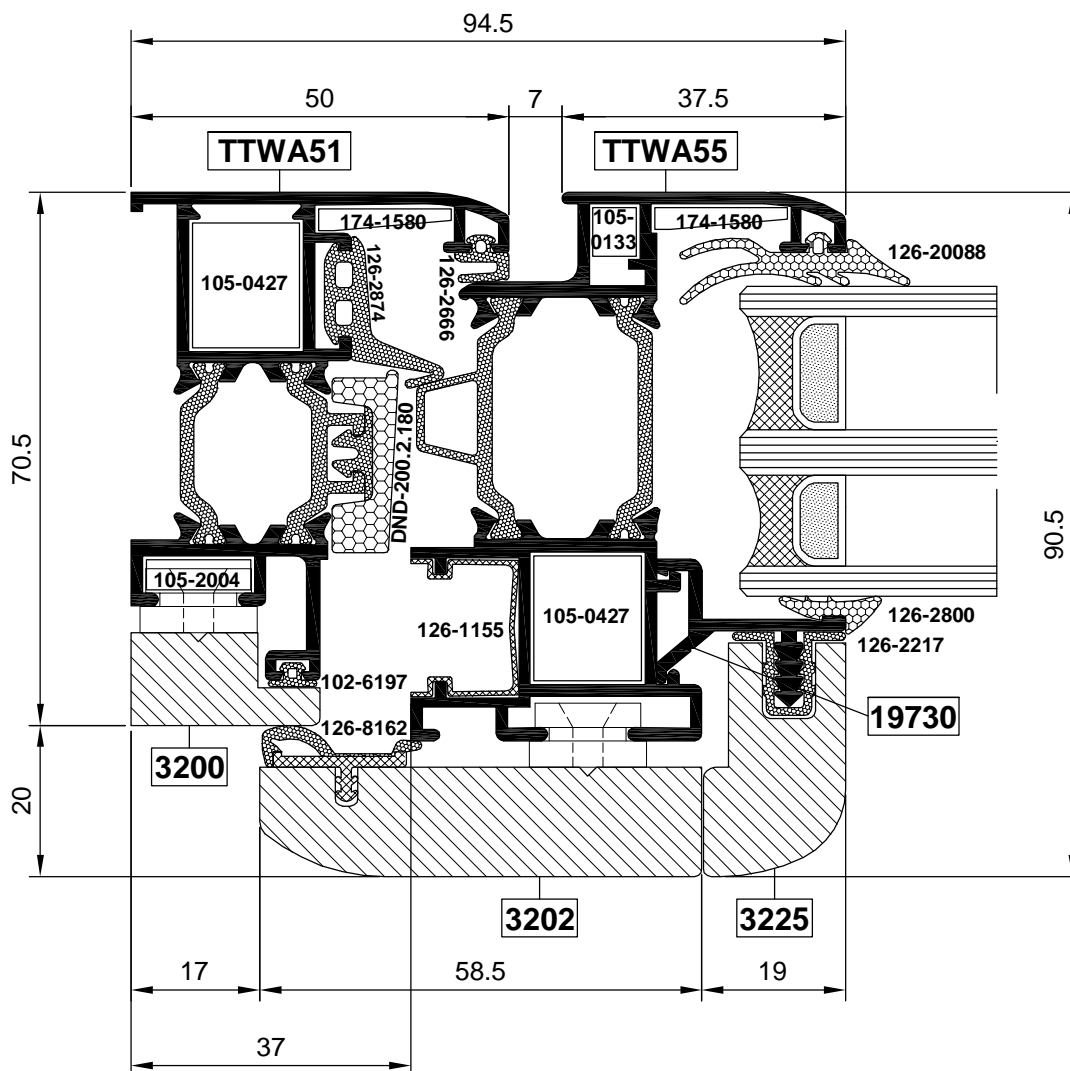
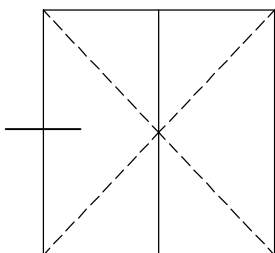


SEZIONI IN SCALA 1:1

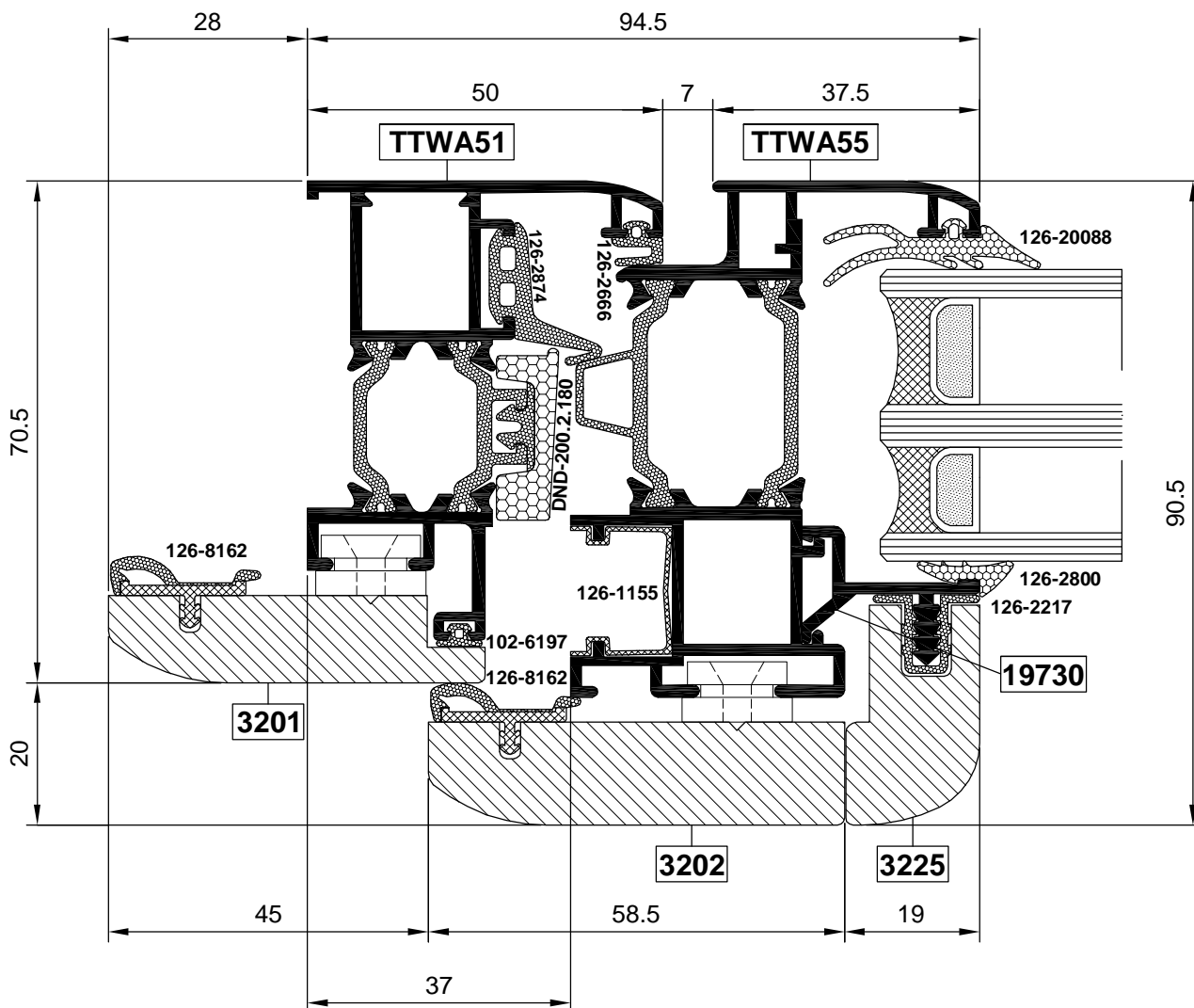
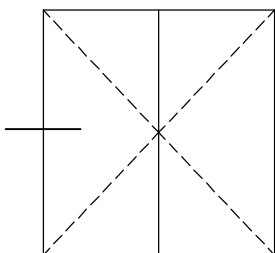


CROSS SECTION 1:1

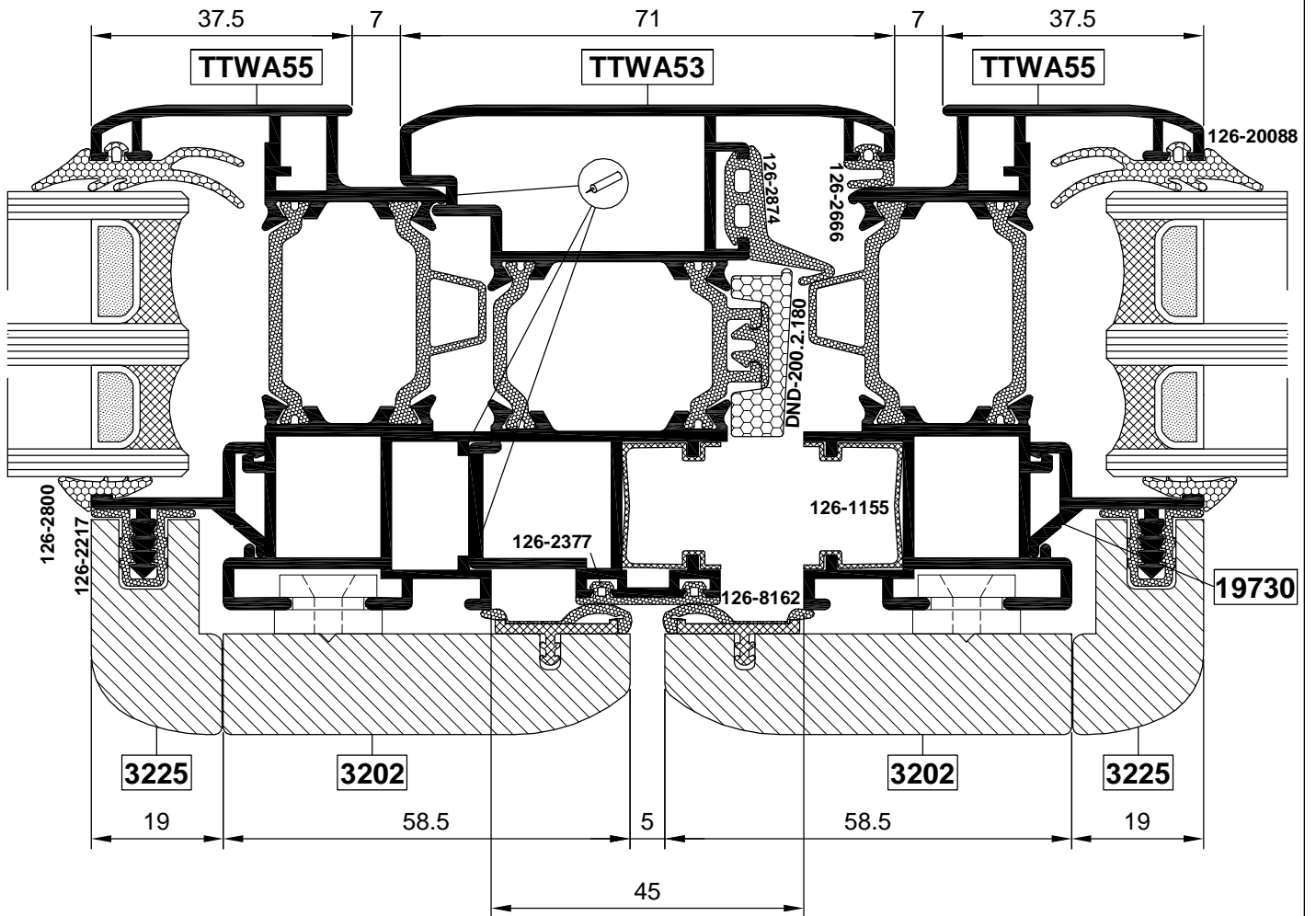
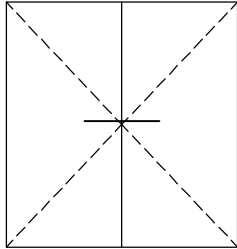
Sezioni 1:1 - Cross sections 1:1



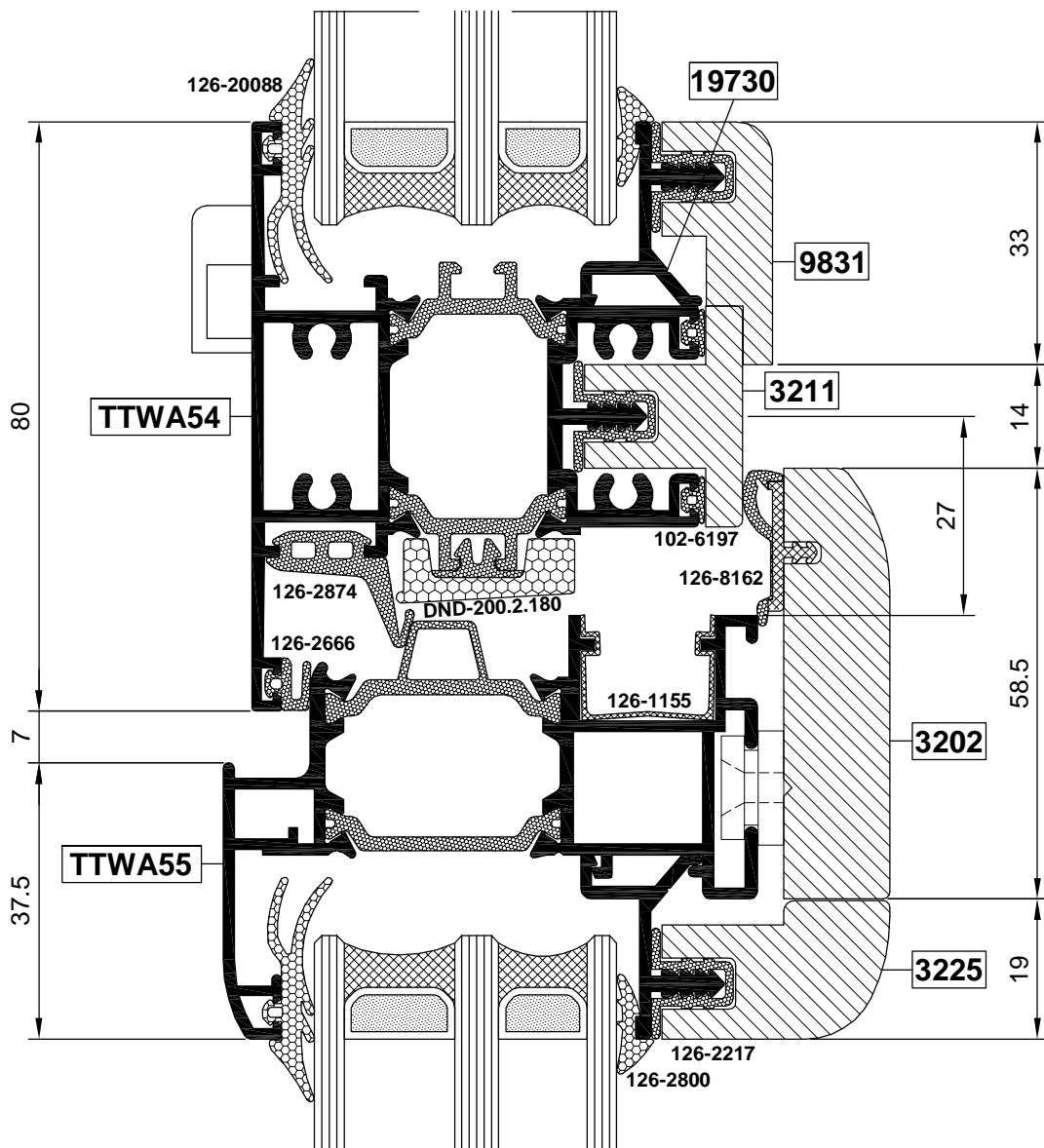
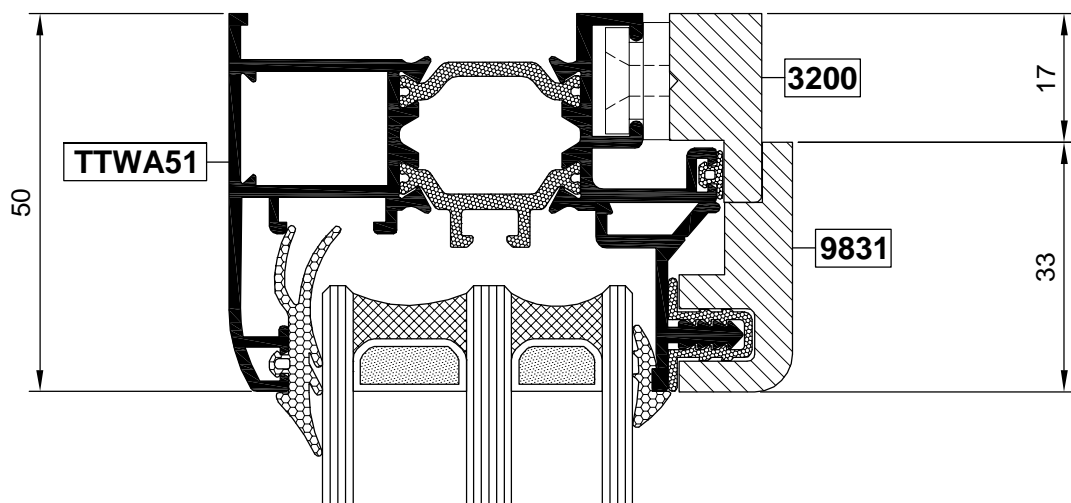
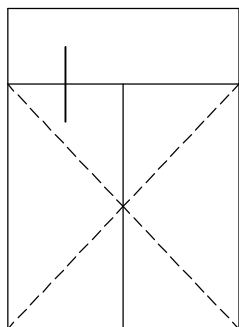
Sezioni 1:1 - Cross sections 1:1



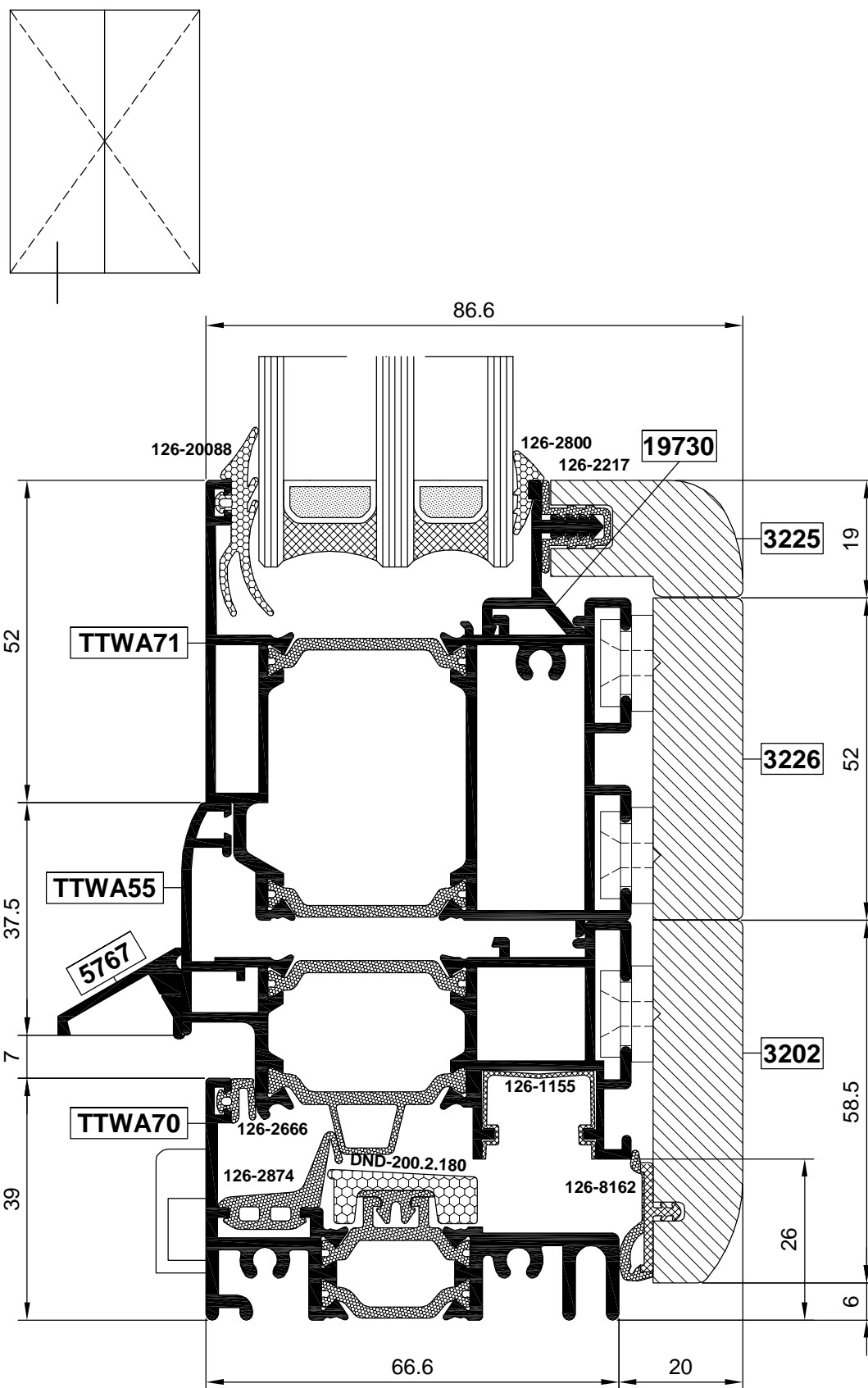
Sezioni 1:1 - Cross sections 1:1



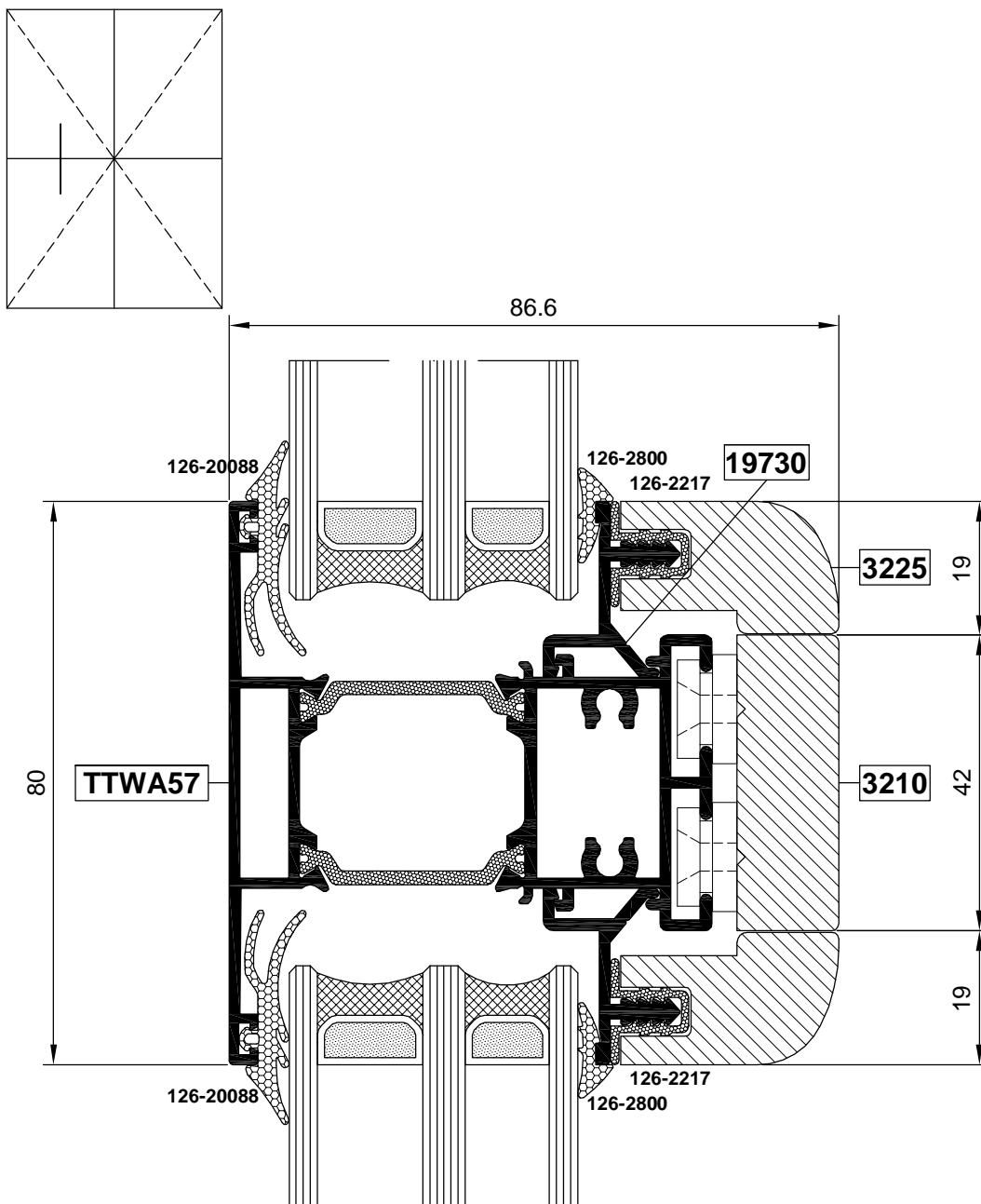
Sezioni 1:1 - Cross sections 1:1



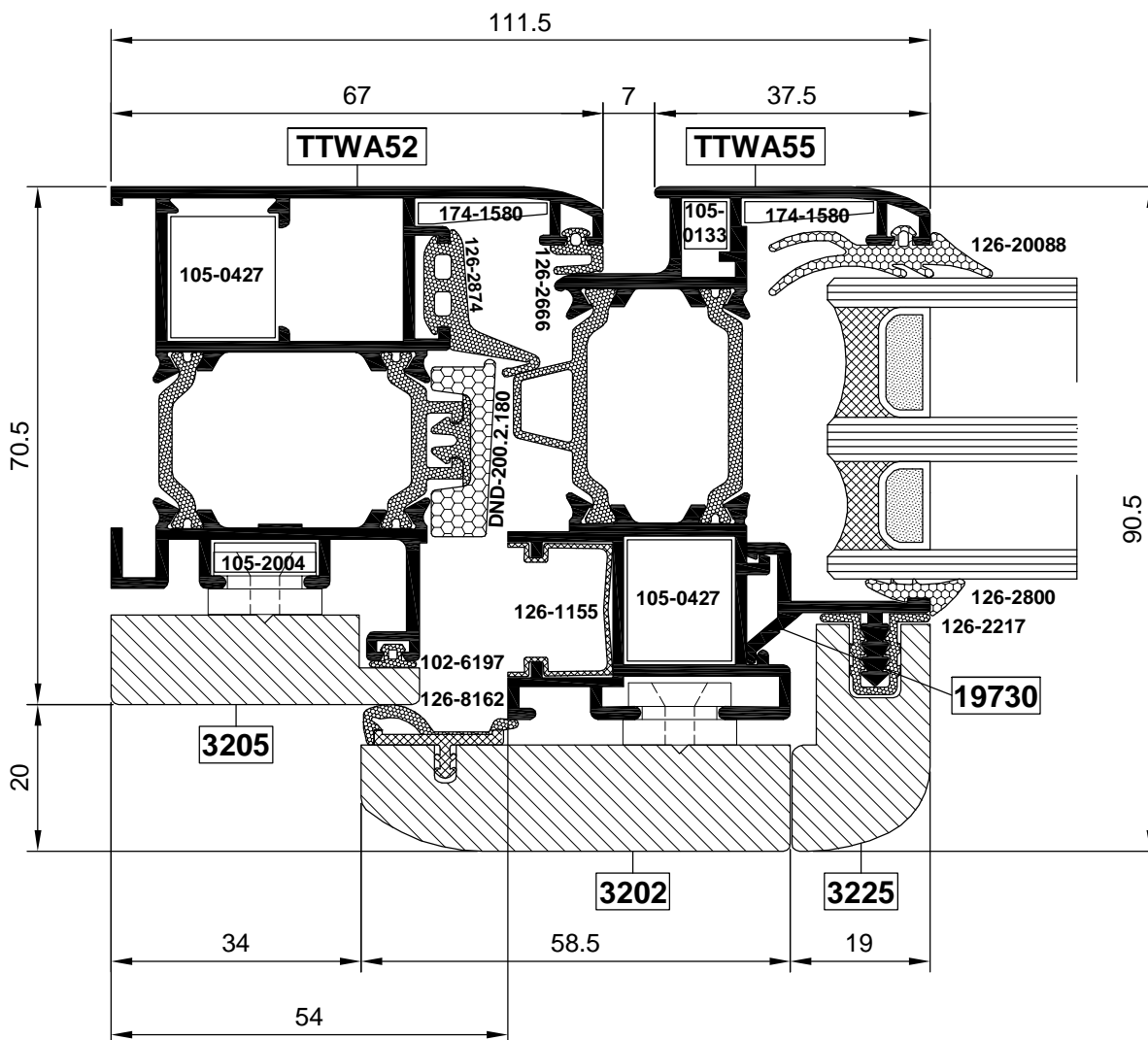
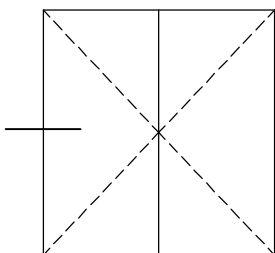
Sezioni 1:1 - Cross sections 1:1



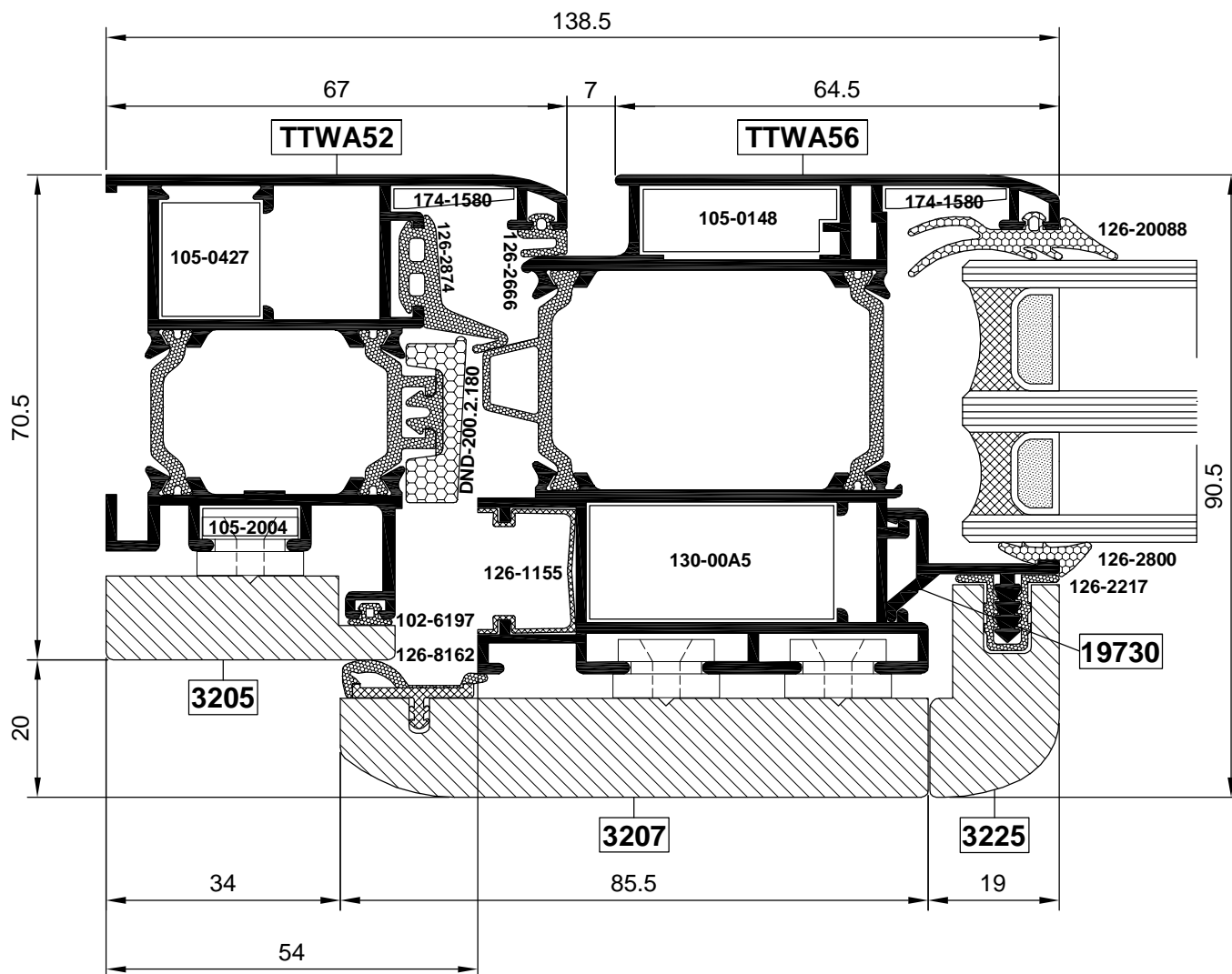
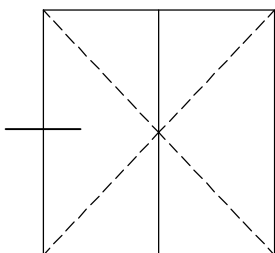
Sezioni 1:1 - Cross sections 1:1



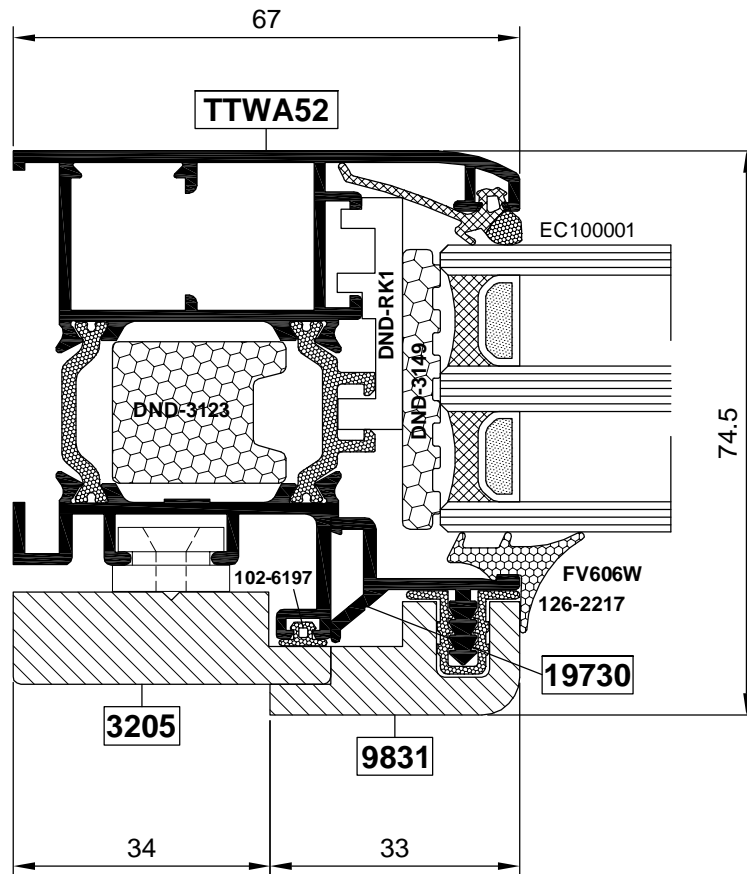
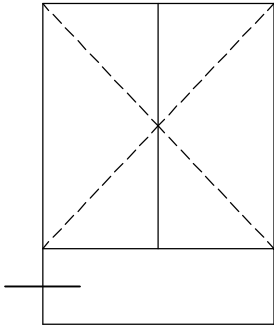
Sezioni 1:1 - Cross sections 1:1



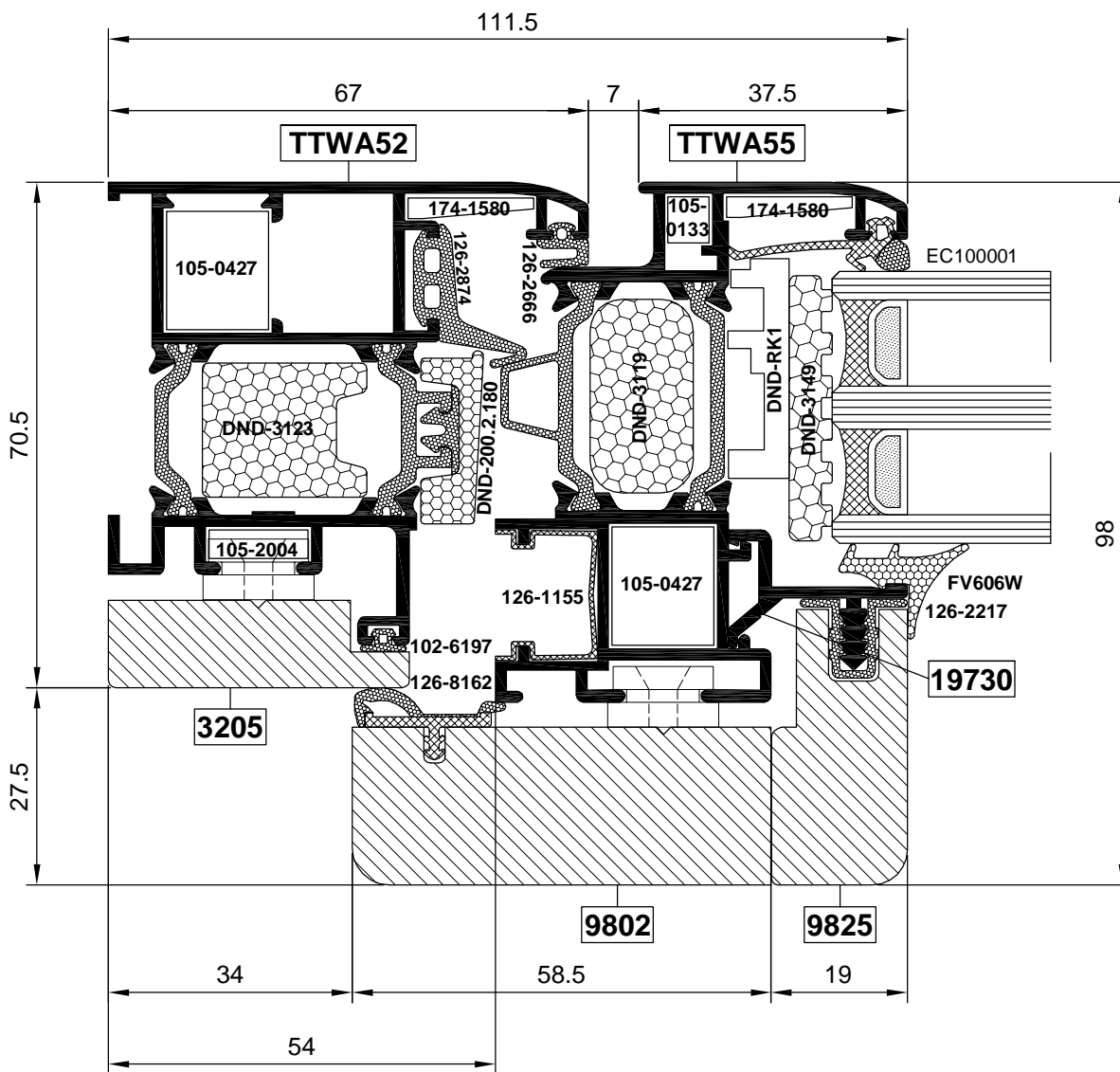
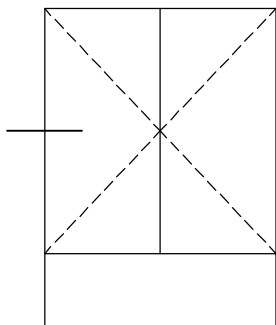
Sezioni 1:1 - Cross sections 1:1



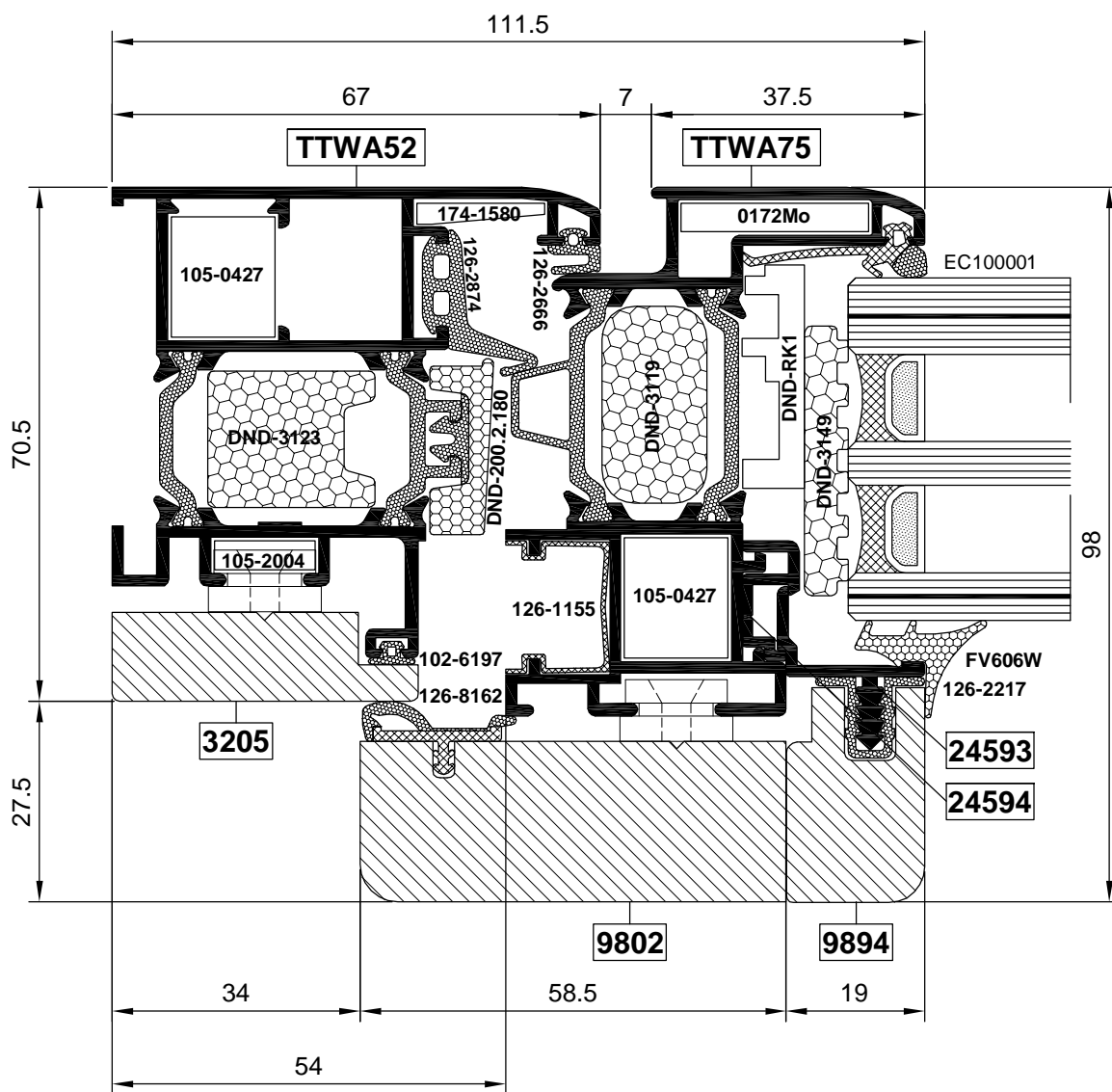
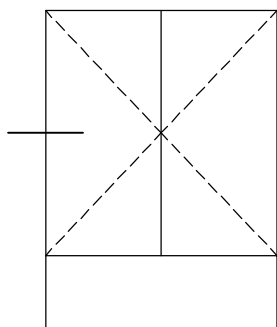
Sezioni 1:1 - Cross sections 1:1



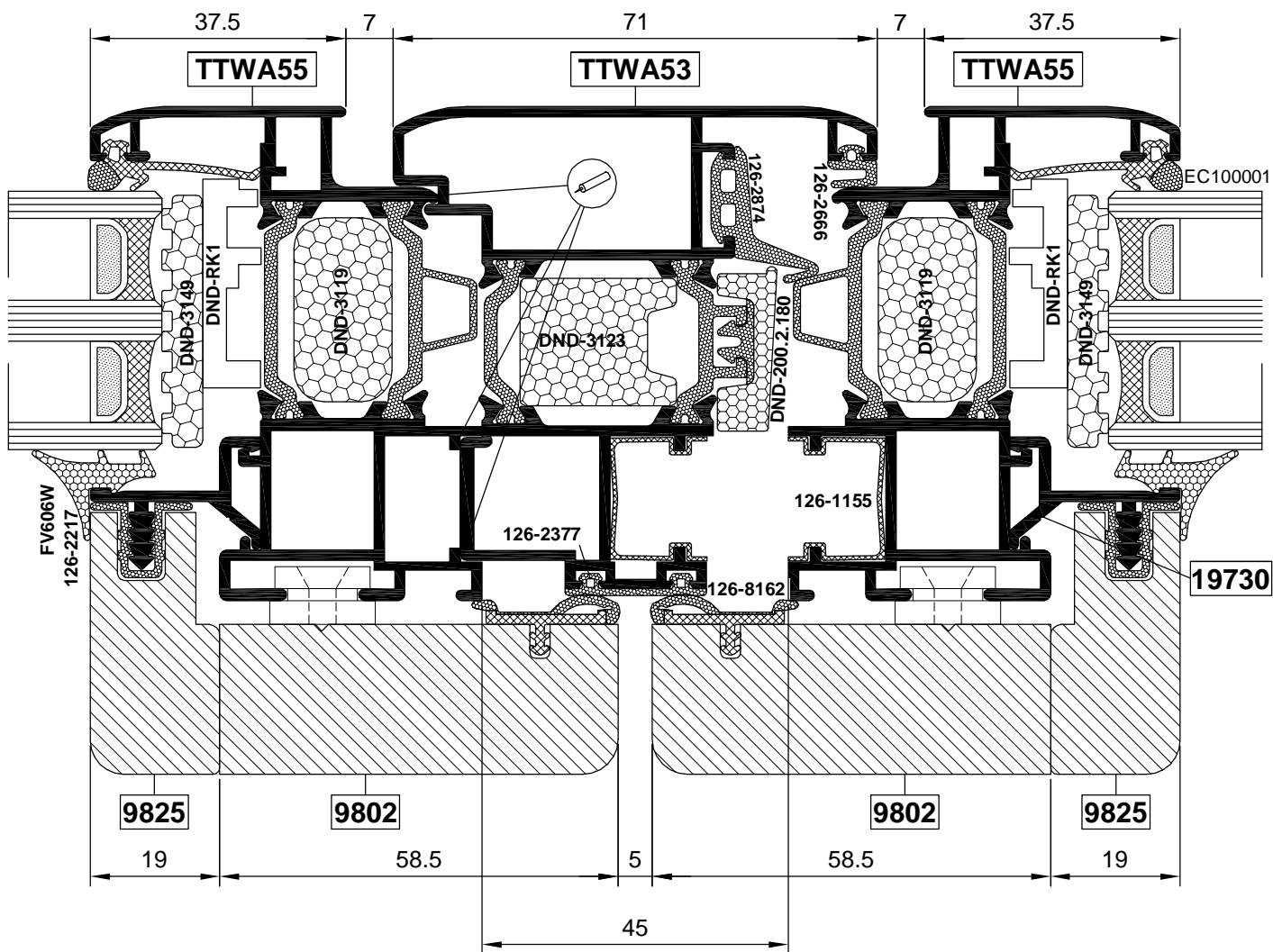
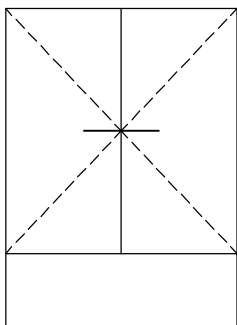
Sezioni 1:1 - Cross sections 1:1



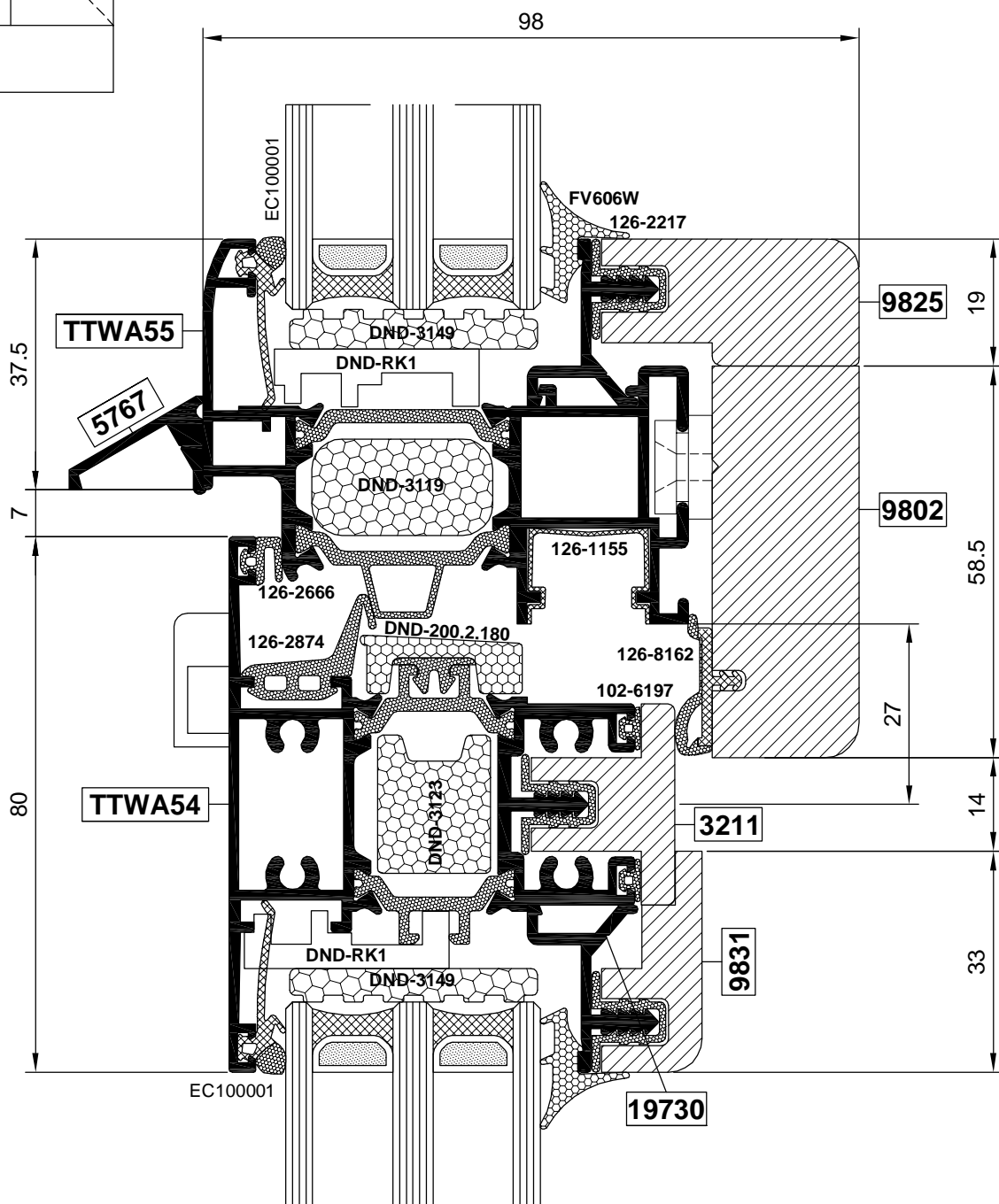
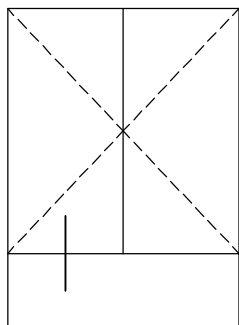
Sezioni 1:1 - Cross sections 1:1



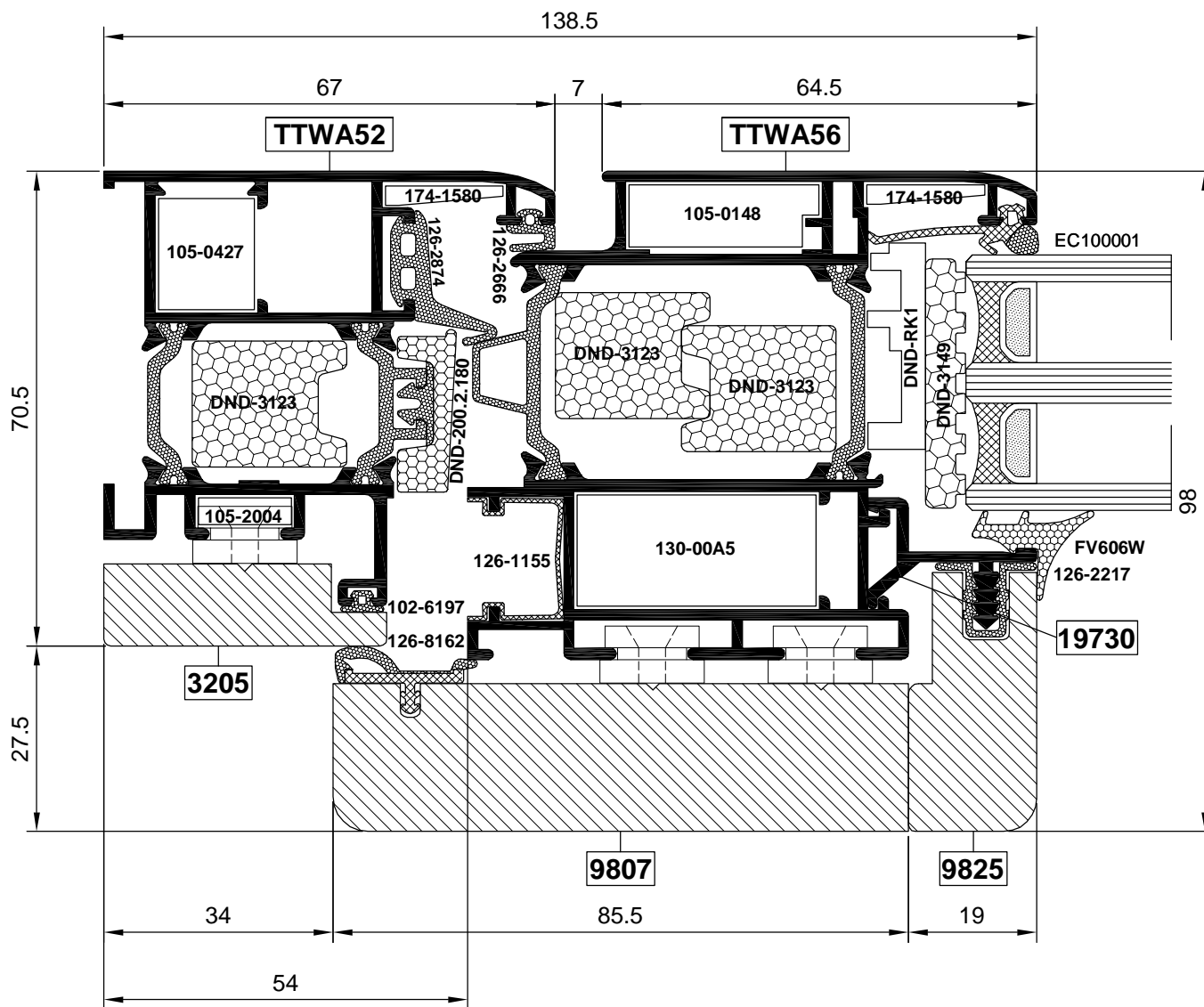
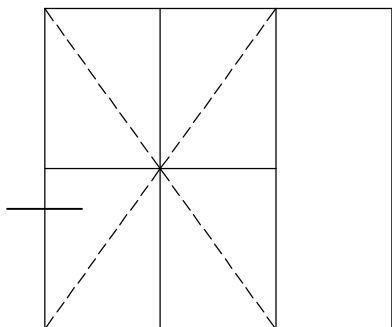
Sezioni 1:1 - Cross sections 1:1



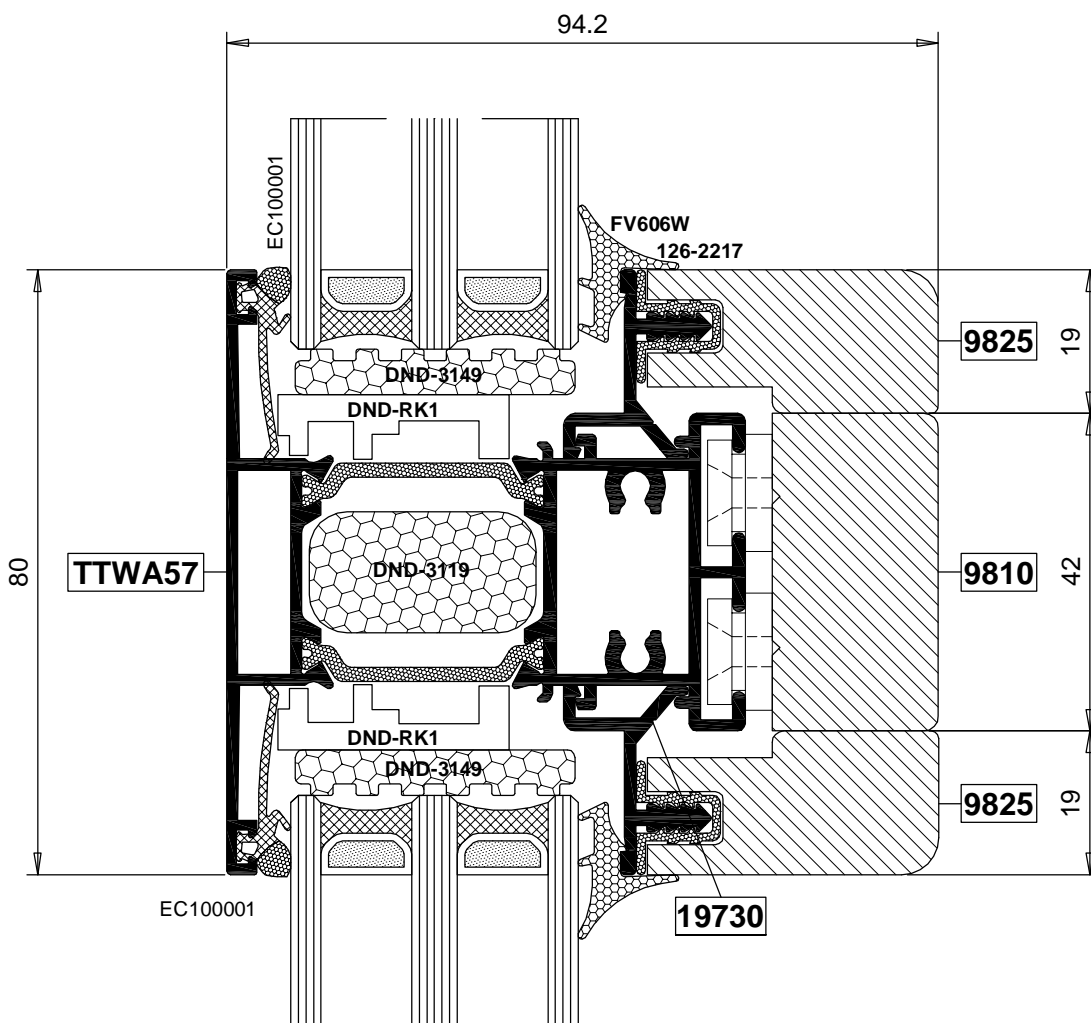
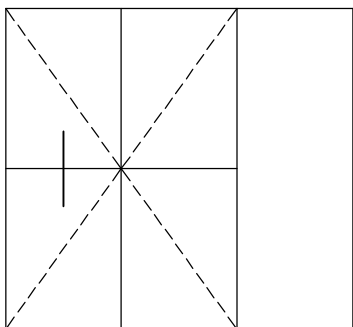
Sezioni 1:1 - Cross sections 1:1



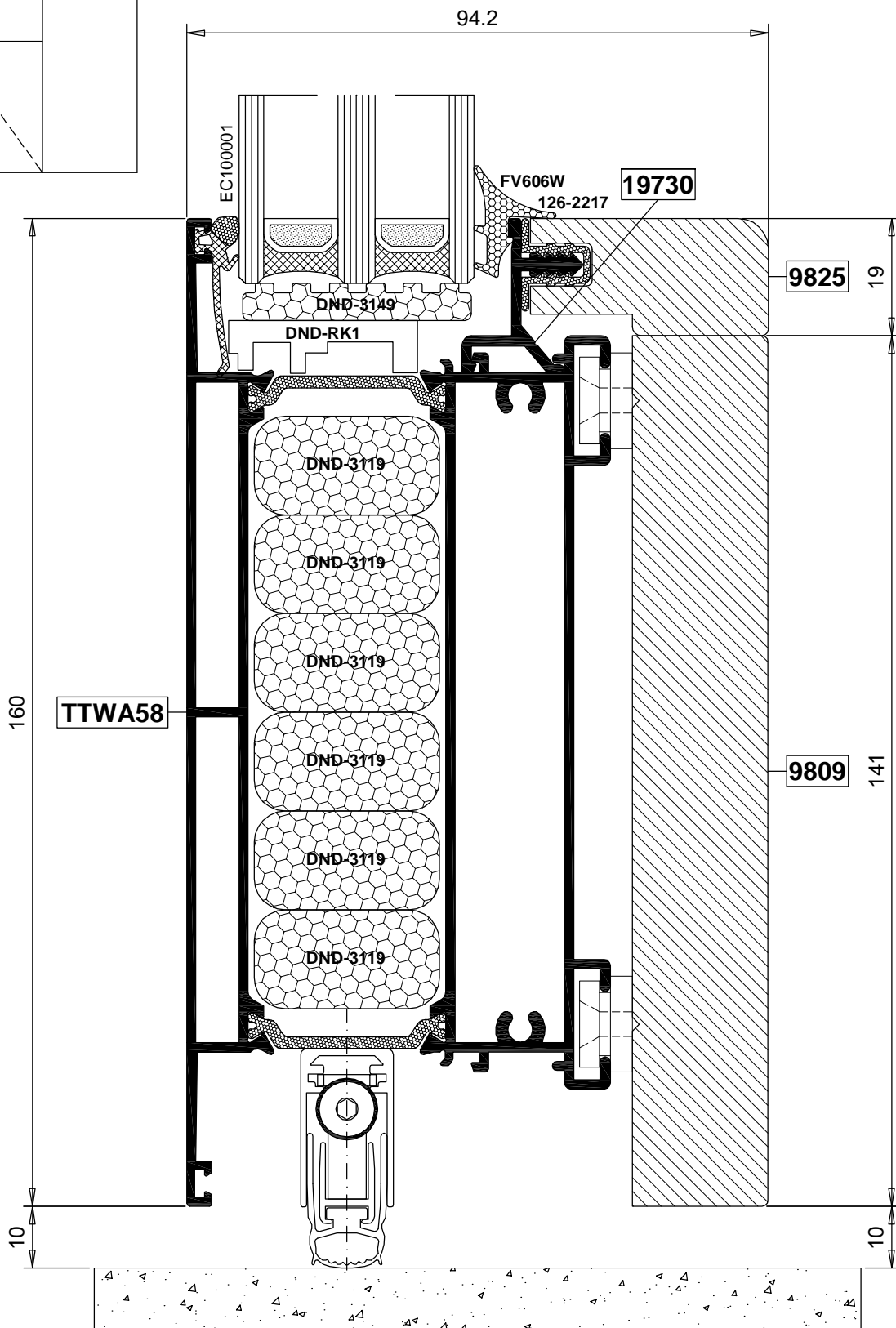
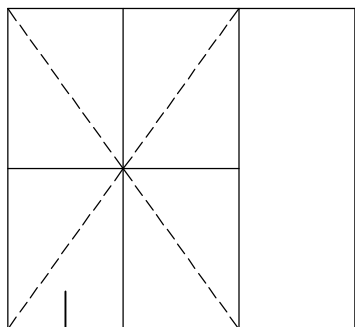
Sezioni 1:1 - Cross sections 1:1



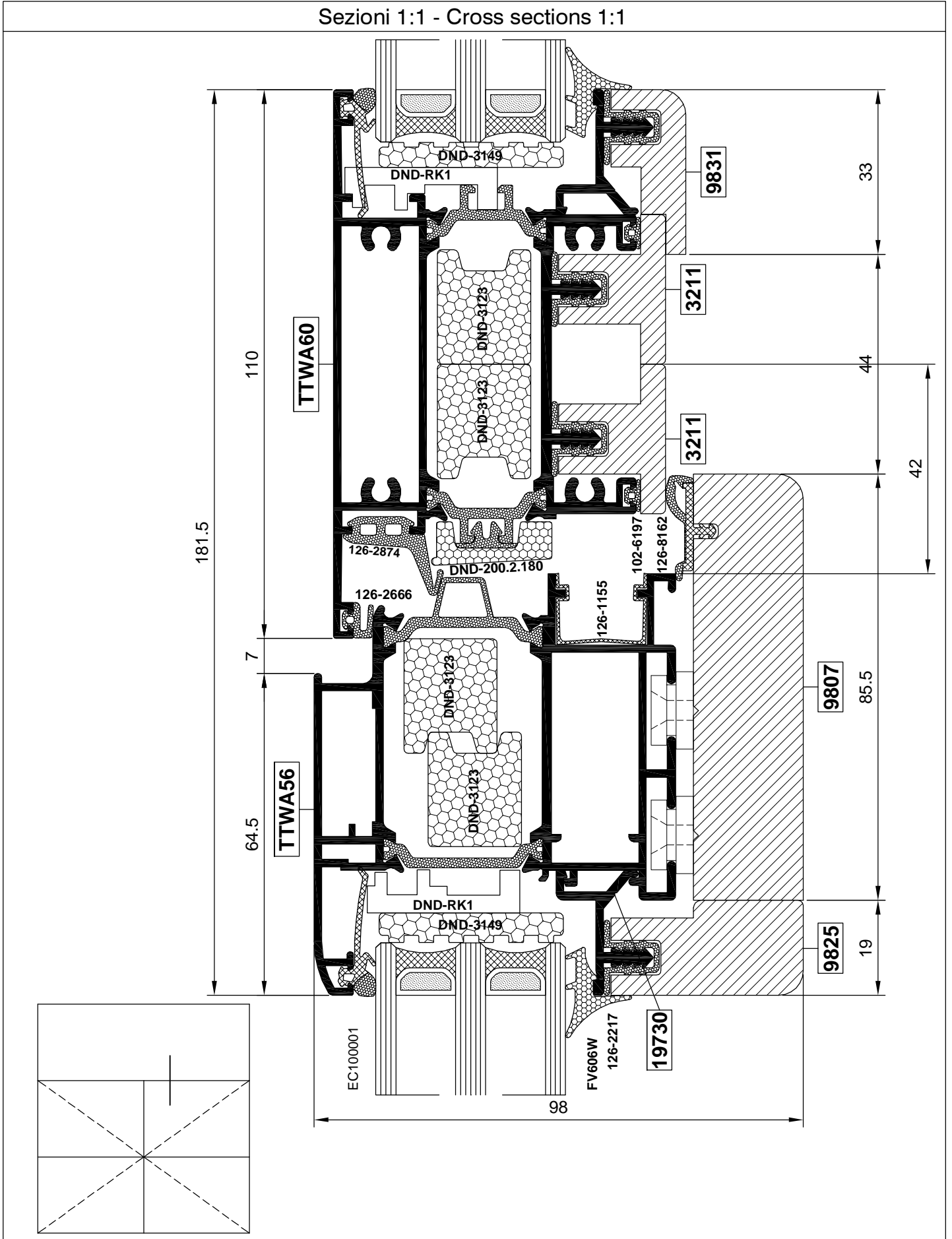
Sezioni 1:1 - Cross sections 1:1



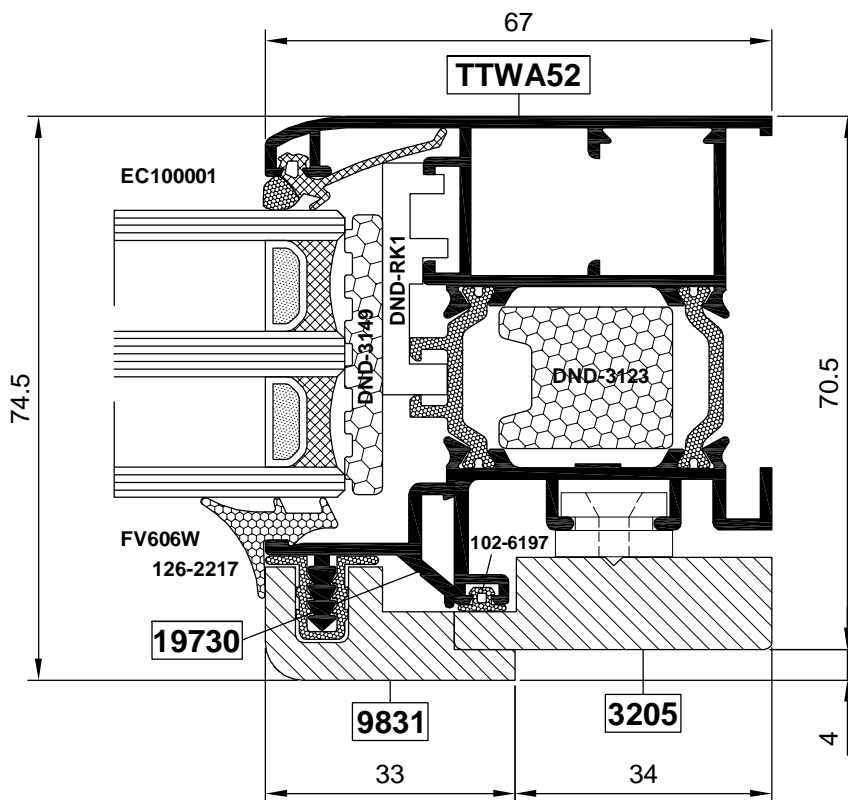
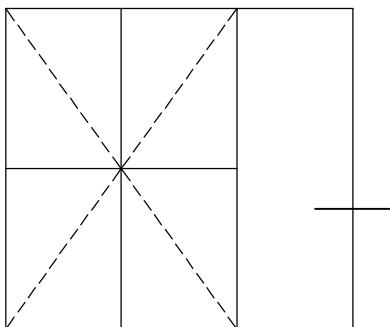
Sezioni 1:1 - Cross sections 1:1



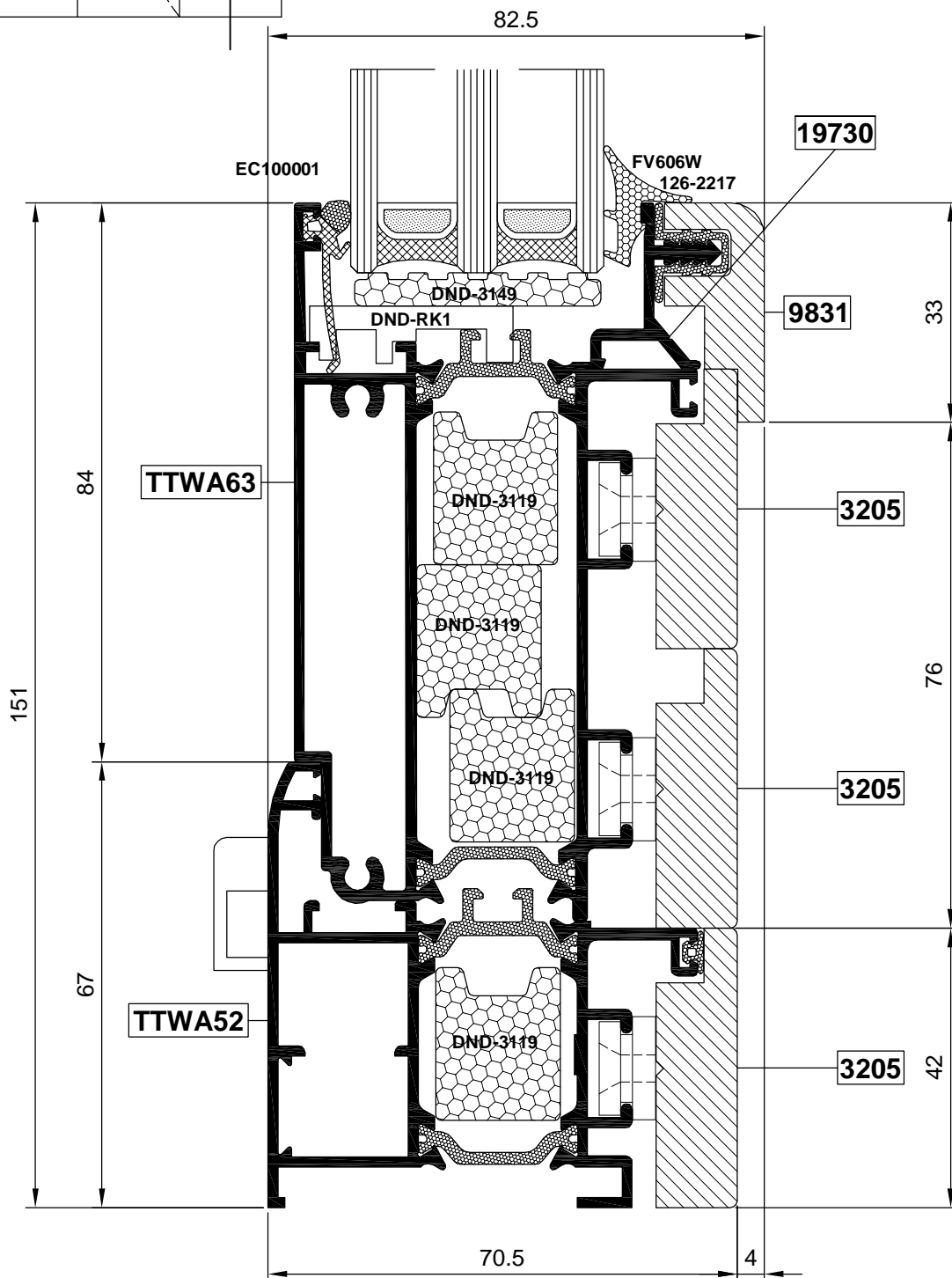
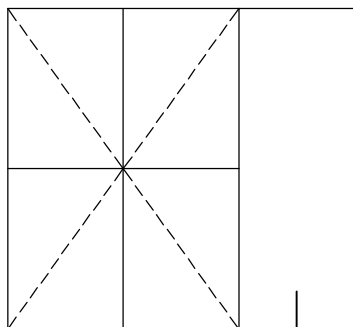
Sezioni 1:1 - Cross sections 1:1



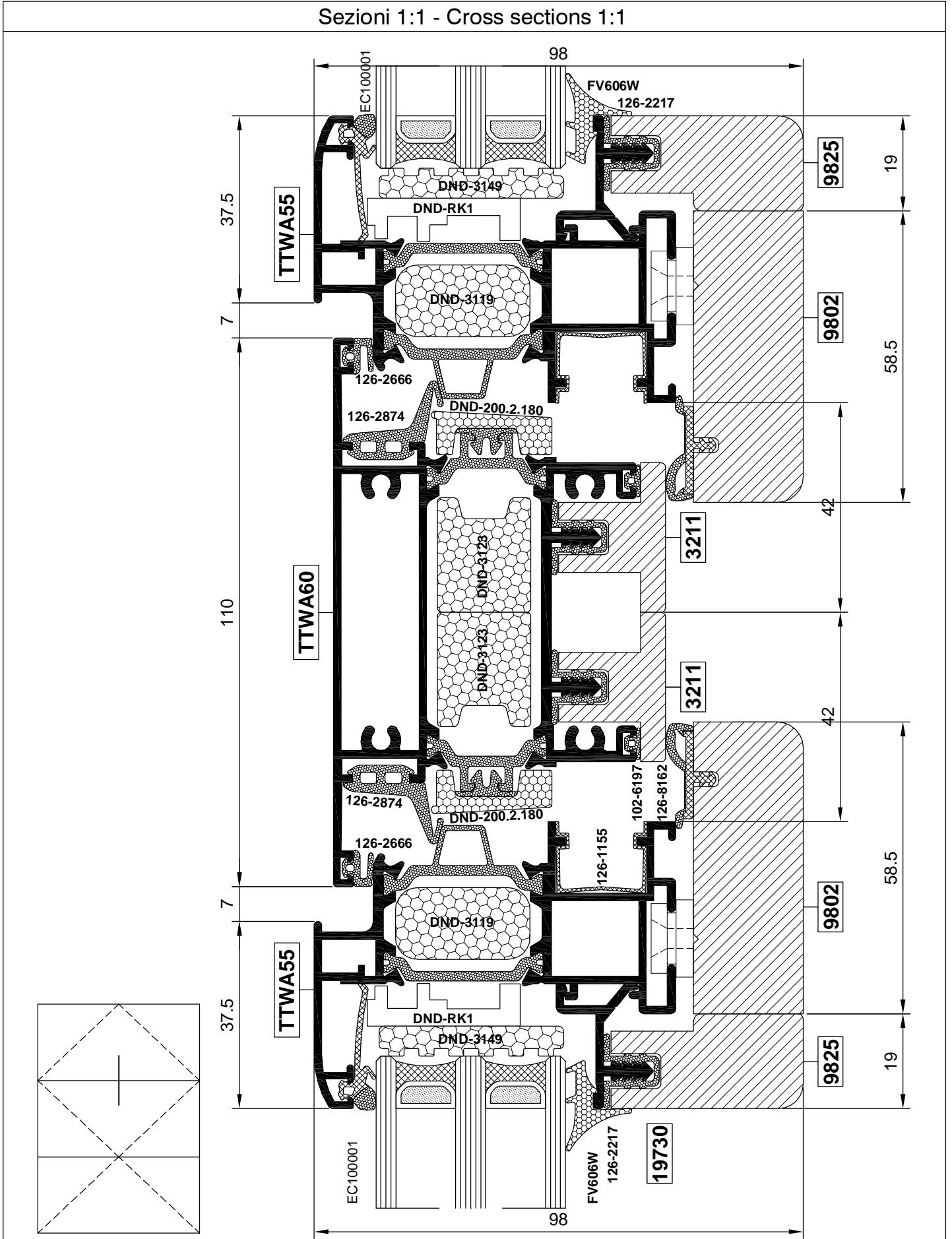
Sezioni 1:1 - Cross sections 1:1



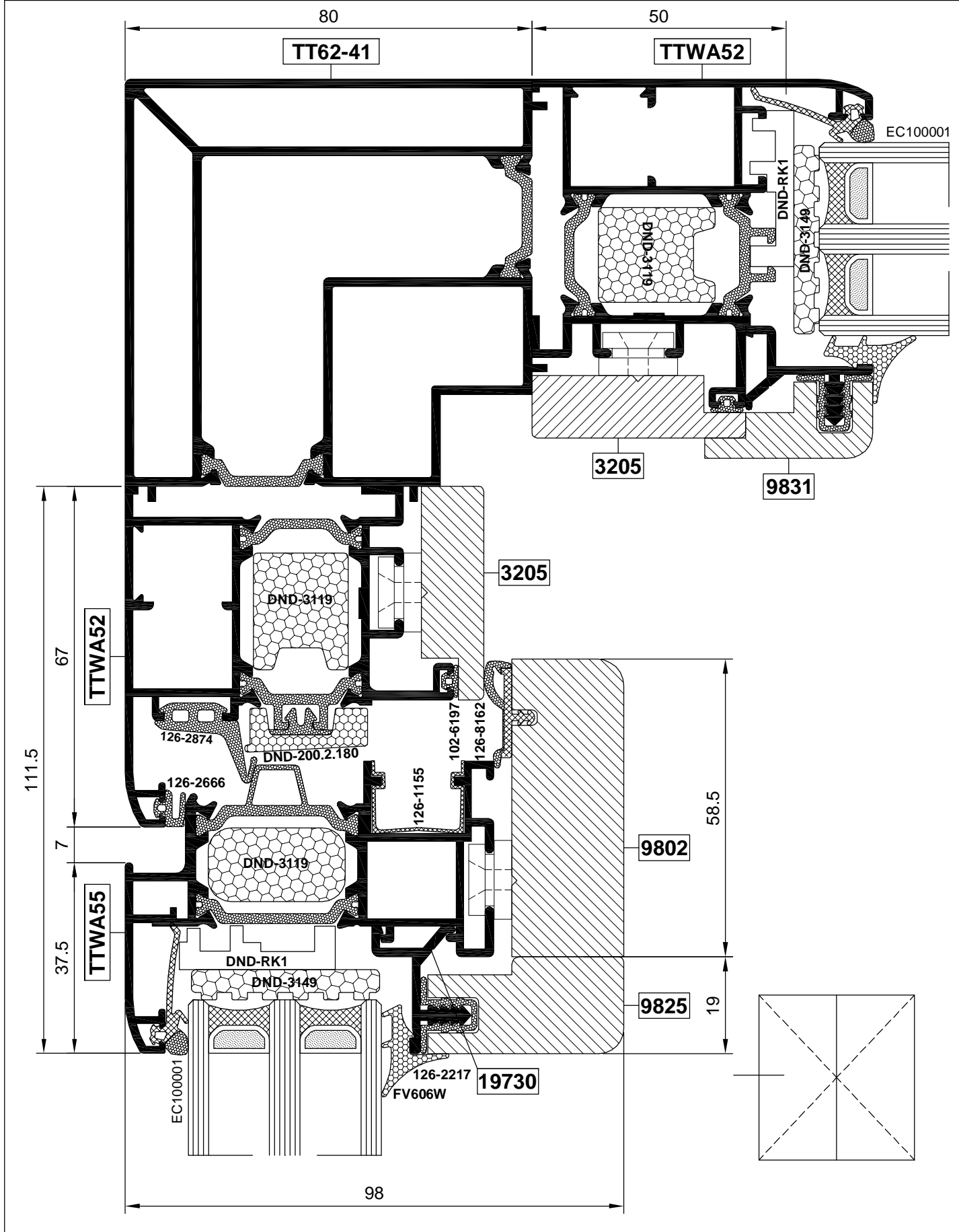
Sezioni 1:1 - Cross sections 1:1



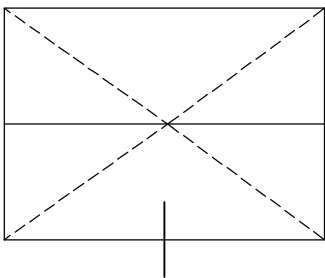
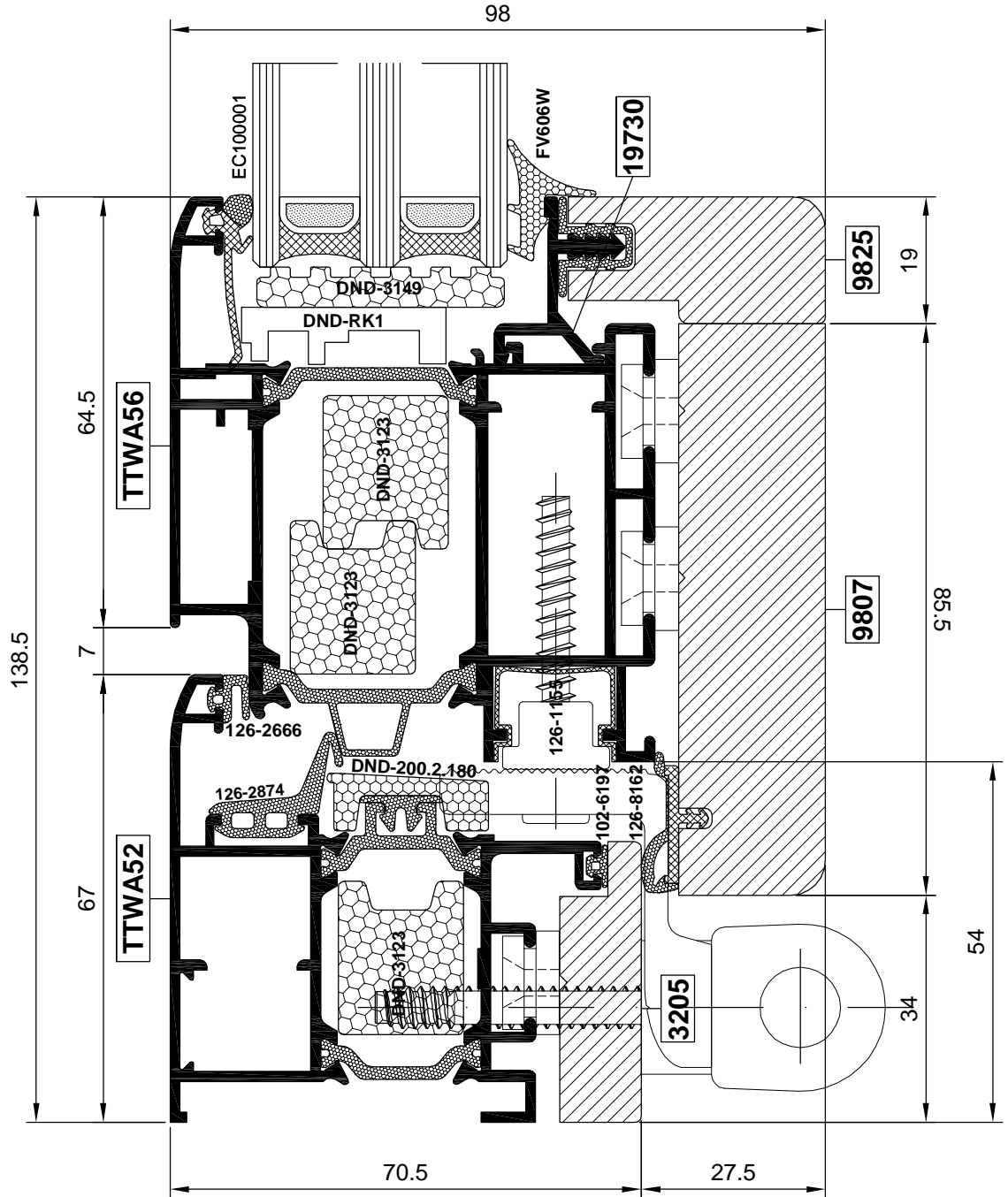
Sezioni 1:1 - Cross sections 1:1



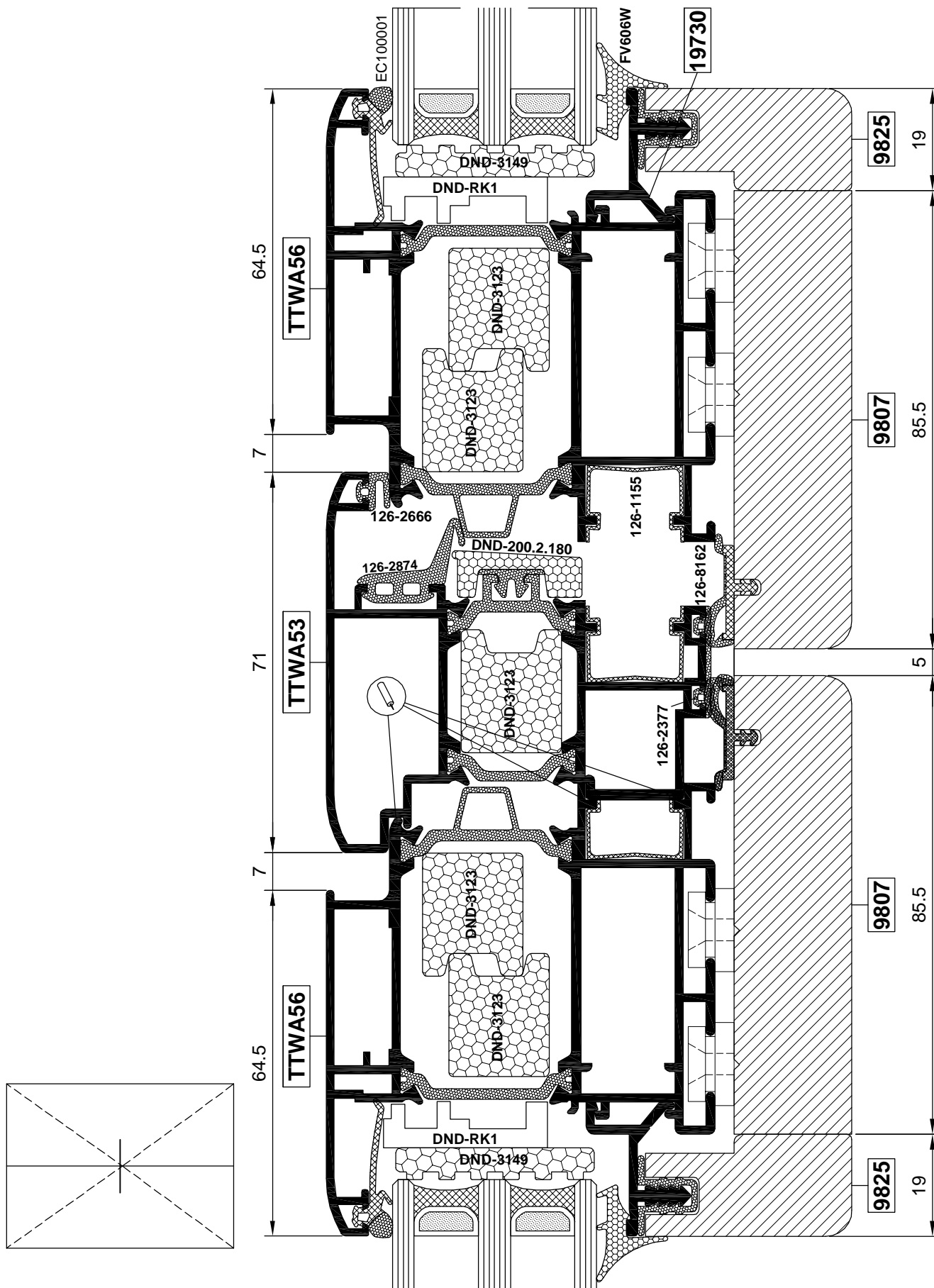
Sezioni 1:1 - Cross sections 1:1



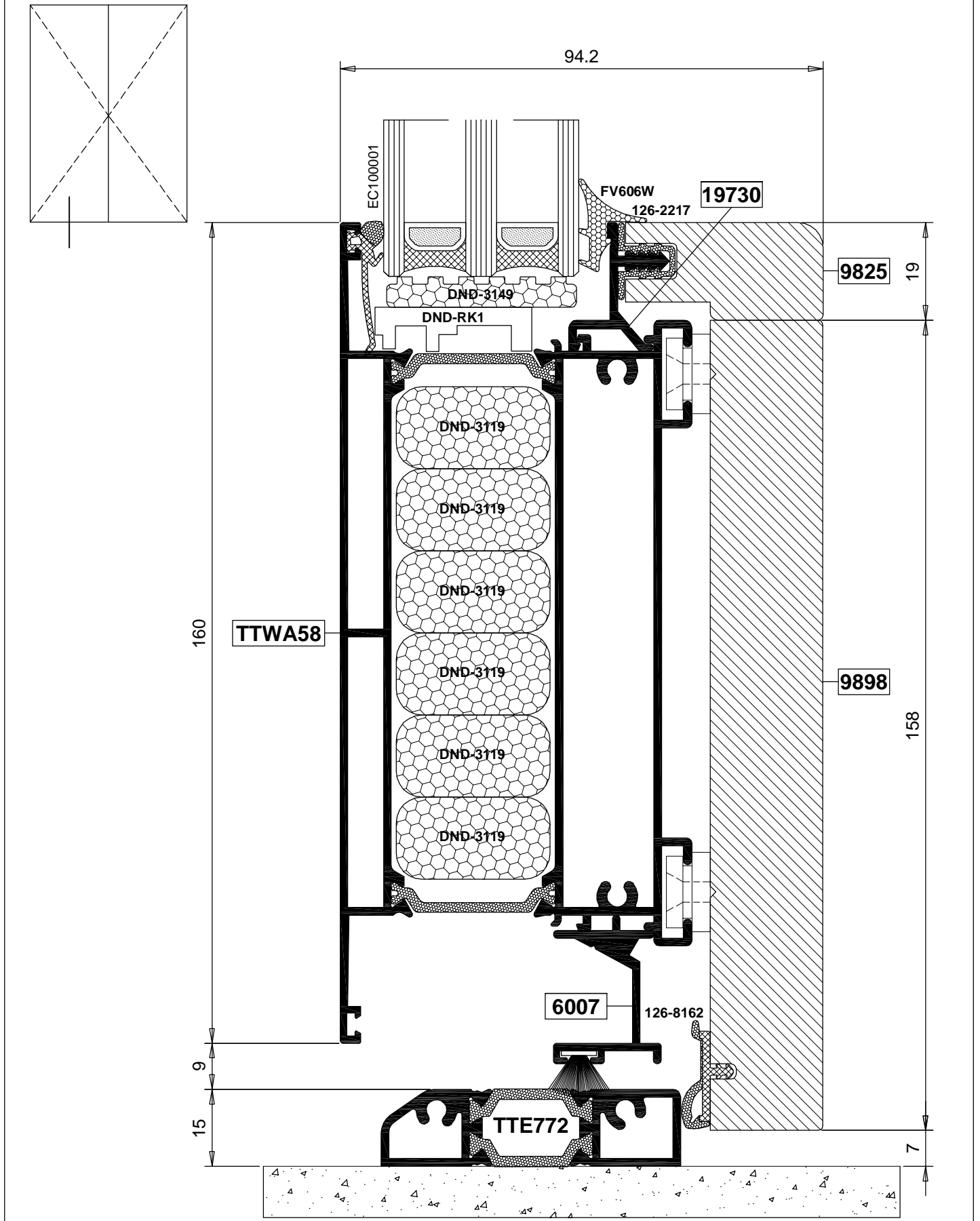
Sezioni 1:1 - Cross sections 1:1

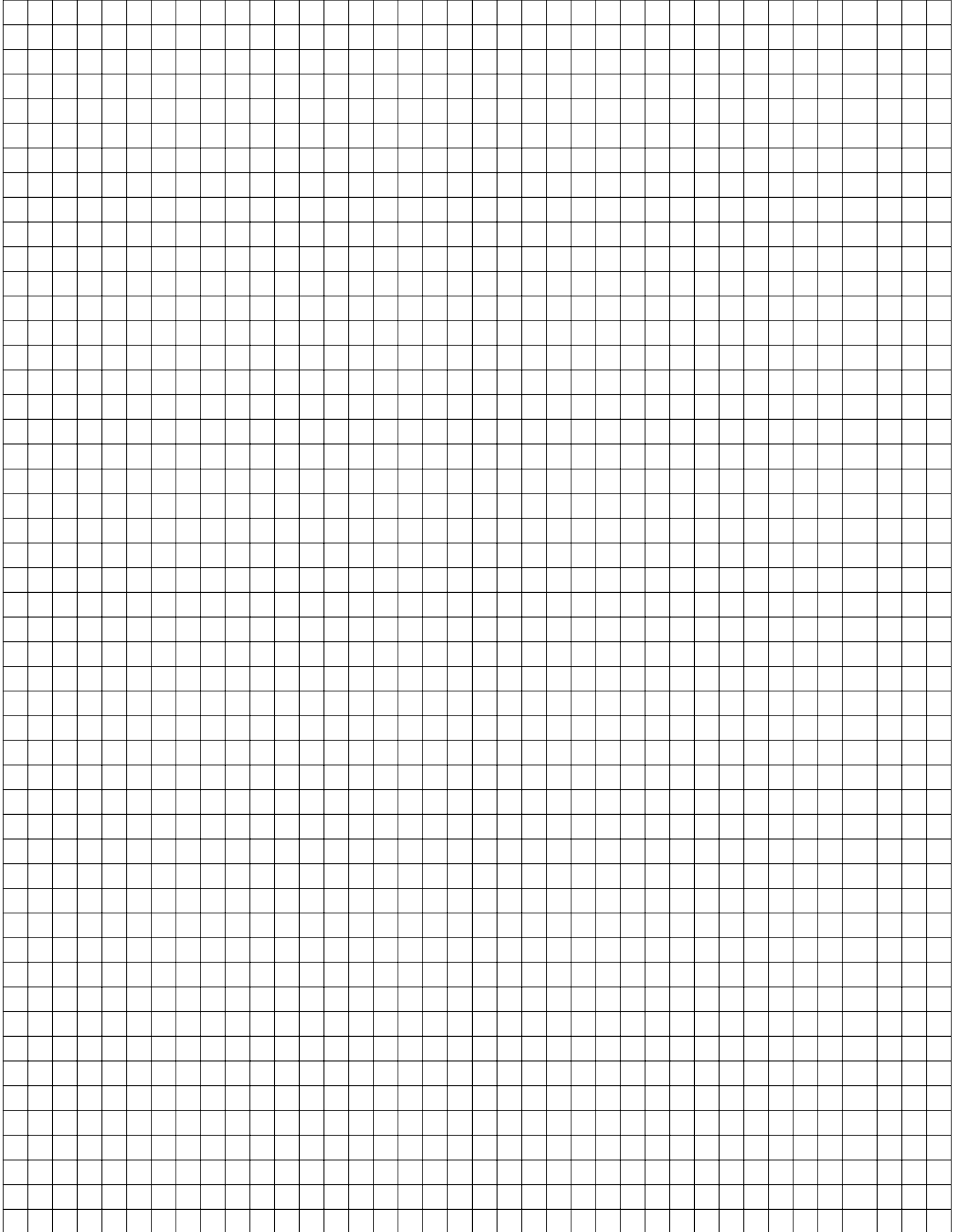


Sezioni 1:1 - Cross sections 1:1



Sezioni 1:1 - Cross sections 1:1



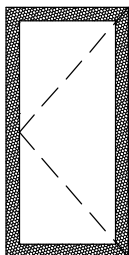


DISTINTE DI TAGLIO



PREPARATIONS

Finestra ad un'anta - One wing casement window



Note:

Notes:

Spessore vetro considerato mm 41

For glass with 41 mm thickness

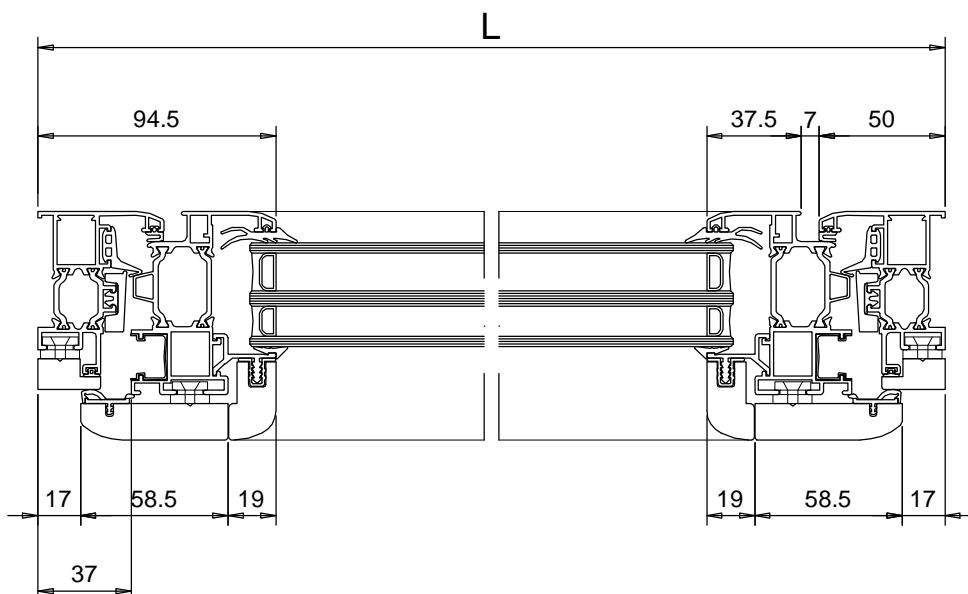
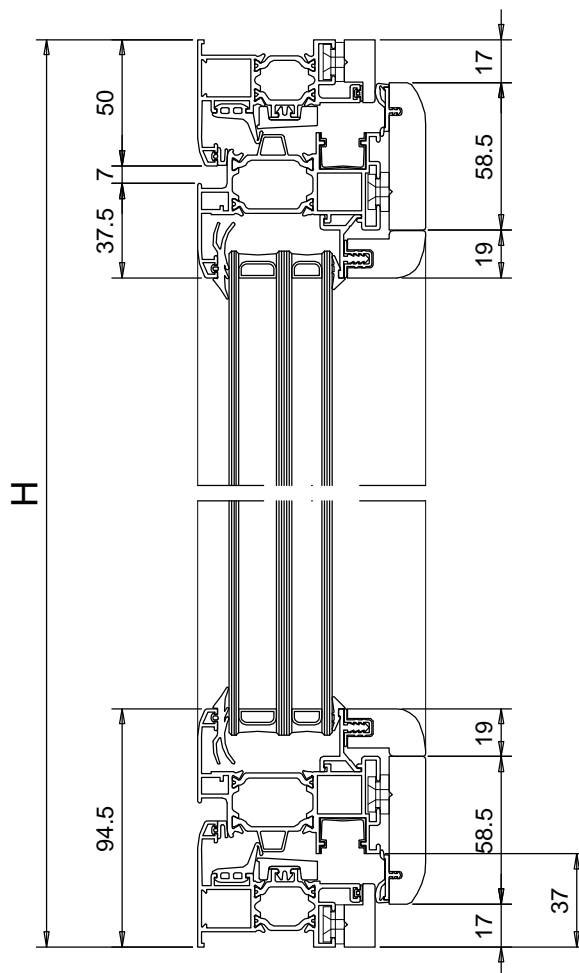
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

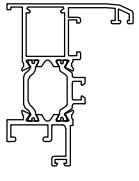


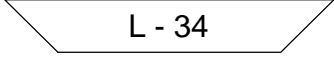
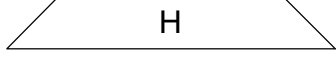
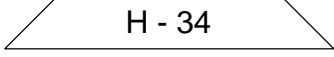

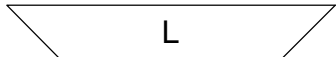
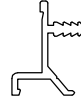
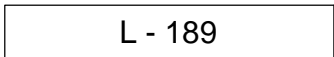
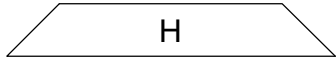
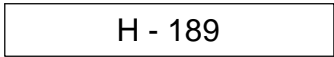
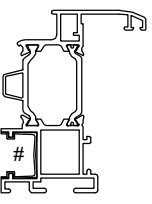
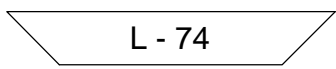

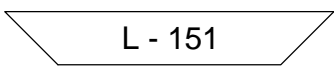
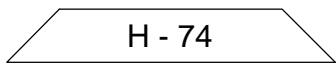
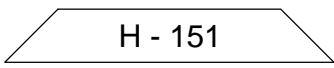
Vetro N° 1 pezzo

Glass N°1 piece

(L-168) (H-168)



Finestra ad un'anta - One wing casement window

Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation	Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation
 TTWA51	2	 L	 3202	2	 L - 34
	2	 H		2	 H - 34
 3200	2	 L	 19730	2	 L - 189
	2	 H		2	 H - 189
 TTWA55 + 126-1155	2	 L - 74	 3225	2	 L - 151
	2	 H - 74		2	 H - 151

#Tagliare separatamente
Separately cutted

**Accessori
Accessories**

Art. Item	Descrizione Description	N°pezzi Pcs
104-RV169	Nottolini assembl. legno Connection clips for al.-wood	1/cm 20
535-090.17	Viti per nottolini Self-tapping screw	1/cm 20
104-600.01	Espansore Adjustable block	7
* 605-0427	Squadretta a scatto Corner joint	8
105-0133	Squadretta a cianfrinare Corner joint	4
105-2004	Squadretta all. interna telaio Internal frame align. corner joint	4
174-1580	Squadretta all. esterna External align. corner joint	8
DND-2431	Rinforzo per cerniera Hinge fastening reinforce	2
100-2328	Drenaggio acqua Water drainage	2

**Accessori
Accessories**

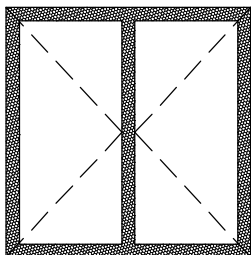
Art. Item	Descrizione Description	N°pezzi Pcs

**Guarnizioni
Gaskets**

Art. Item	Descrizione Description	N°pezzi Pcs
126-6197	Guarnizione distanziatrice Spacing gasket	2L 2H
126-8162	Guarnizione battuta interna Internal rabbet gasket	2L 2H
126-2217	Guarnizione fissaggio legno Gasket for wood fixing	2L 2H
126-2666	Guarnizione di tenuta esterna External seal gasket	2L 2H
126-20088	Guarnizione di vetro esterna External glass beading gasket	2L 2H
126-2800	Guarnizione di vetro interna Internal glass beading gasket	2L 2H
126-2874	Guarnizione di tenuta centrale Central seal gasket	2L 2H
DND-200.2.180	Guarnizione termica Thermal gasket	2L 2H
126-4361	Angolo vulcanizzato Vulcanized angle	N° 4 pz

*Var.squadrette a cianfrinare
Version corner joints locked by crimping

Finestra a due ante - Two wings casement window



Note:

Notes:

Spessore vetro considerato mm 41

For glass with 41 mm thickness

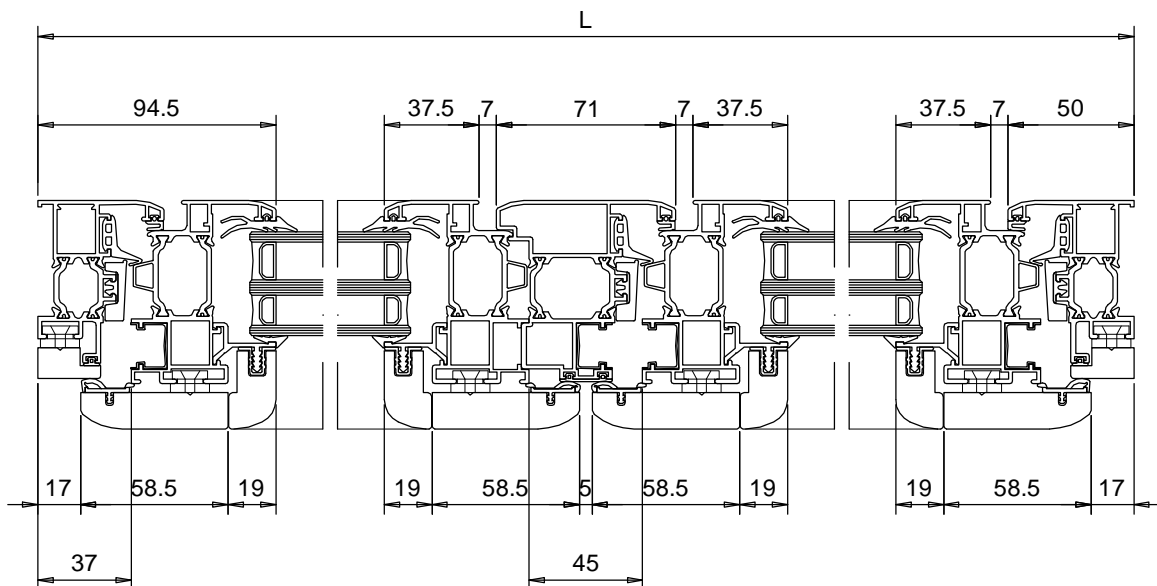
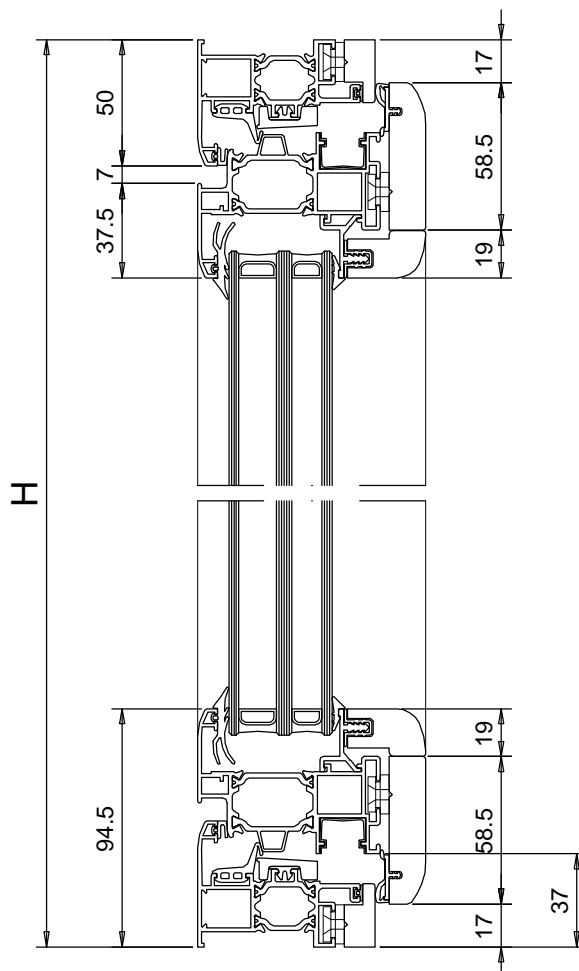
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

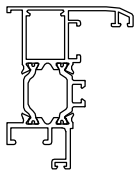
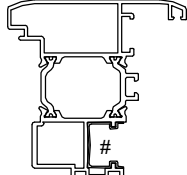

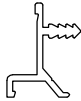
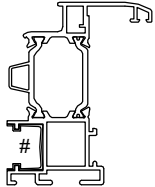
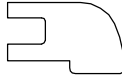
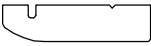
Vetro N° 2 pezzi

Glass N°2 pieces

[(L-307)/2] (H-168)



Finestra a due ante - Two wings casement window

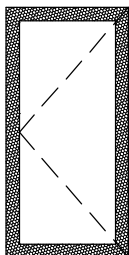
Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation	Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation
 TTWA51	2 2	L H	 TTWA53 + 126-1155	1	H - 114
 3200	2 2	L H	 19730	4 4	(L - 349) / 2 H - 189
 TTWA55 + 126-1155	4 4	(L - 119) / 2 H - 74	 3225	4 4	(L - 273) / 2 H - 151
 3202	4 4	(L - 39) / 2 H - 34			

#Tagliare separatamente
Separately cutted

Accessori Accessories			Accessori Accessories			Guarnizioni Gaskets		
Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs
104-RV169	Nottolini assembl. legno Connection clips for al.-wood	1/cm 20				126-6197	Guarnizione distanziatrice Spacing gasket	2L 2H
535-090.17	Viti per nottolini Self-tapping screw	1/cm 20				126-8162	Guarnizione battuta interna Internal rabbet gasket	2L 4H
104-600.01	Espansore Adjustable block	8				126-2217	Guarnizione fissaggio legno Gasket for wood fixing	2L 4H
* 605-0427	Squadretta a scatto Corner joint	12				126-2377	Guarnizione di finitura riporto centrale Central rabbet profile gasket	1H
105-0133	Squadretta a cianfrinare Corner joint	8				126-2666	Guarnizione di tenuta esterna External seal gasket	2L 3H
105-2004	Squadretta all. interna telaio Internal frame align. corner joint	4				126-20088	Guarnizione di vetro esterna External glass beading gasket	2L 4H
174-1580	Squadretta all. esterna External align. corner joint	12				126-2800	Guarnizione di vetro interna Internal glass beading gasket	2L 4H
DND-2431	Rinforzo per cerniera Hinge fastening reinforce	4				126-2874	Guarnizione di tenuta centrale Central seal gasket	2L 3H
DND-6313	Tappo riporto centrale Seal plug on central profile	1				DND-200.2.180	Guarnizione termica Thermal gasket	2L 3H
100-2328	Drenaggio acqua Water drainage	2				126-4361	Angolo vulcanizzato Vulcanized angle	N° 4 pz

*Var.squadrette a cianfrinare
Version corner joints locked by crimping

Finestra ad un'anta - One wing casement window



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

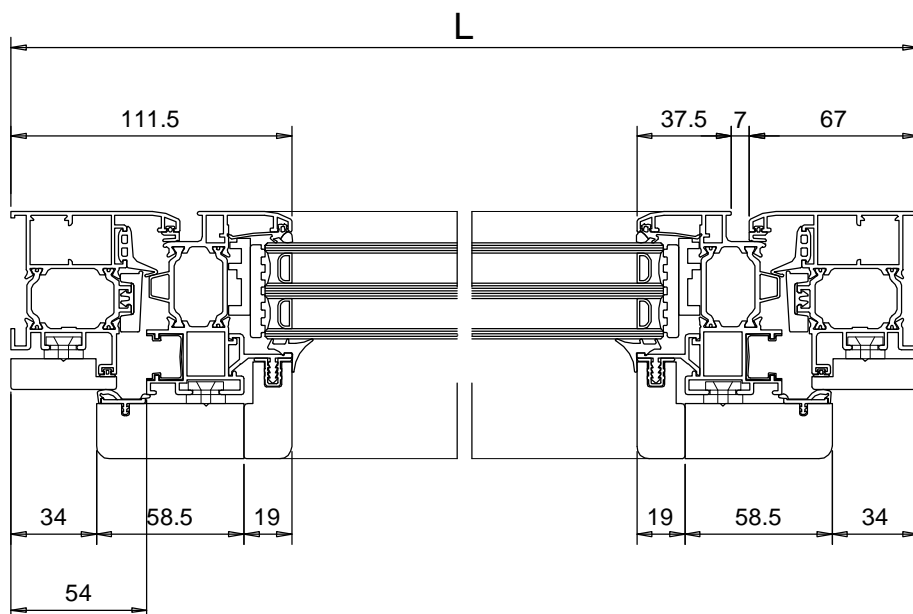
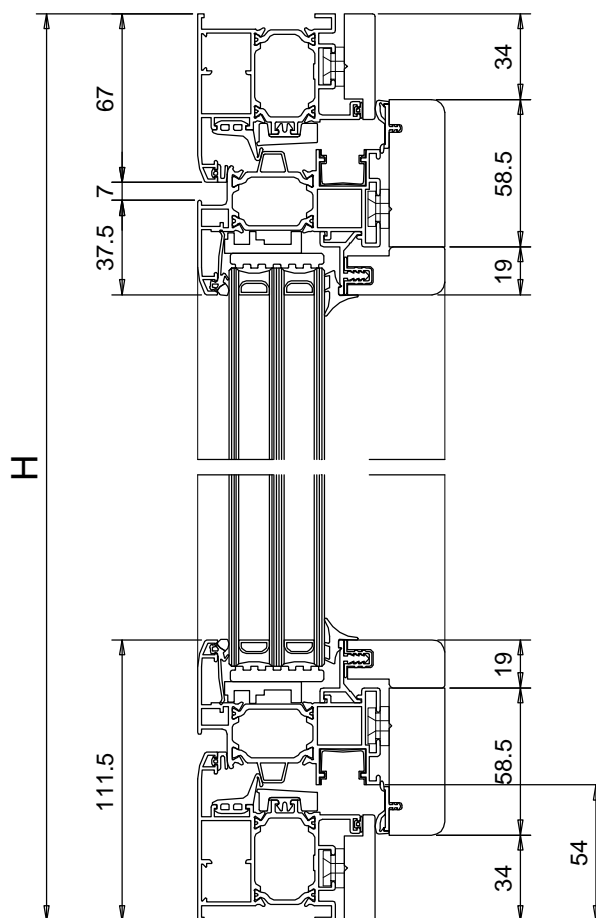
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

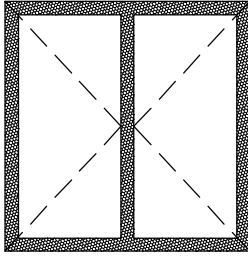
Vetro N° 1 pezzo

Glass N°1 piece

(L-202) (H-202)



Finestra a due ante - Two wings casement window



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

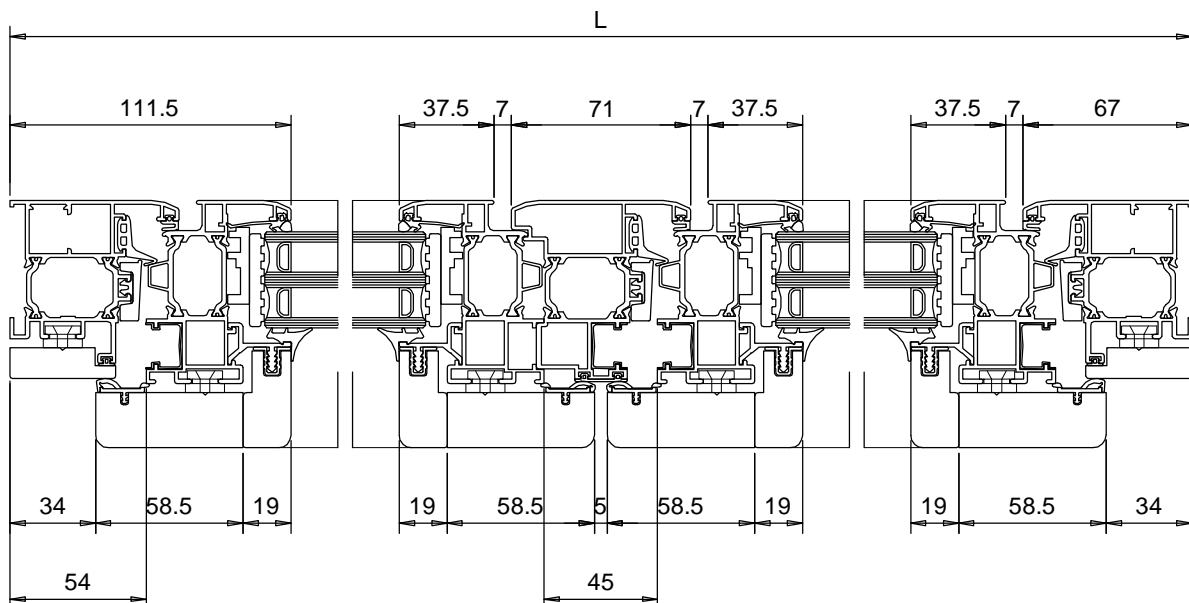
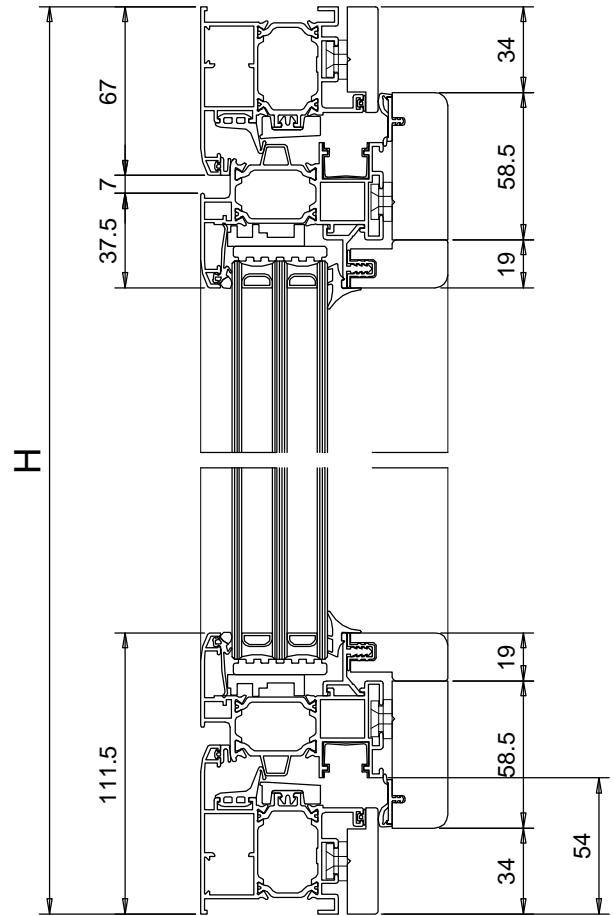
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

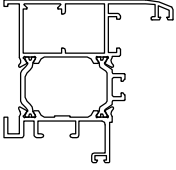
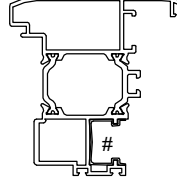
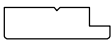
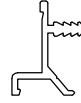
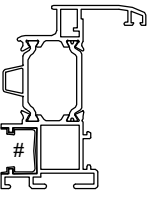
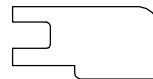

Vetro N° 2 pezzi

Glass N°2 pieces

[(L-341)/2] (H-168)



Finestra a due ante - Two wings casement window

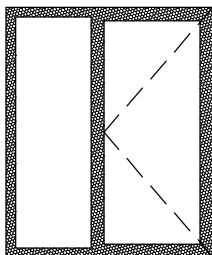
Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation	Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation
 TTWA52	2 2	L H	 TTWA53 + 126-1155	1	H - 148
 3205	2 2	L H	 19730	4 4	(L - 383) / 2 H - 223
 TTWA55 + 126-1155	4 4	(L - 153) / 2 H - 108	 9825	4 4	(L - 307) / 2 H - 185
 9802	4 4	(L - 73) / 2 H - 68			

#Tagliare separatamente
Separately cutted

Accessori Accessories			Accessori Accessories			Guarnizioni Gaskets		
Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs
104-RV169	Nottolini assembl. legno Connection clips for al.-wood	1/cm 20				126-6197	Guarnizione distanziatrice Spacing gasket	2L 2H
535-090.17	Viti per nottolini Self-tapping screw	1/cm 20				126-8162	Guarnizione battuta interna Internal rabbet gasket	2L 4H
104-600.01	Espansore Adjustable block	8				126-2217	Guarnizione fissaggio legno Gasket for wood fixing	2L 4H
* 605-0427	Squadretta a scatto Corner joint	12				126-2377	Guarnizione di finitura riporto centrale Central rabbet profile gasket	1H
105-0133	Squadretta a cianfrinare Corner joint	8				126-2666	Guarnizione di tenuta esterna External seal gasket	2L 3H
105-2004	Squadretta all. interna telaio Internal frame align. corner joint	4				EC100001	Guarnizione di vetro esterna External glass beading gasket	2L 4H
174-1580	Squadretta all. esterna External align. corner joint	12				FV606W	Guarnizione di vetro interna Internal glass beading gasket	2L 4H
DND-2431	Rinforzo per cerniera Hinge fastening reinforce	4				126-2874	Guarnizione di tenuta centrale Central seal gasket	2L 3H
DND-6313	Tappo riporto centrale Seal plug on central profile	1				DND-200.2.180	Guarnizione termica Thermal gasket	2L 3H
100-2328	Drenaggio acqua Water drainage	2				126-4361	Angolo vulcanizzato Vulcanized angle	N° 4 pz

*Var.squadrette a cianfrinare
Version corner joints locked by crimping

Finestra ad un'anta+ fisso - One wing casement window + fixed frame



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

Gioco perimetrale tra profilo e vetro mm 8,5 minimo

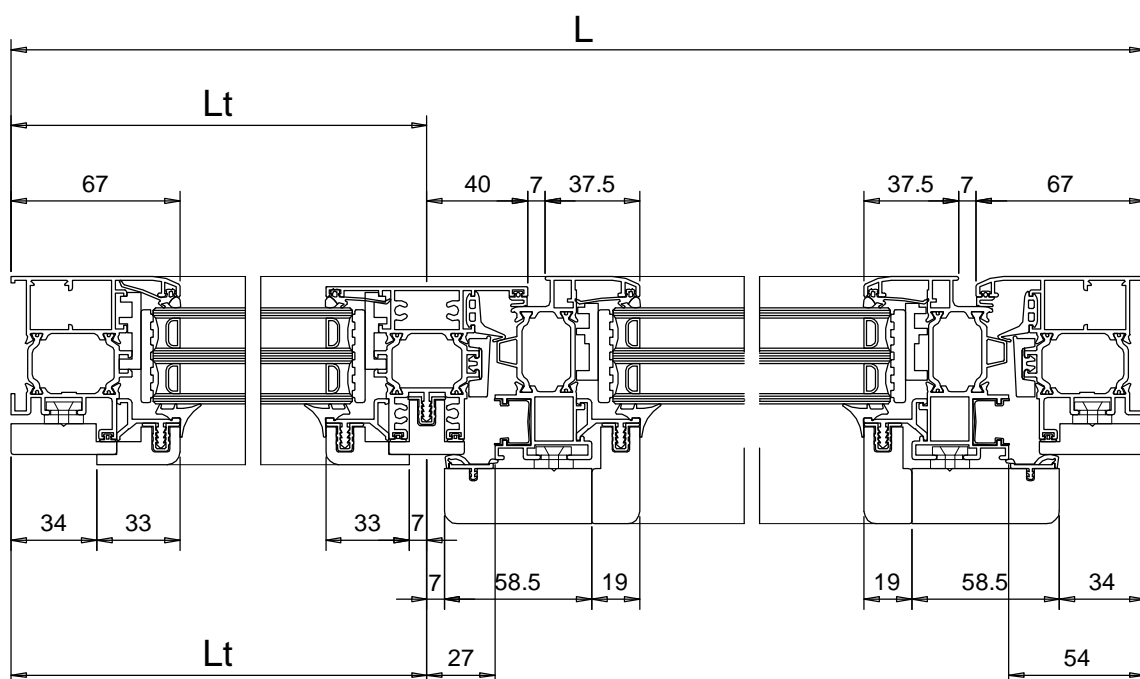
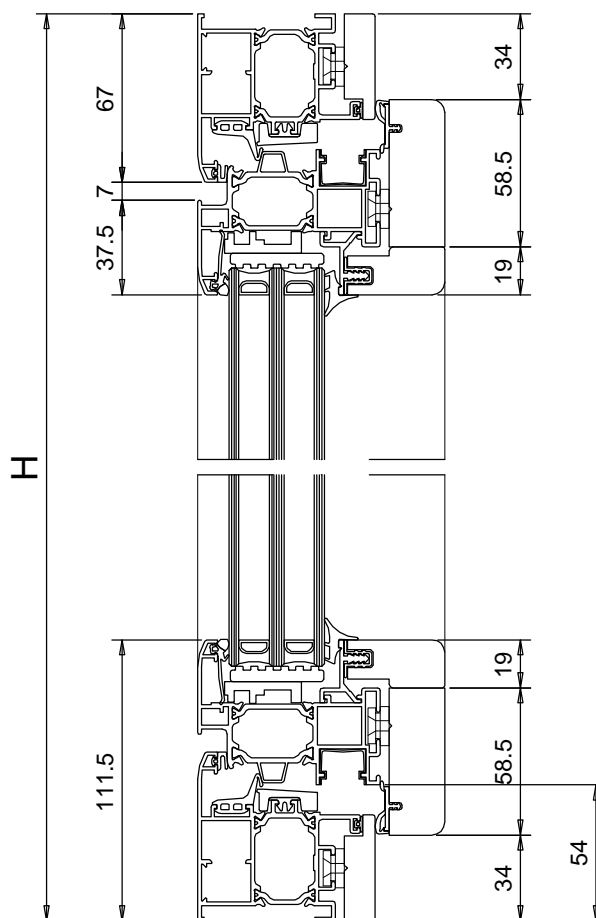
Space between glass and profile 8,5 mm minimum

Vetro N° 1 pezzo per anta

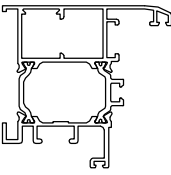


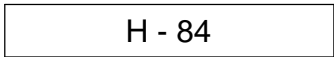
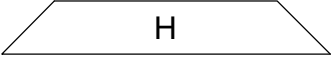
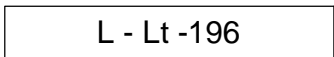
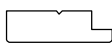
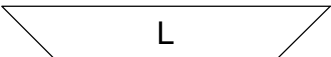
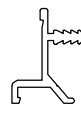
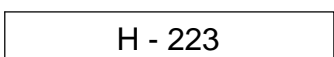
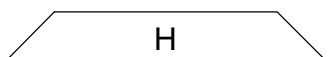
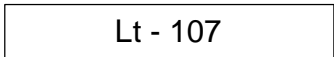
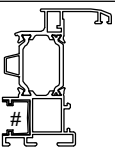
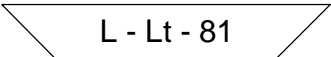
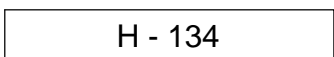
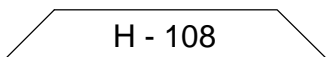
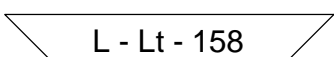

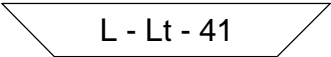
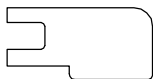
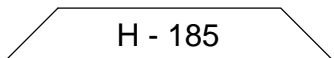
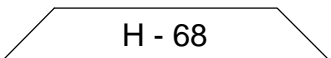
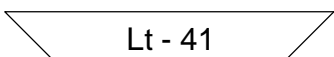
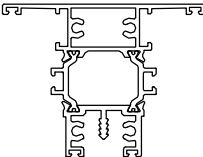
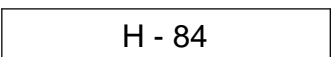
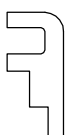
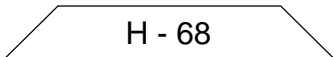
Glass N°1 piece for wing (L-Lt-175) (H-202)

Vetro N° 1 pezzo per fisso

Glass N°1 piece for fixed frame (Lt-86) (H-113)



Finestra ad un'anta + fisso - One wing casement window + fixed frame

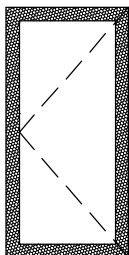
Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation	Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation
 TTWA52	2		 3211	1	
	2			2	
 3205	2		 19730	2	
	2			2	
 TTWA55 + 126-1155	2			2	
	2			2	
 9802	2		 9825	2	
	2			2	
 TTWA54	1		 9831	2	

#Tagliare separatamente
Separately cutted

Accessori Accessories			Accessori Accessories			Guarnizioni Gaskets		
Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs
104-RV169	Nottolini assembl. legno Connection clips for al.-wood	1/cm 20				126-6197	Guarnizione distanziatrice Spacing gasket	2L 2H
535-090.17	Viti per nottolini Self-tapping screw	1/cm 20				126-8162	Guarnizione battuta interna Internal rabbet gasket	2(L-Lt) 2H
104-600.01	Espansore Adjustable block	7				126-2217	Guarnizione fissaggio legno Gasket for wood fixing	2L 5H
* 605-0427	Squadretta a scatto Corner joint	8				126-2666	Guarnizione di tenuta esterna External seal gasket	2(L-Lt) 2H
105-0133	Squadretta a cianfrinare Corner joint	4				EC100001	Guarnizione di vetro esterna External glass beading gasket	2L 4H
105-2004	Squadretta all. interna telaio Internal frame align. corner joint	4				FV606W	Guarnizione di vetro interna Internal glass beading gasket	2L 4H
174-1580	Squadretta all. esterna External align. corner joint	8				126-2874	Guarnizione di tenuta centrale Central seal gasket	2(L-Lt) 2H
DND-2431	Rinforzo per cerniera Hinge fastening reinforce	2				DND-200.2.180	Guarnizione termica Thermal gasket	2(L-Lt) 2H
100-2328	Drenaggio acqua Water drainage	2				126-4361	Angolo vulcanizzato Vulcanized angle	N° 4 pz

*Var.squadrette a cianfrinare
Version corner joints locked by crimping

Finestra ad un'anta - One wing casement window



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

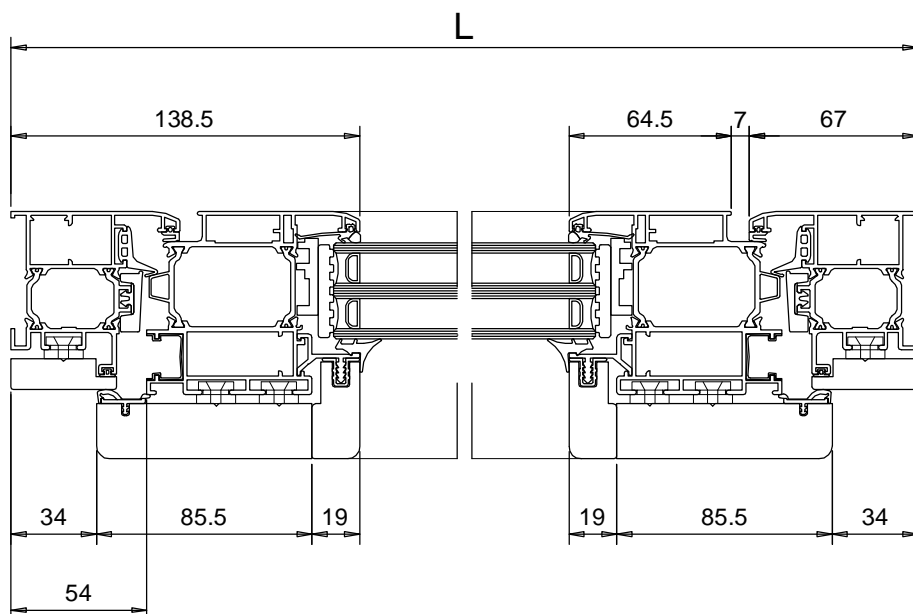
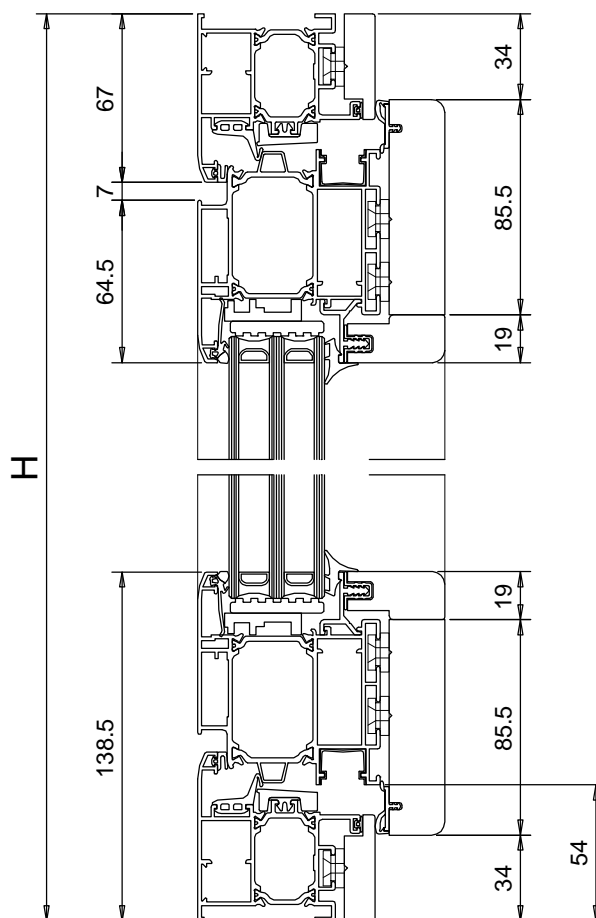
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

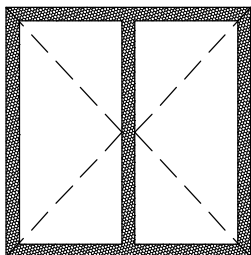
Vetro N° 1 pezzo

Glass N°1 piece

(L-256) (H-256)



Finestra a due ante - Two wings casement window



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

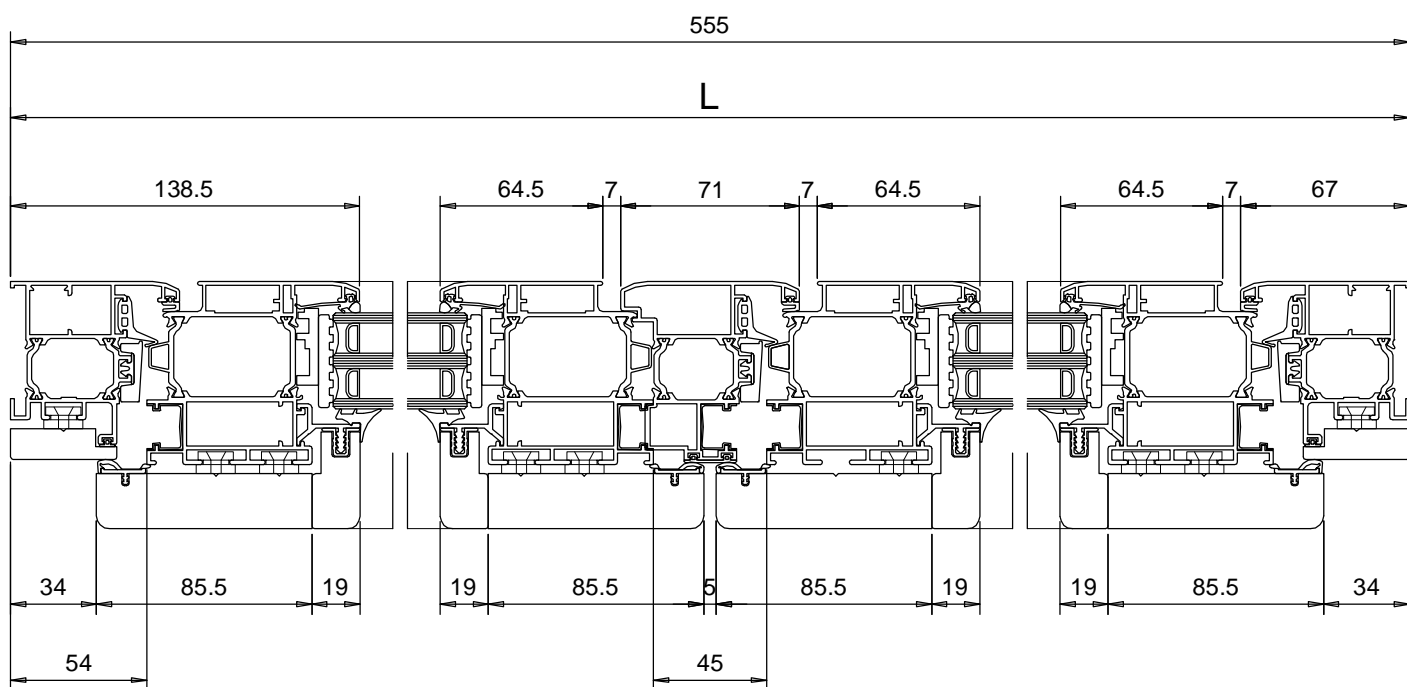
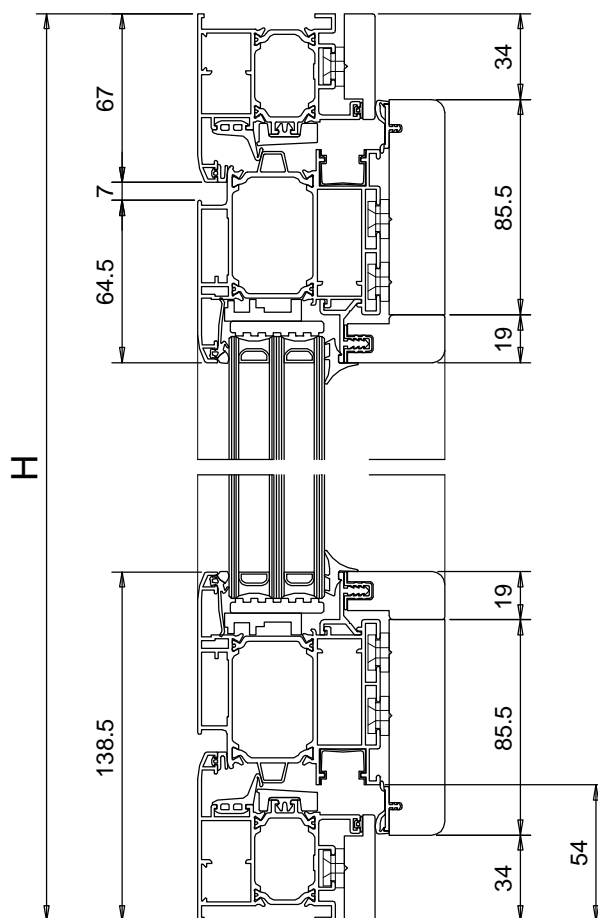
Gioco perimetrale tra profilo e vetro mm 8,5 minimo

Space between glass and profile 8,5 mm minimum

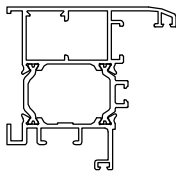
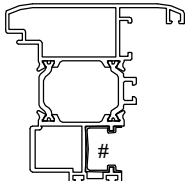
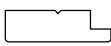
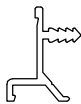
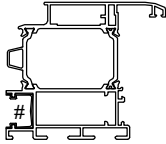
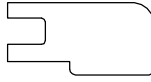
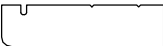
Vetro N° 2 pezzi

Glass N°2 pieces

[(L-449)/2] (H-256)



Finestra a due ante - Two wings casement window

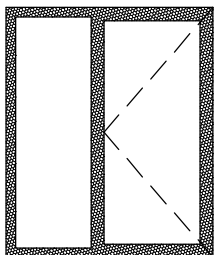
Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation	Profilo Profile	N° Pezzi Pcs	Schema di taglio Preparation
 TTWA52	2 2	L H	 TTWA53 + 126-1155	1	H - 148
 3205	2 2	L H	 19730	4 4	(L - 491) / 2 H - 223
 TTWA56 + 126-1155	4 4	(L - 153) / 2 H - 108	 9825	4 4	(L - 415) / 2 H - 185
 9807	4 4	(L - 73) / 2 H - 68			

#Tagliare separatamente
Separately cutted

Accessori Accessories			Accessori Accessories			Guarnizioni Gaskets		
Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs	Art. Item	Descrizione Description	N°pezzi Pcs
104-RV169	Nottolini assembl. legno Connection clips for al.-wood	1/cm 20	100-2328	Drenaggio acqua Water drainage	2	126-6197	Guarnizione distanziatrice Spacing gasket	2L 2H
535-090.17	Viti per nottolini Self-tapping screw	1/cm 20				126-8162	Guarnizione battuta interna Internal rabbet gasket	2L 4H
104-600.01	Espansore Adjustable block	8				126-2217	Guarnizione fissaggio legno Gasket for wood fixing	2L 4H
* 605-0427	Squadretta a scatto Corner joint	4				126-2377	Guarnizione di finitura riporto centrale Central rabbet profile gasket	1H
130-00A5	Squadretta ad avvitare Corner joint	8				126-2666	Guarnizione di tenuta esterna External seal gasket	2L 3H
105-0148	Squadretta a cianfrinare Corner joint	8				EC100001	Guarnizione di vetro esterna External glass beading gasket	2L 4H
105-2004	Squadretta all. interna telaio Internal frame align. corner joint	4				FV606W	Guarnizione di vetro interna Internal glass beading gasket	2L 4H
174-1580	Squadretta all. esterna External align. corner joint	12				126-2874	Guarnizione di tenuta centrale Central seal gasket	2L 3H
DND-2431	Rinforzo per cerniera Hinge fastening reinforce	4				DND-200.2.180	Guarnizione termica Thermal gasket	2L 3H
DND-6313	Tappo riporto centrale Seal plug on central profile	1				126-4361	Angolo vulcanizzato Vulcanized angle	N° 4 pz

*Var.squadrette a cianfrinare
Version corner joints locked by crimping

Finestra ad un'anta + fisso - One wing casement window + fixed frame



Note:

Notes:

Spessore vetro considerato mm 38

For glass with 38 mm thickness

Gioco perimetrale tra profilo e vetro mm 8,5 minimo

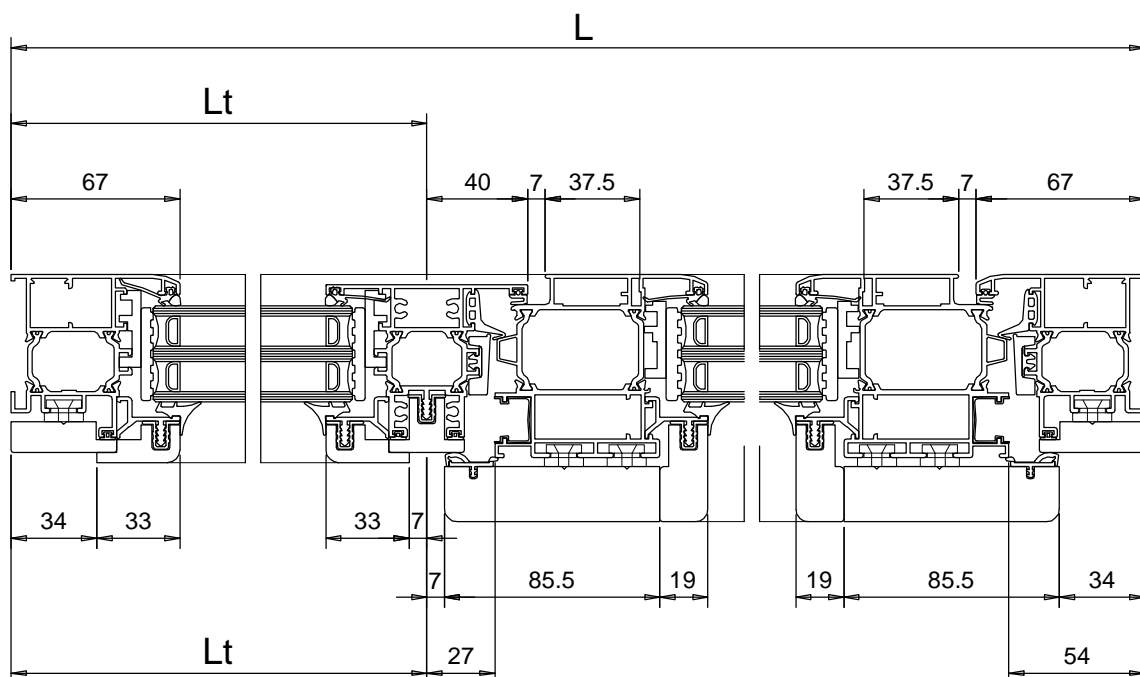
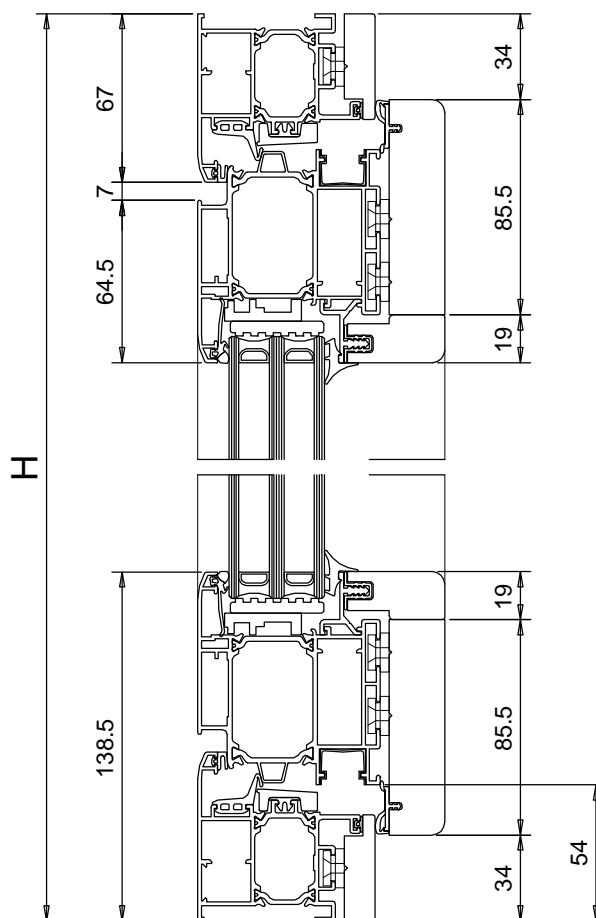
Space between glass and profile 8,5 mm minimum

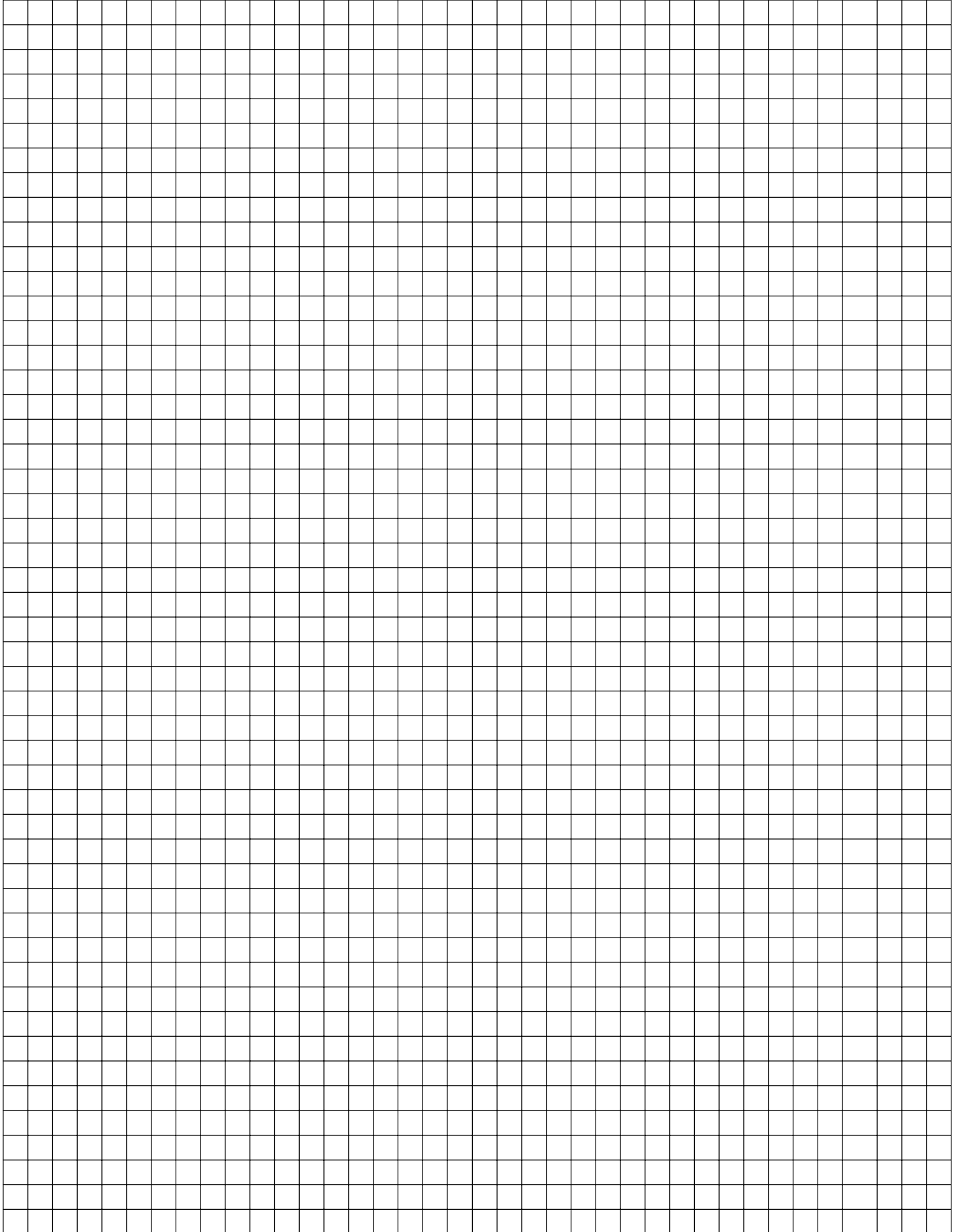
Vetro N° 1 pezzo per anta

Glass N°1 piece for wing
(Lt-Lt-229) (H-256)

Vetro N° 1 pezzo per fisso

Glass N°1 piece for fixed frame
(Lt-86) (H-113)



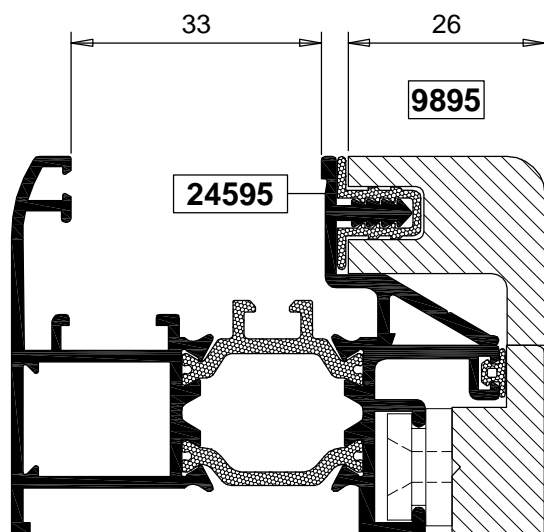


VETRAZIONI



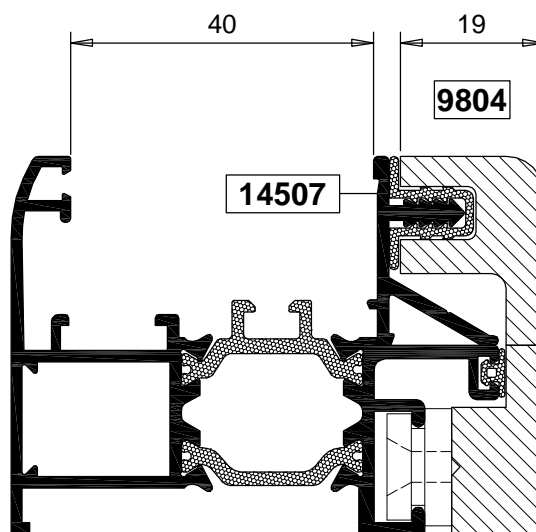
GLAZING

Schema vetratura telaio - Fixed frame glazing diagram



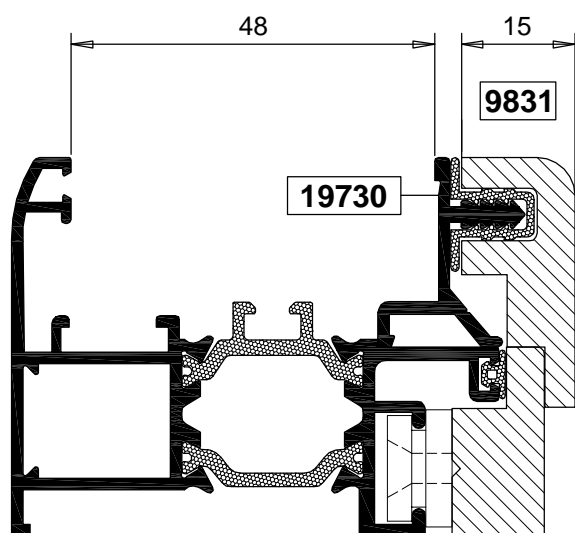
TTWA51

3200



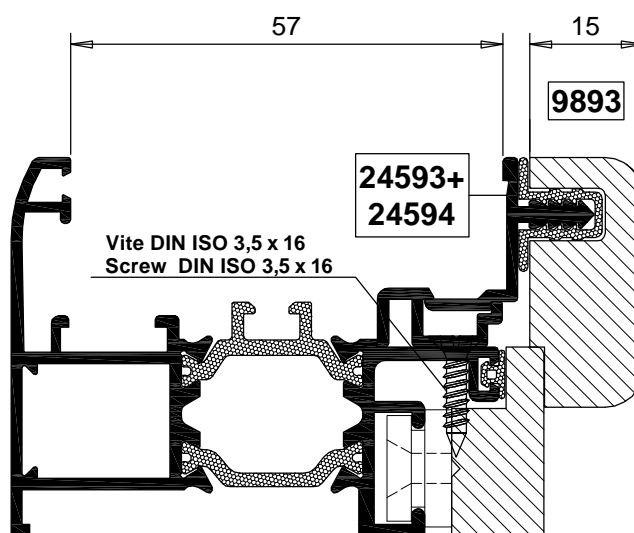
TTWA51

3200



TTWA51

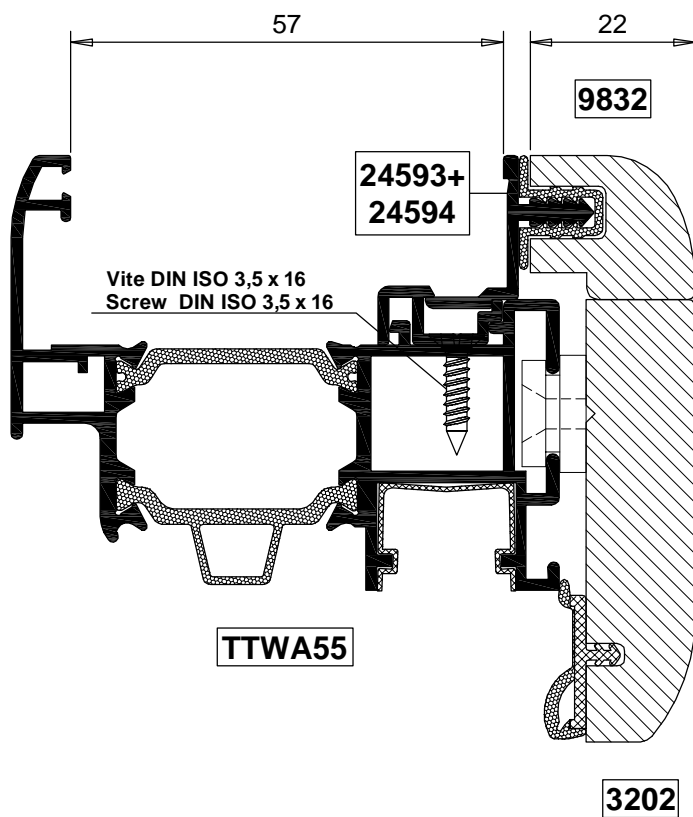
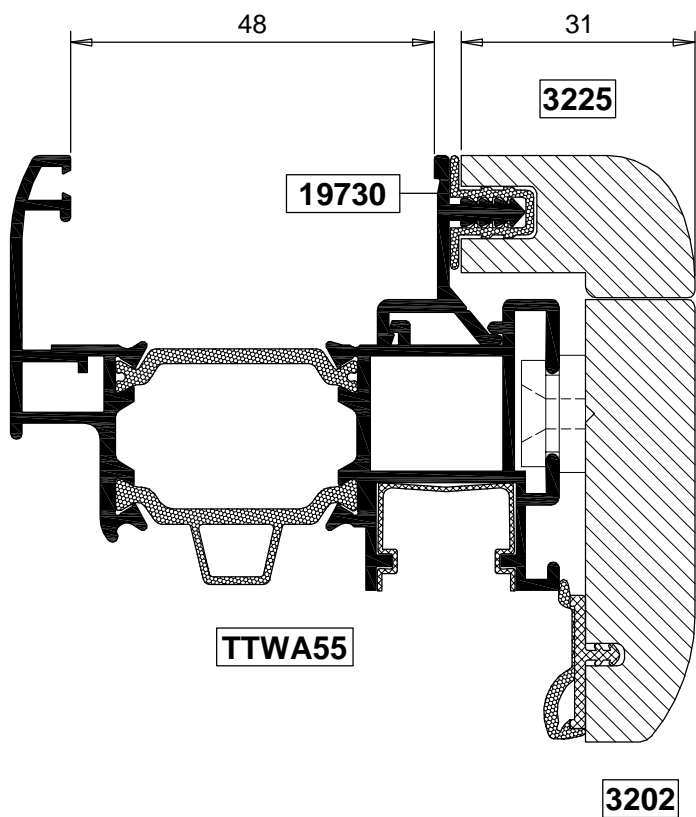
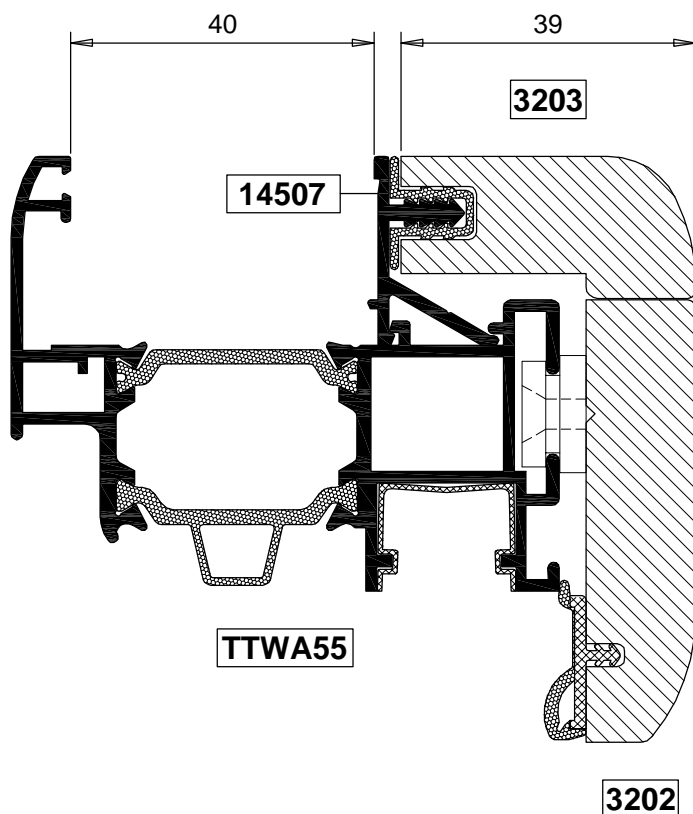
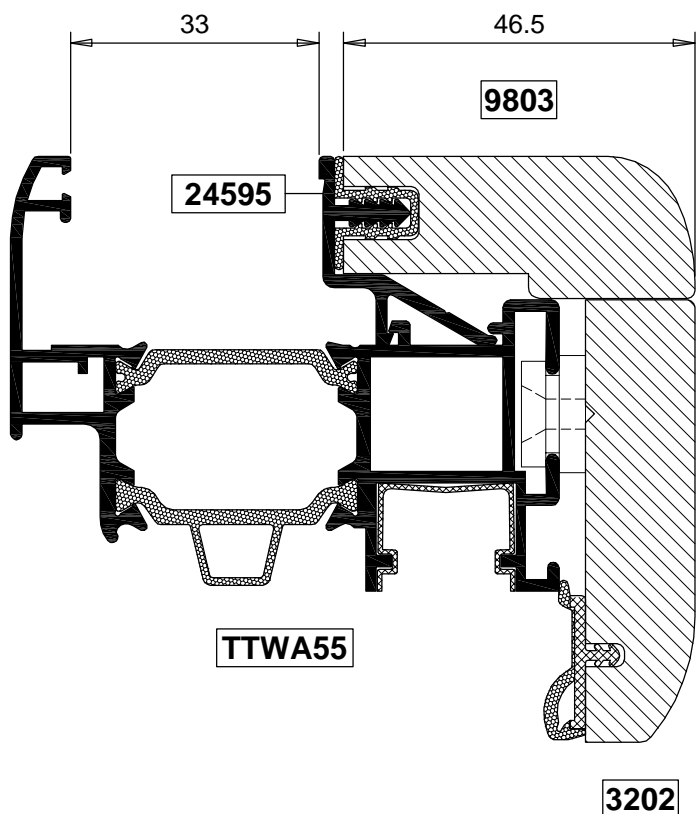
3200



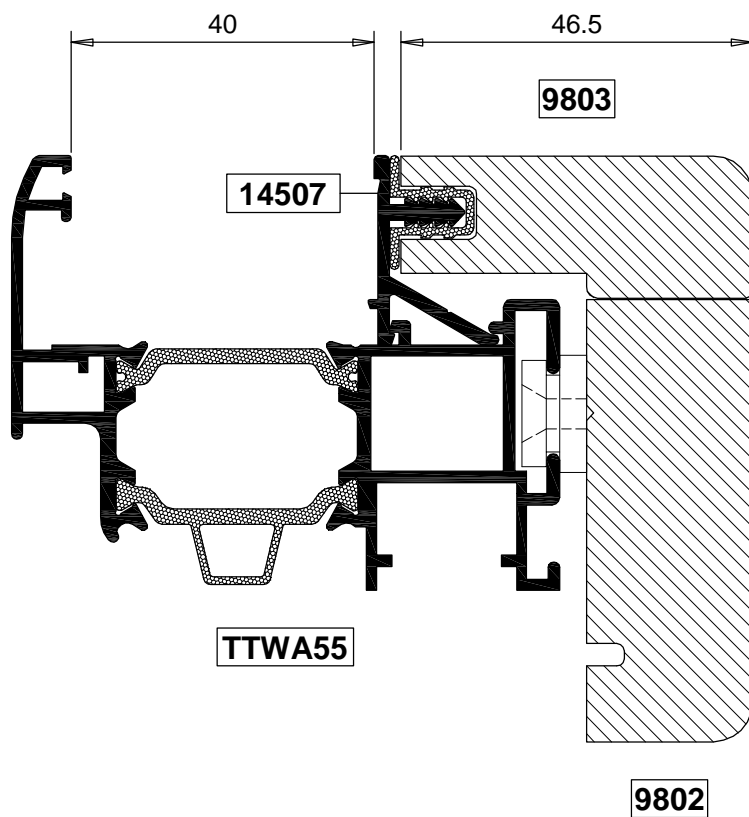
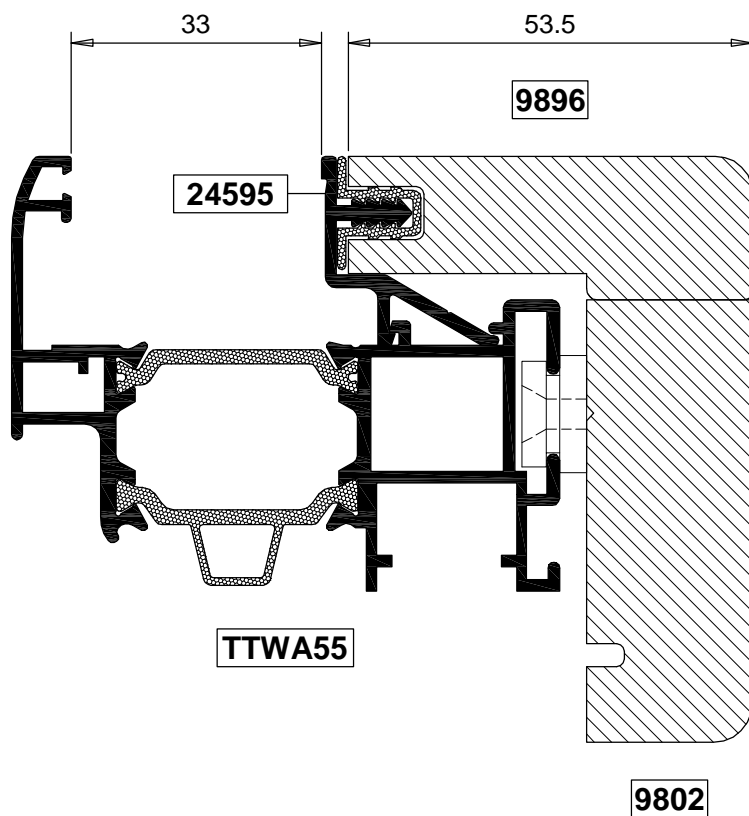
TTWA51

3200

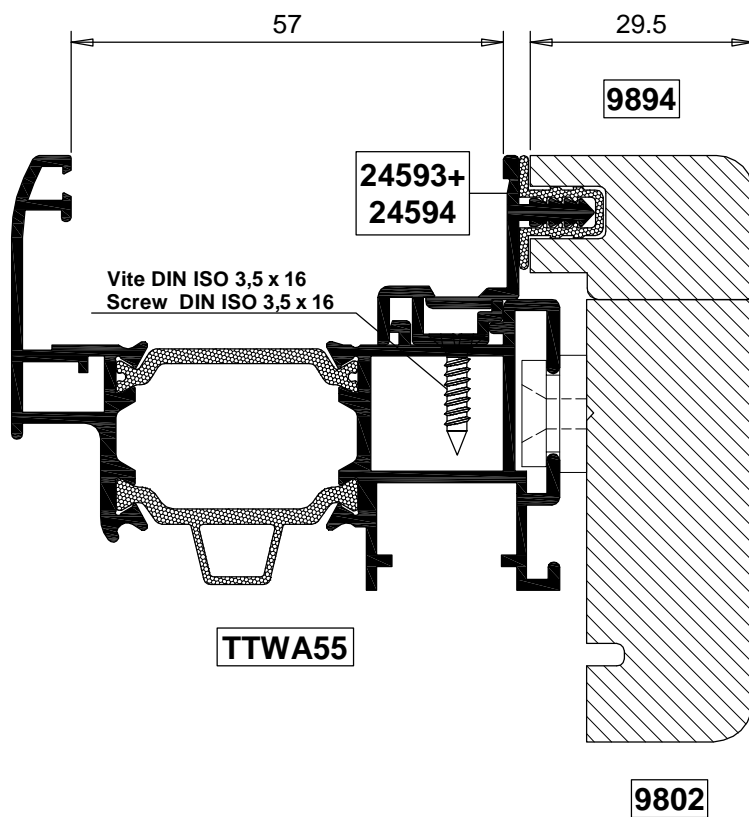
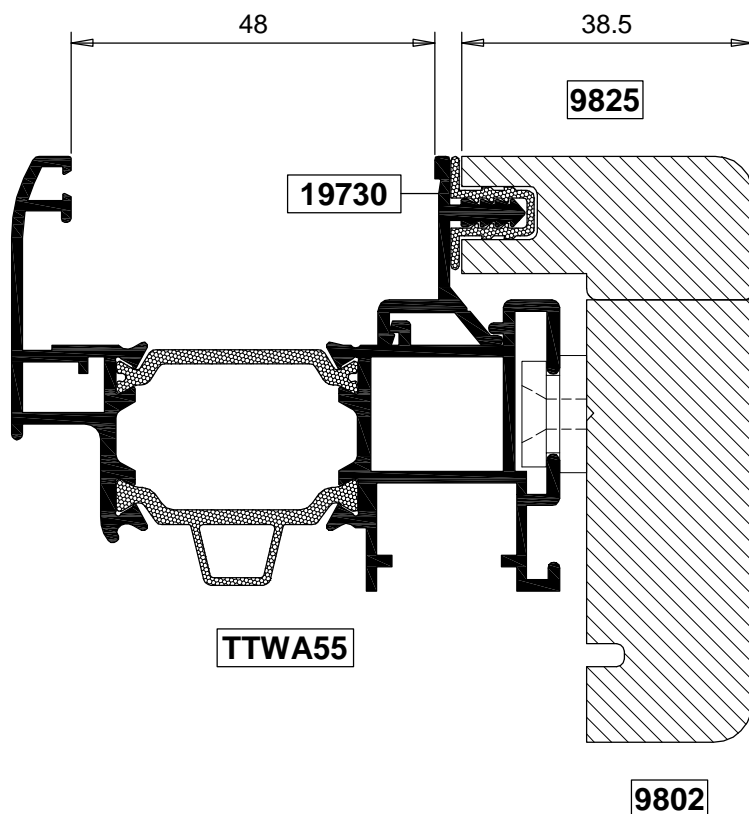
Schema vetratura anta - Wing glazing diagram



Schema vetratura anta - Wing glazing diagram



Schema vetratura anta - Wing glazing diagram



Schema vetrazione anta - Wing glazing diagram

Spazio Netto	Spessore	Esterna	Interna	PRICAL	COMPLASTEX	Esterna	Interna	PRICAL	COMPLASTEX	Esterna	Interna	COMPLASTEX
24595		EC100001				126-20088				126-20088		
33	23	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
33	24	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
33	25	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
33	26	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
33	27	3	3	FV603	126-OUP3W	4	2			4	2	
33	28	3	2			4	1			4	1	
14507												
40	29	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
40	30	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
40	31	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
40	32	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
40	33	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
40	34	3	3	FV603	126-OUP3W	4	2			4	2	
40	35	3	2			4	1			4	1	
19730												
48	36	3	9			4	8	FV608	126-OUP8W	4	8	126-2197
48	37	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
48	38	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
48	39	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
48	40	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
48	41	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
48	42	3	3	FV603	126-OUP3W	4	2			4	2	
48	43	3	2			4	1			4	1	
24593+24594												
57	44	3	10			4	9			4	9	
57	45	3	9			4	8	FV608	126-OUP8W	4	8	126-2197
57	46	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
57	47	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
57	48	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
57	49	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
57	50	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
57	51	3	3	FV603	126-OUP3W	4	2			4	2	
57	52	3	2			4	1			4	1	

Non Possible

Net Space	Thickness	External	Internal	PRICAL	COMPLASTEX	External	Internal	PRICAL	COMPLASTEX	External	Internal	COMPLASTEX
24595		EC100001				126-20088				126-20088		
33	23	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
33	24	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
33	25	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
33	26	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
33	27	3	3	FV603	126-OUP3W	4	2			4	2	
33	28	3	2			4	1			4	1	
14507												
40	29	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
40	30	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
40	31	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
40	32	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
40	33	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
40	34	3	3	FV603	126-OUP3W	4	2			4	2	
40	35	3	2			4	1			4	1	
19730												
48	36	3	9			4	8	FV608	126-OUP8W	4	8	126-2197
48	37	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
48	38	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
48	39	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
48	40	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
48	41	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
48	42	3	3	FV603	126-OUP3W	4	2			4	2	
48	43	3	2			4	1			4	1	
24593+24594												
57	44	3	10			4	9			4	9	
57	45	3	9			4	8	FV608	126-OUP8W	4	8	126-2197
57	46	3	8	FV608	126-OUP8W	4	7	FV607	126-OUP7W	4	7	126-2197
57	47	3	7	FV607	126-OUP7W	4	6	FV606	126-OUP6W	4	6	126-2195
57	48	3	6	FV606	126-OUP6W	4	5	FV605	126-OUP5W	4	5	126-2195
57	49	3	5	FV605	126-OUP5W	4	4	FV604	126-OUP4W	4	4	126-2194
57	50	3	4	FV604	126-OUP4W	4	3	FV603	126-OUP3W	4	3	126-2194
57	51	3	3	FV603	126-OUP3W	4	2			4	2	
57	52	3	2			4	1			4	1	

Not Possible

LAVORAZIONI

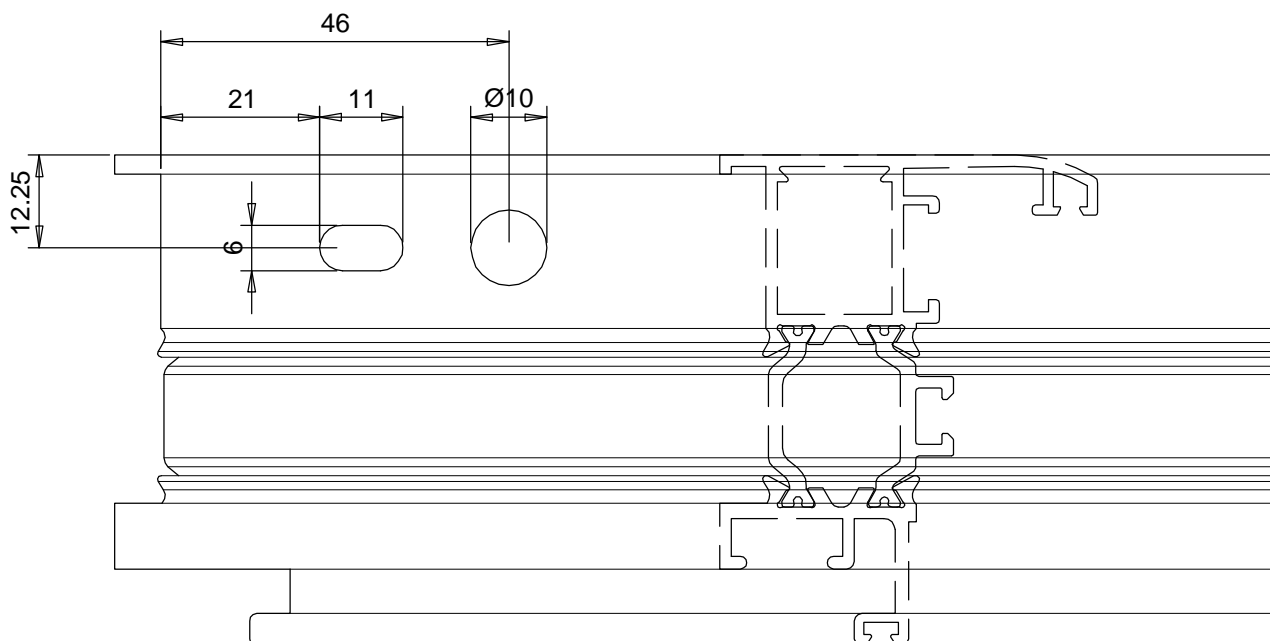
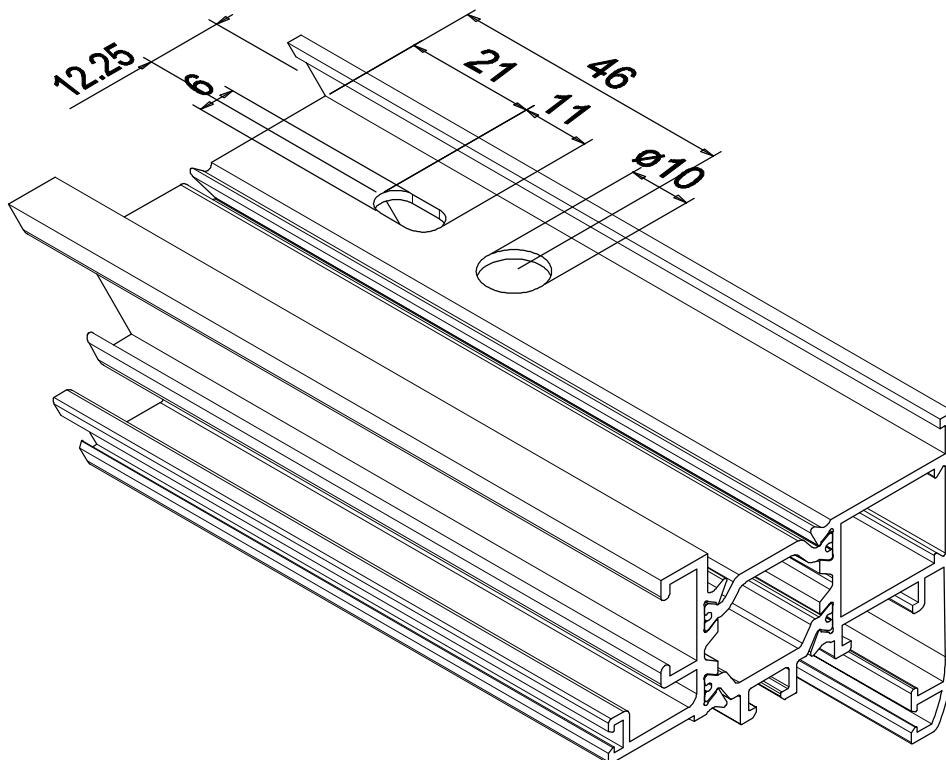


TOOLING

Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
PER TELAI FISSI

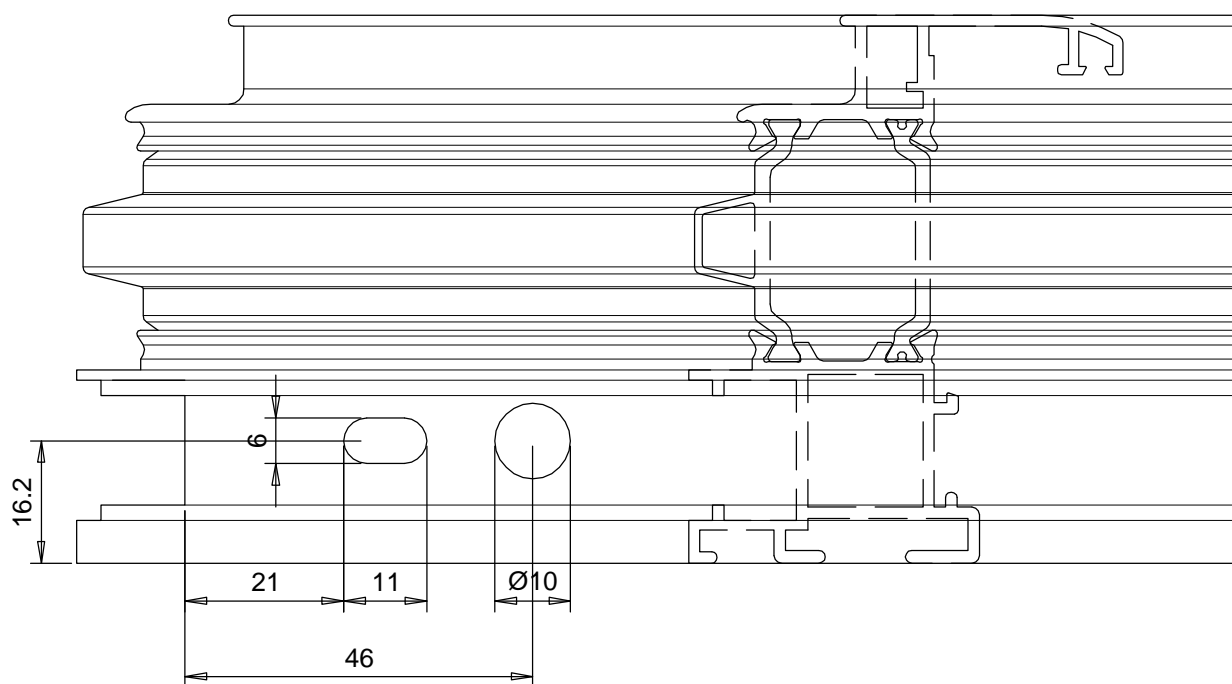
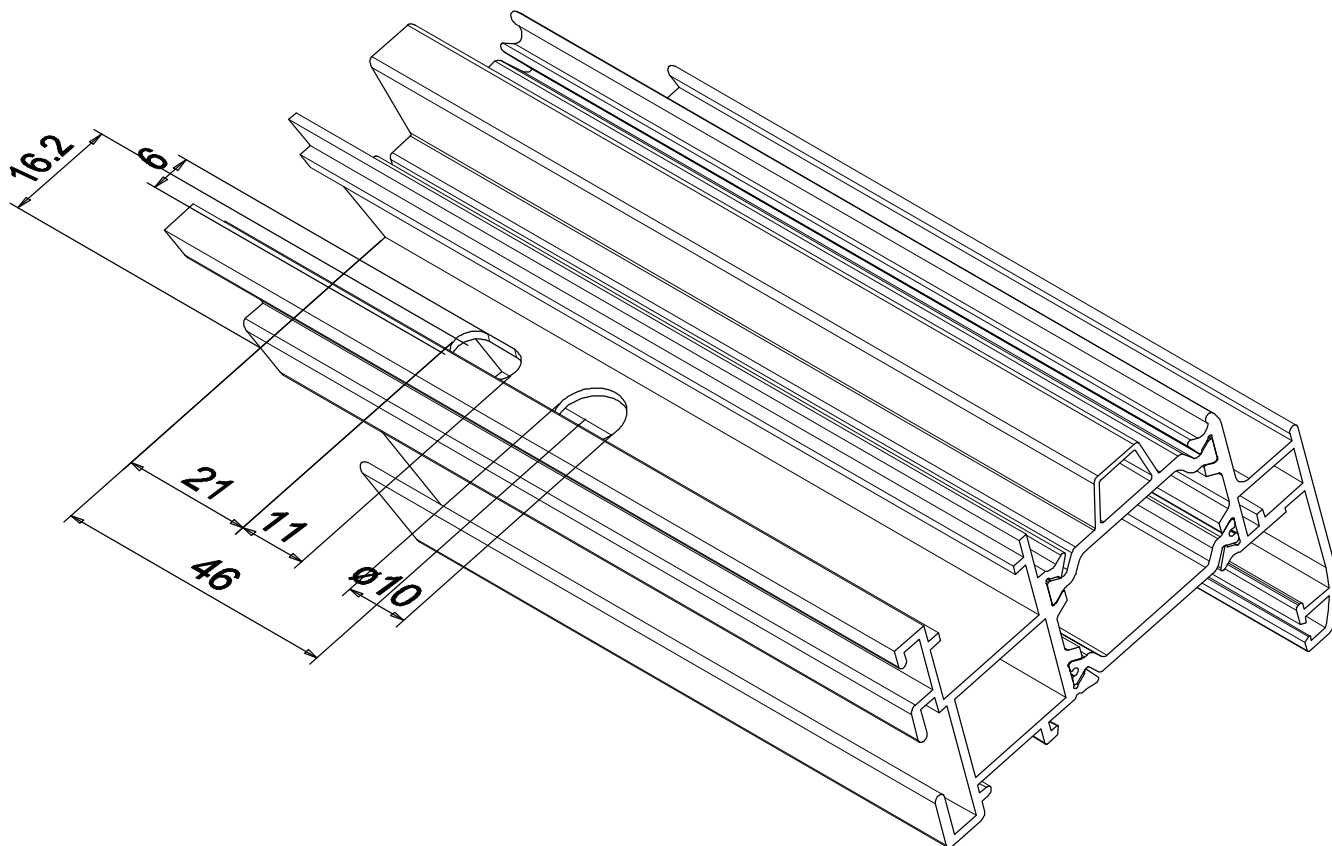
TOOLING FOR INSTALLING
CORNER JOINT
FOR FIXED FRAMES



Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
PER ANTE

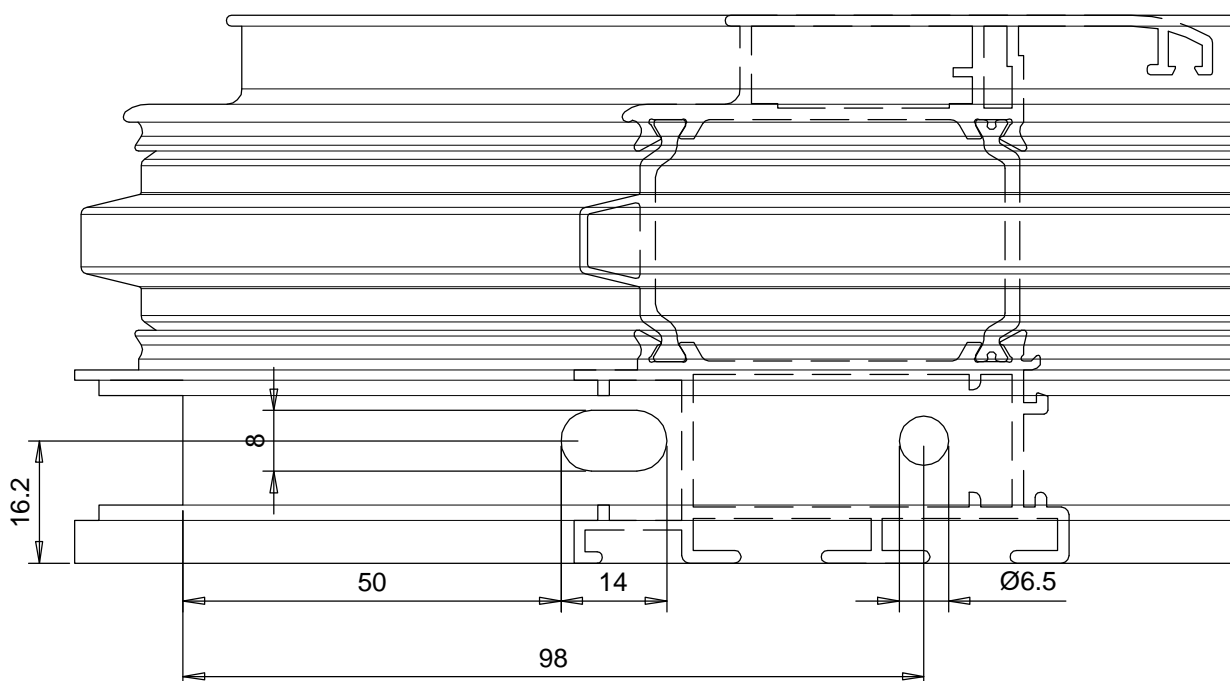
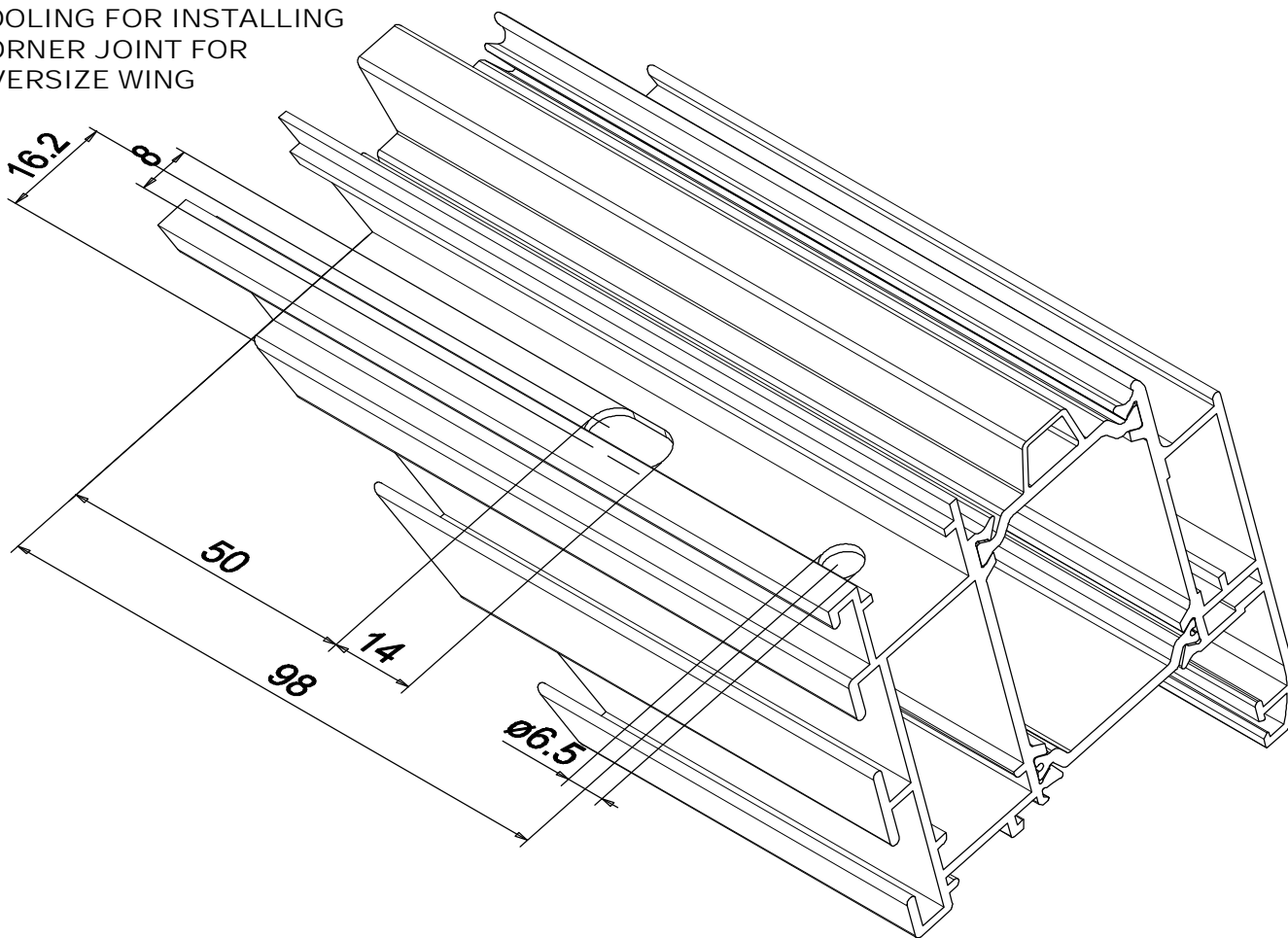
TOOLING FOR INSTALLING
CORNER JOINT FOR WINGS



Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
PER ANTA MAGGIORATA

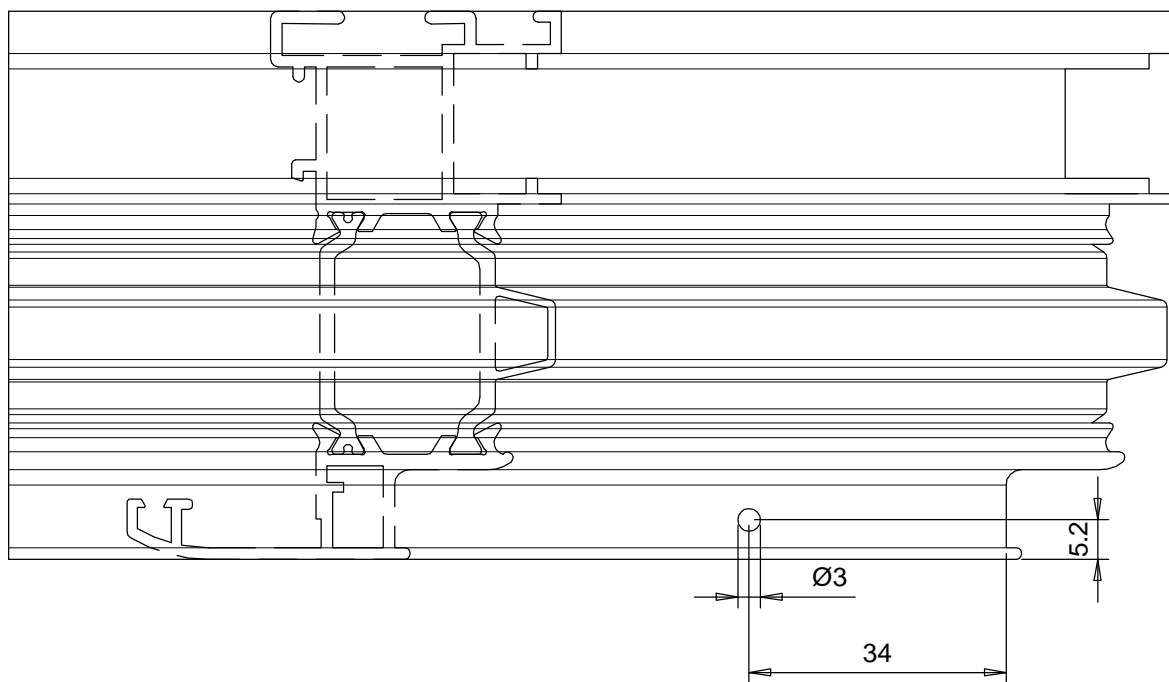
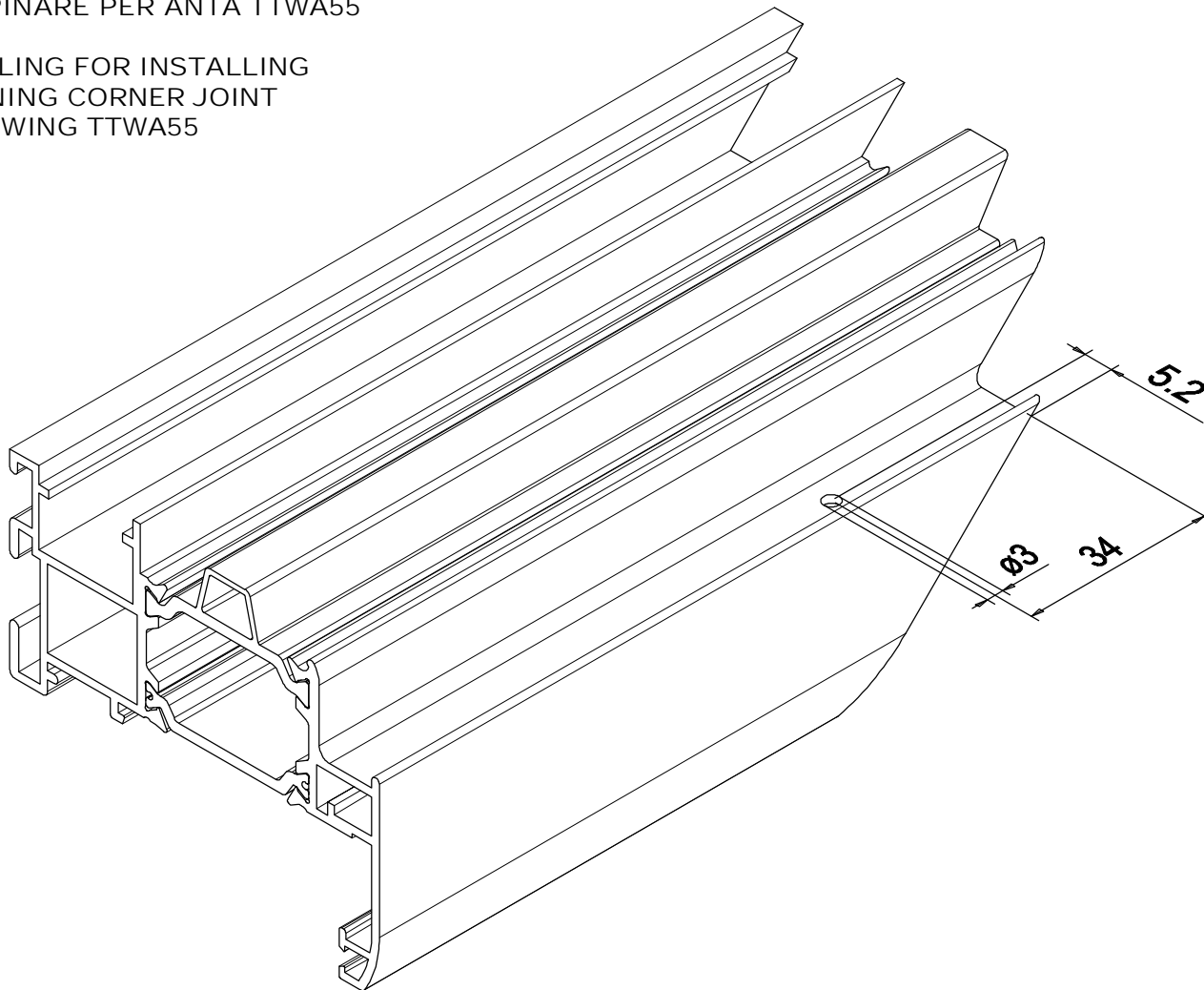
TOOLING FOR INSTALLING
CORNER JOINT FOR
OVERSIZE WING



Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
A SPINARE PER ANTA TTWA55

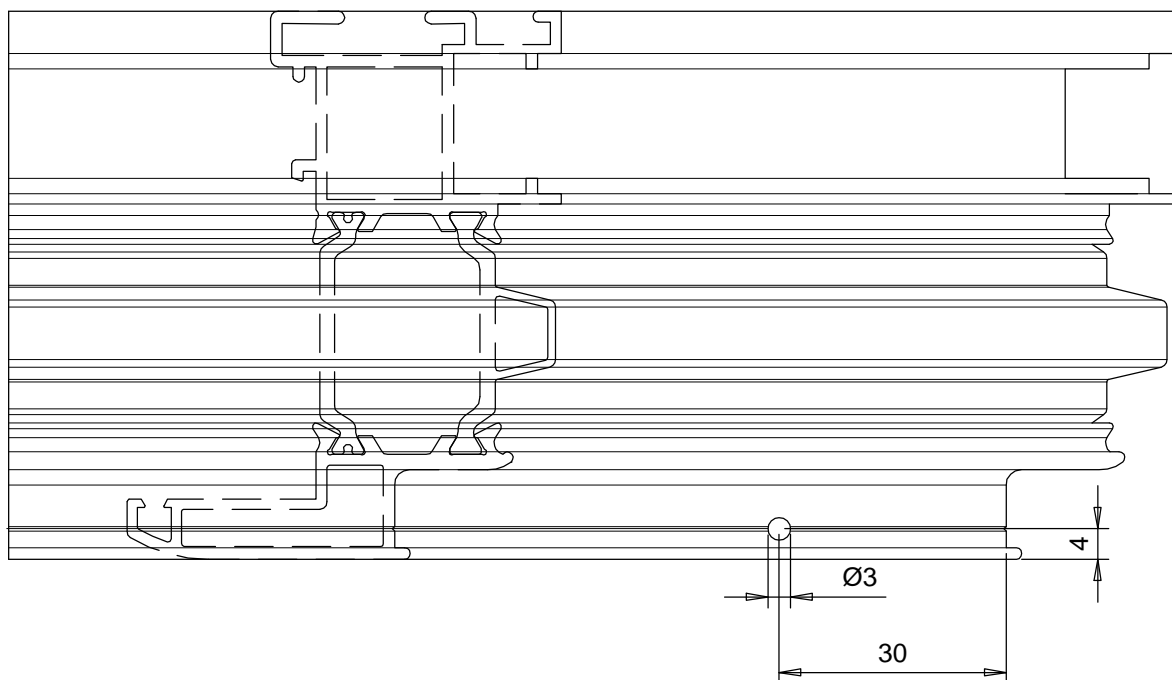
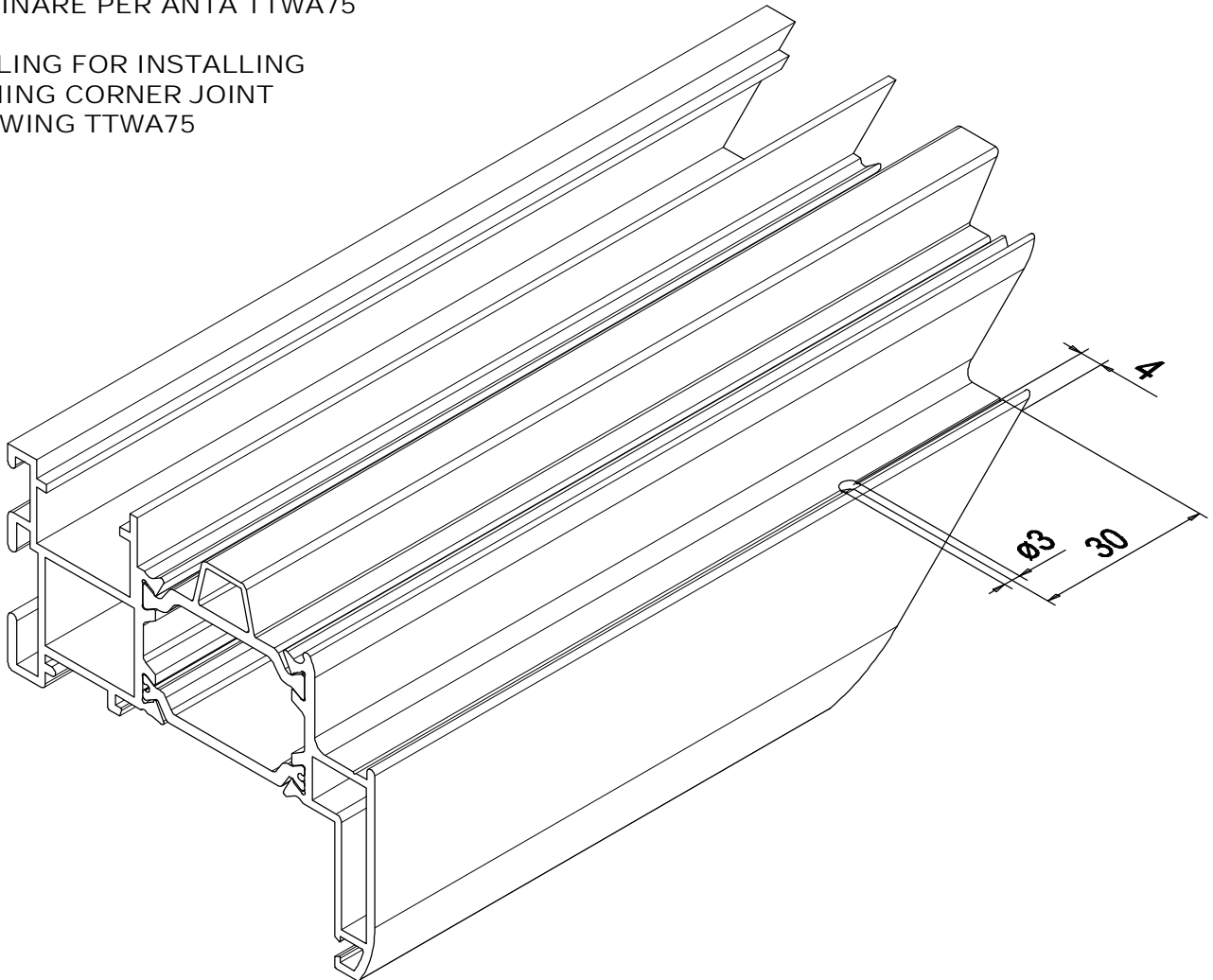
TOOLING FOR INSTALLING
PINNING CORNER JOINT
FOR WING TTWA55



Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
A SPINARE PER ANTA TTWA75

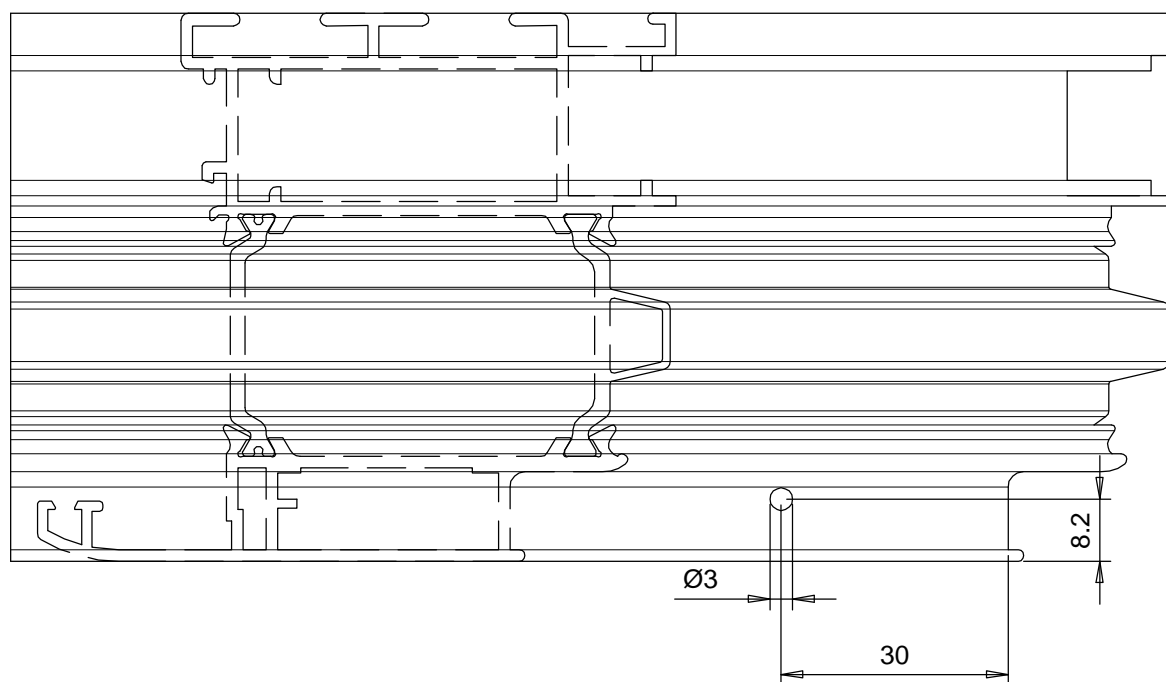
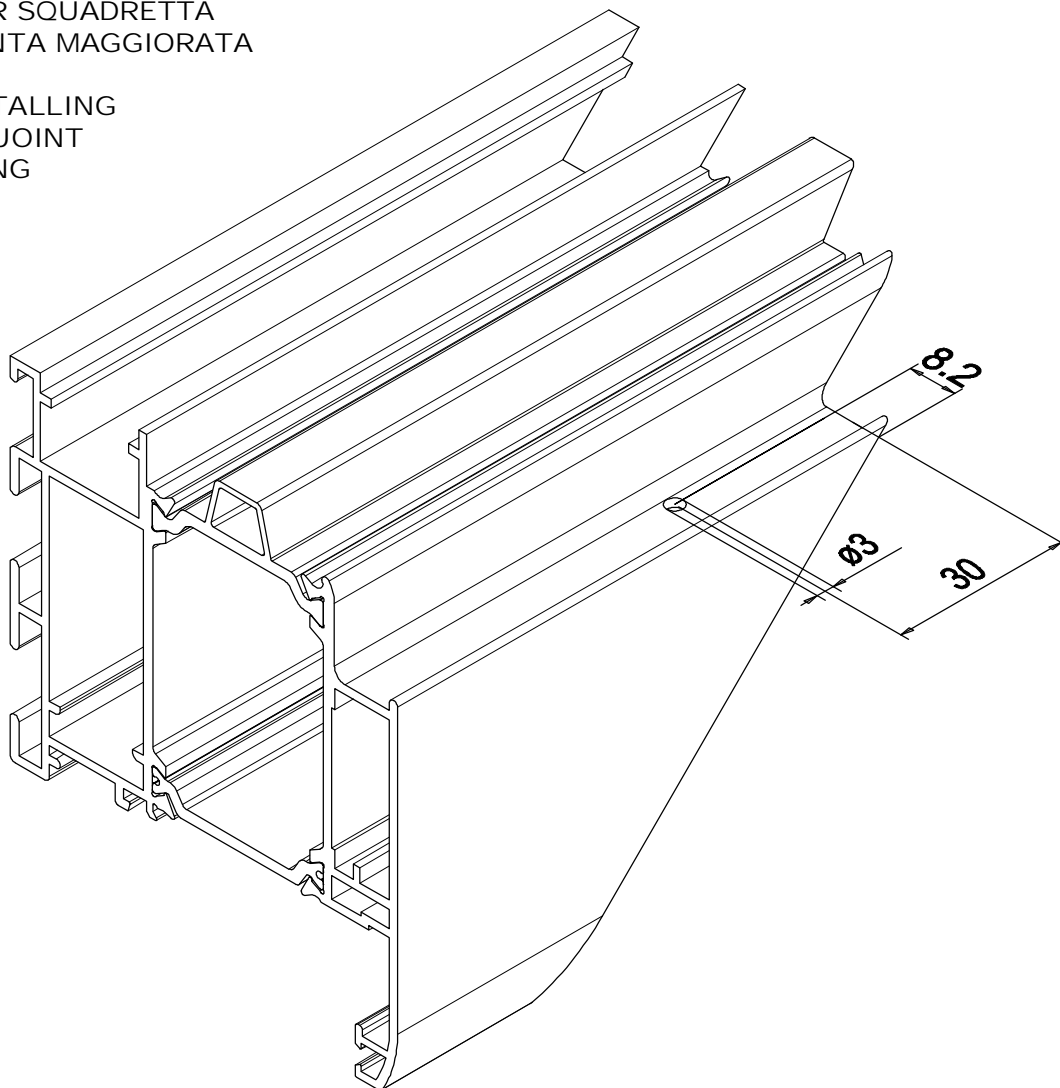
TOOLING FOR INSTALLING
PINNING CORNER JOINT
FOR WING TTWA75



Lavorazioni - Tooling

LAVORAZIONE PER SQUADRETTA
A SPINARE PER ANTA MAGGIORATA

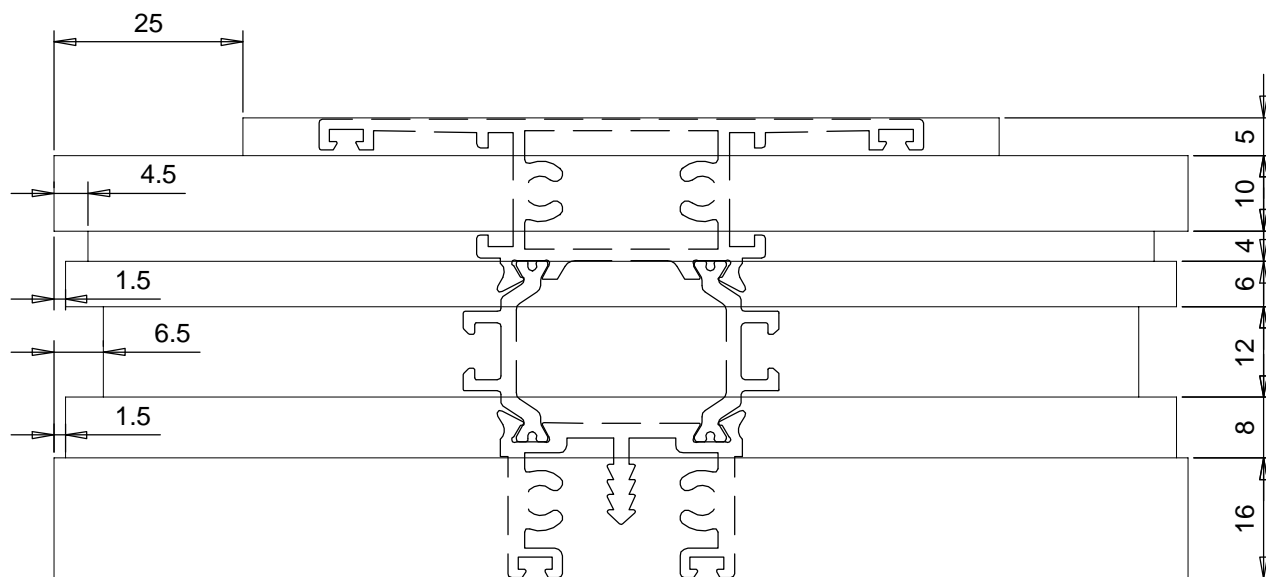
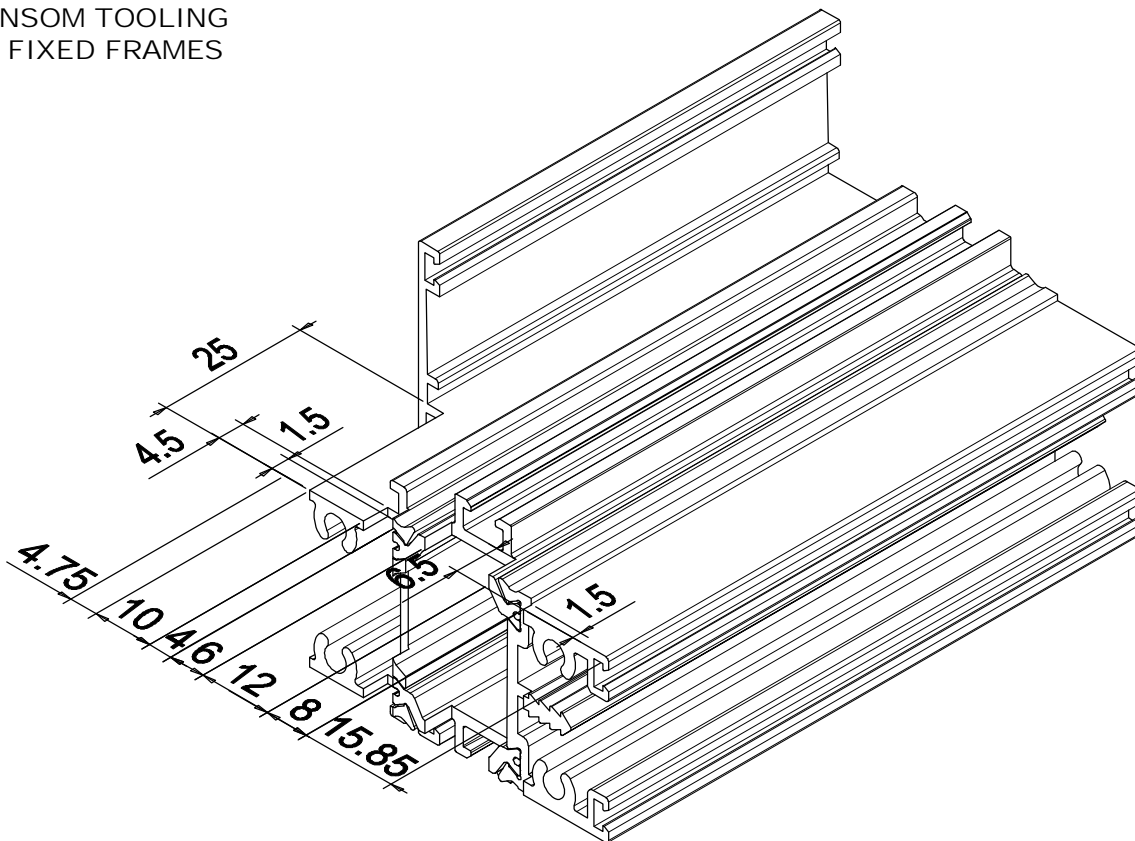
TOOLING FOR INSTALLING
PINNING CORNER JOINT
FOR OVERSIZE WING



Lavorazioni - Tooling

LAVORAZIONE TRAVERSI
PER TELAI FISSI

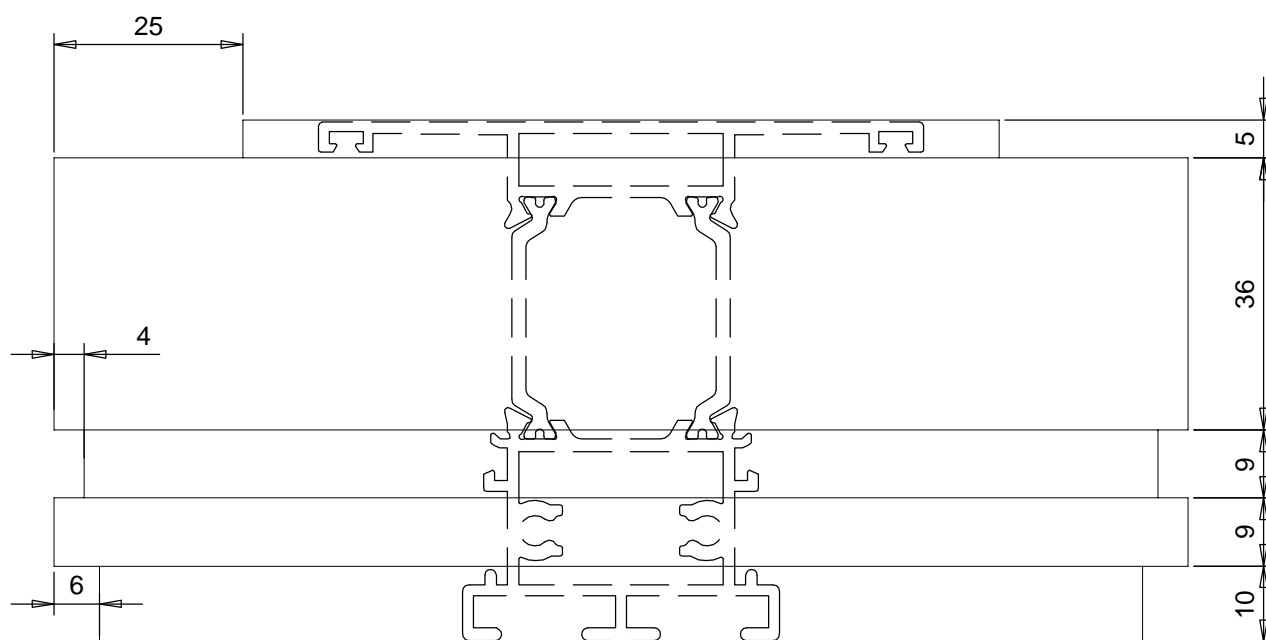
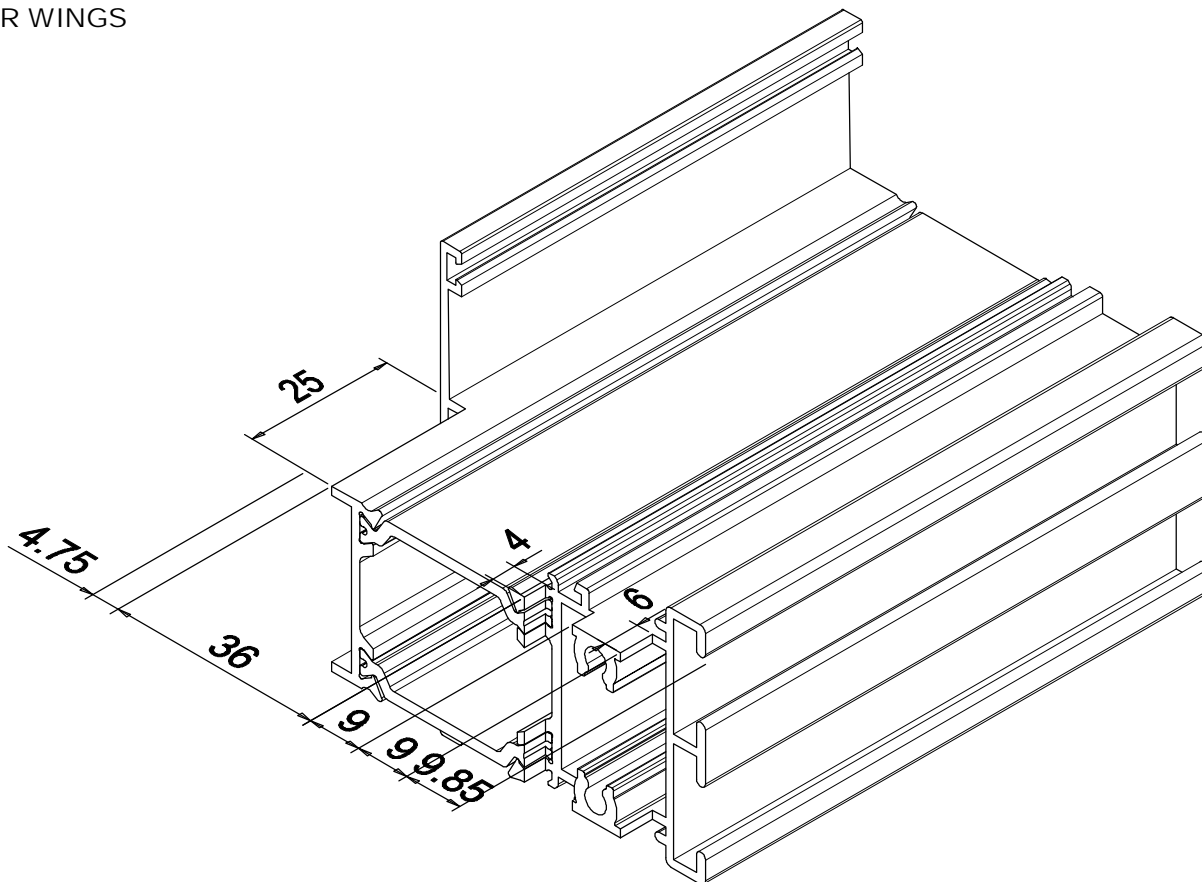
TRANSOM TOOLING
FOR FIXED FRAMES



Lavorazioni - Tooling

LAVORAZIONE TRAVERSI
PER ANTE

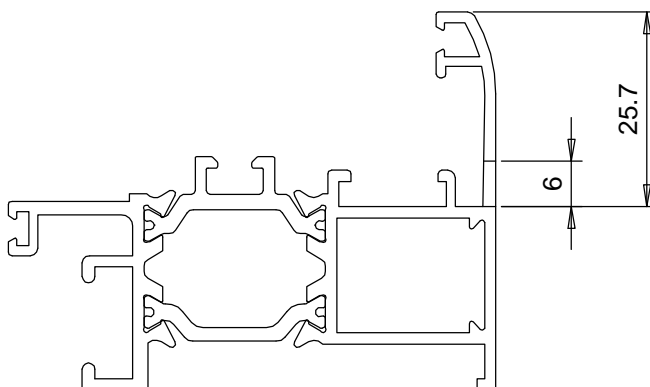
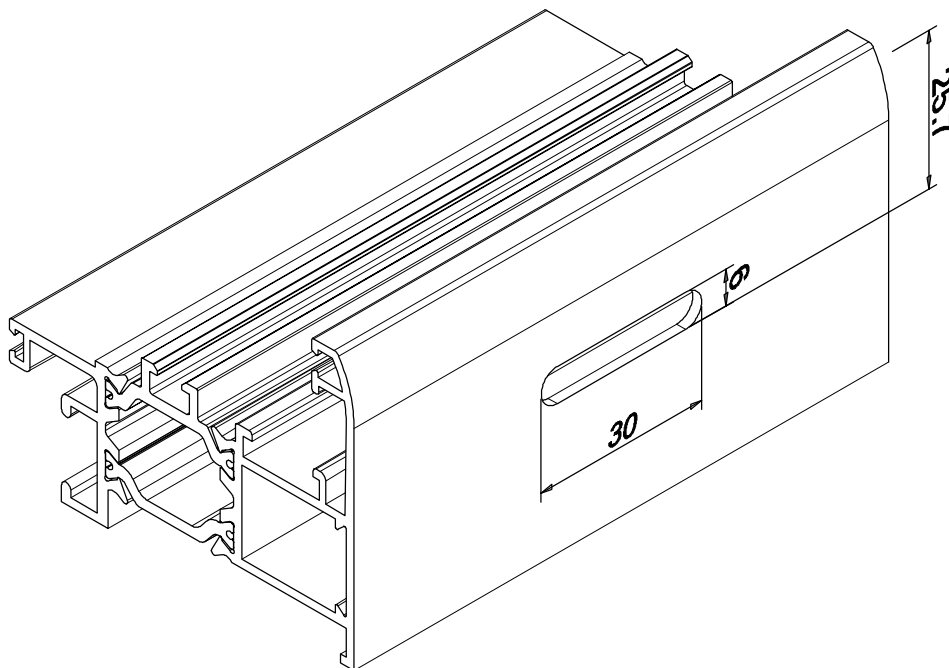
TRANSOM TOOLING
FOR WINGS



Lavorazioni - Tooling

LAVORAZIONE PER SCARICO ACQUA
PER 142-2145

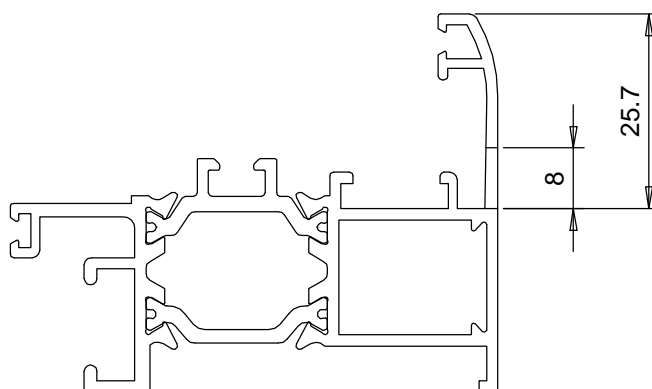
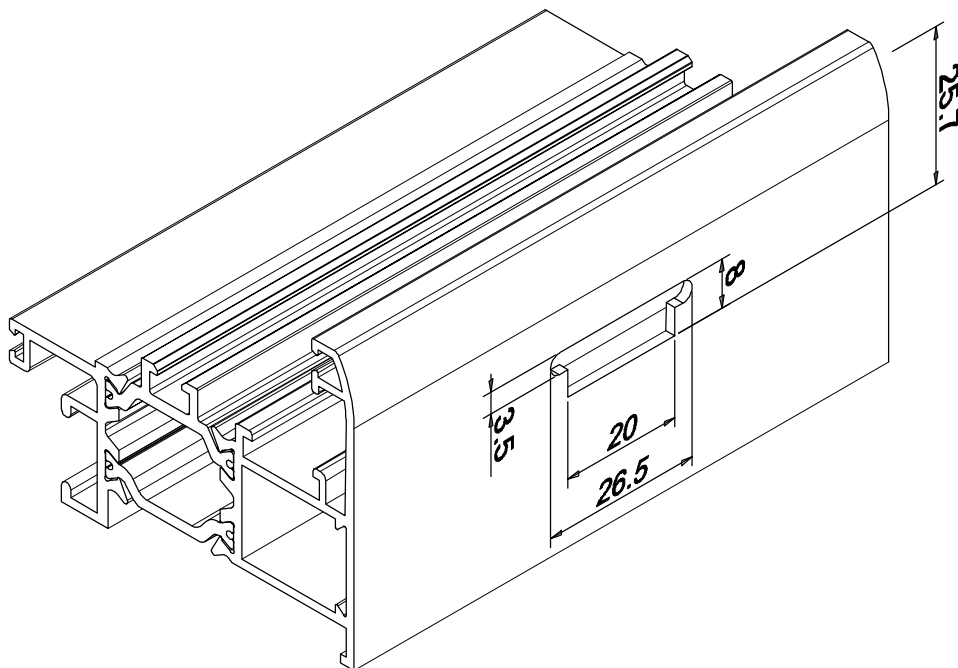
WATER DRAINAGE TOOLING
FOR 142-2145



Lavorazioni - Tooling

LAVORAZIONE PER SCARICO ACQUA
PER 100-2328 / 2144

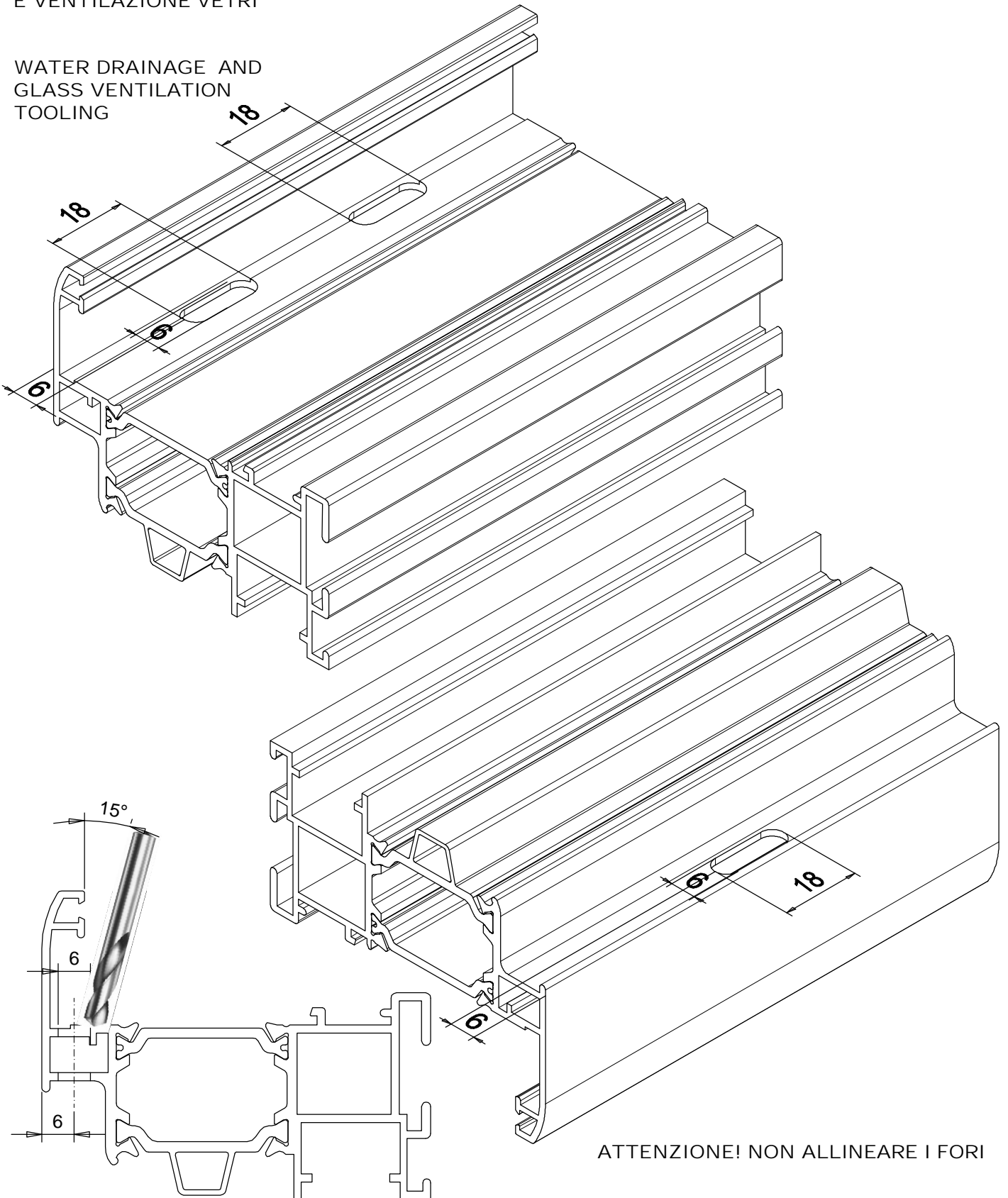
WATER DRAINAGE TOOLING
FOR 100-2328 / 2144



Lavorazioni - Tooling

LAVORAZIONE PER SCARICO ACQUA
E VENTILAZIONE VETRI

WATER DRAINAGE AND
GLASS VENTILATION
TOOLING



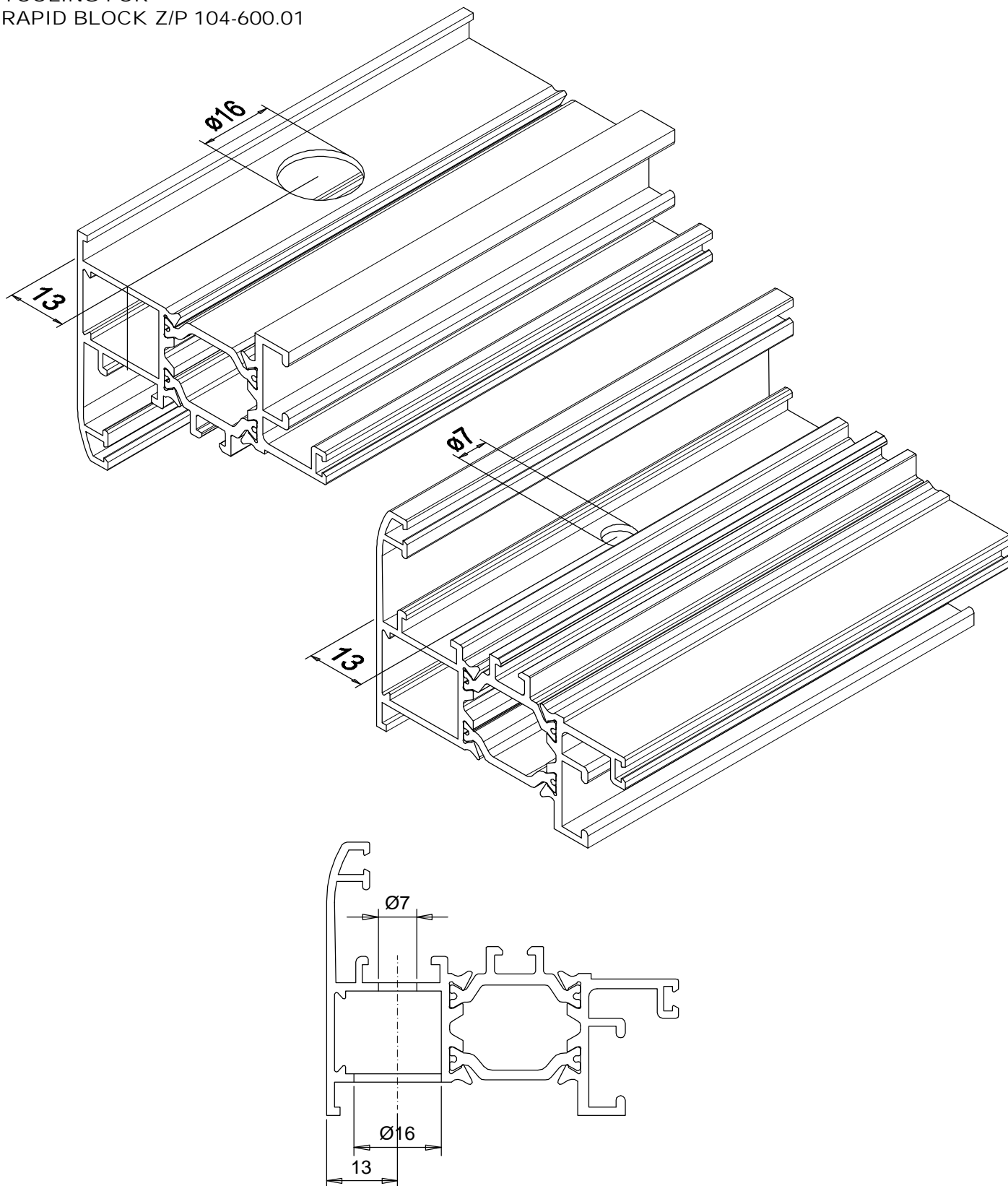
ATTENZIONE! NON ALLINEARE I FORI

WARNING! DO NOT ALIGN THE HOLES

Lavorazioni - Tooling

LAVORAZIONE PER
RAPID BLOCK Z/P 104-600.01

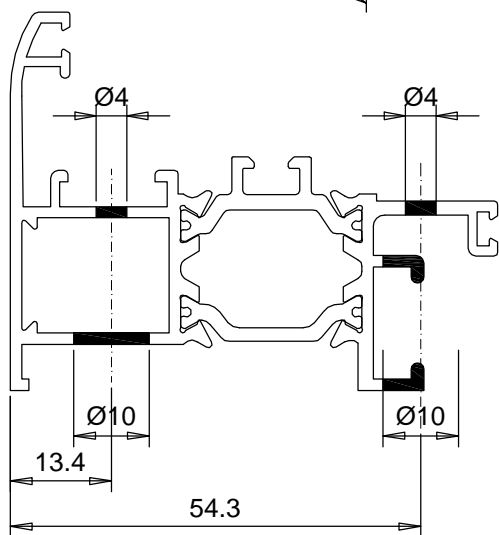
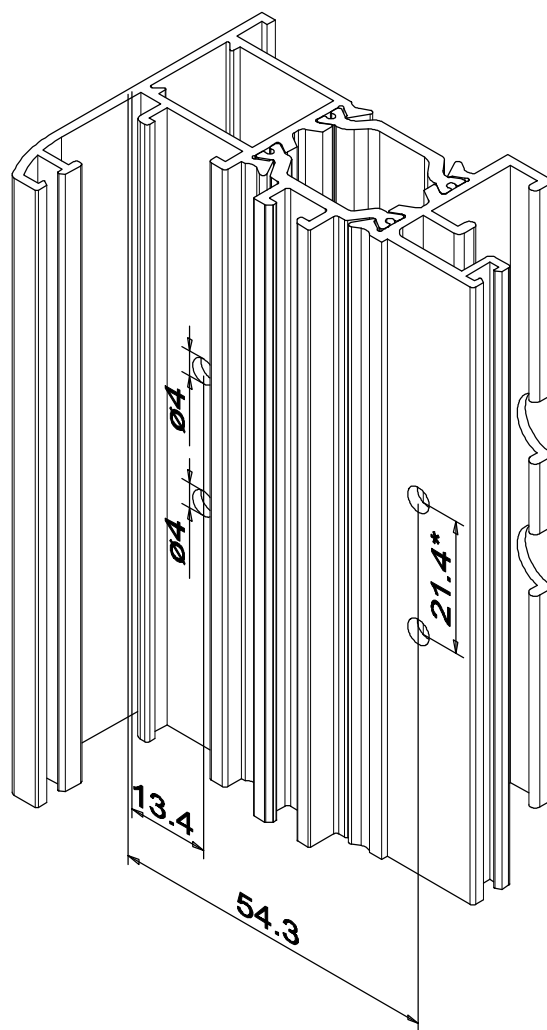
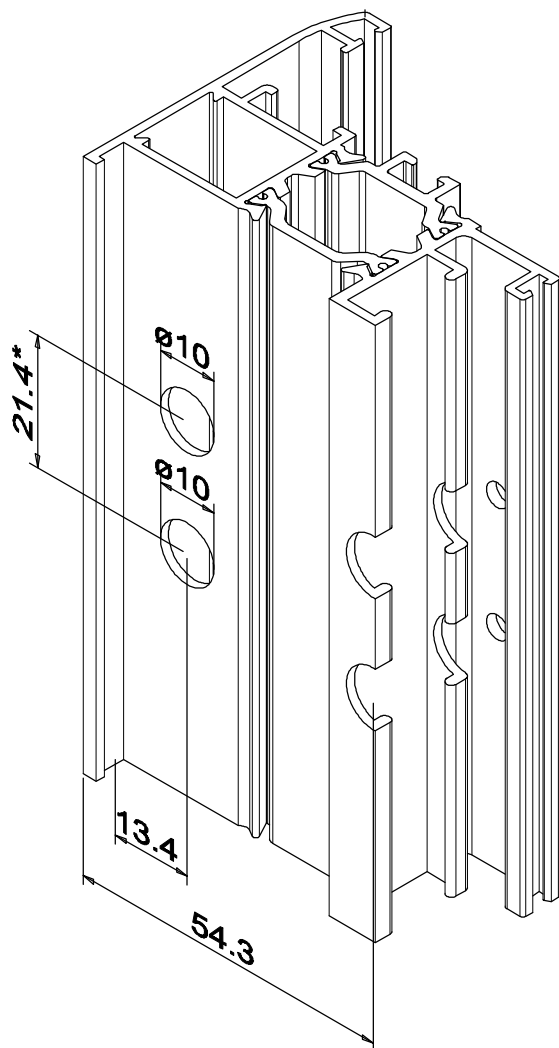
TOOLING FOR
RAPID BLOCK Z/P 104-600.01



Lavorazioni - Tooling

LAVORAZIONE PER FISSAGGIO TRAVERSI
SU TELAI FISSI

TOOLING FOR FIXING TRANSOM
FOR FIXED FRAME



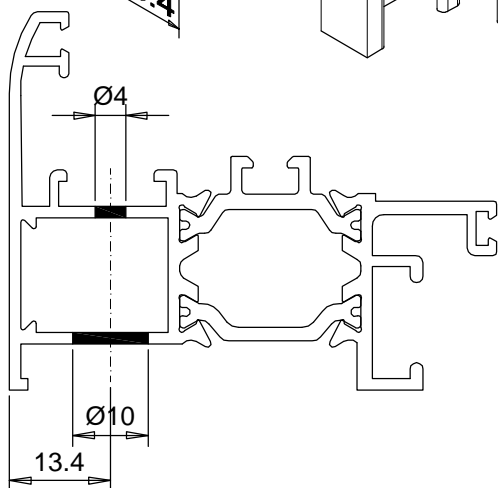
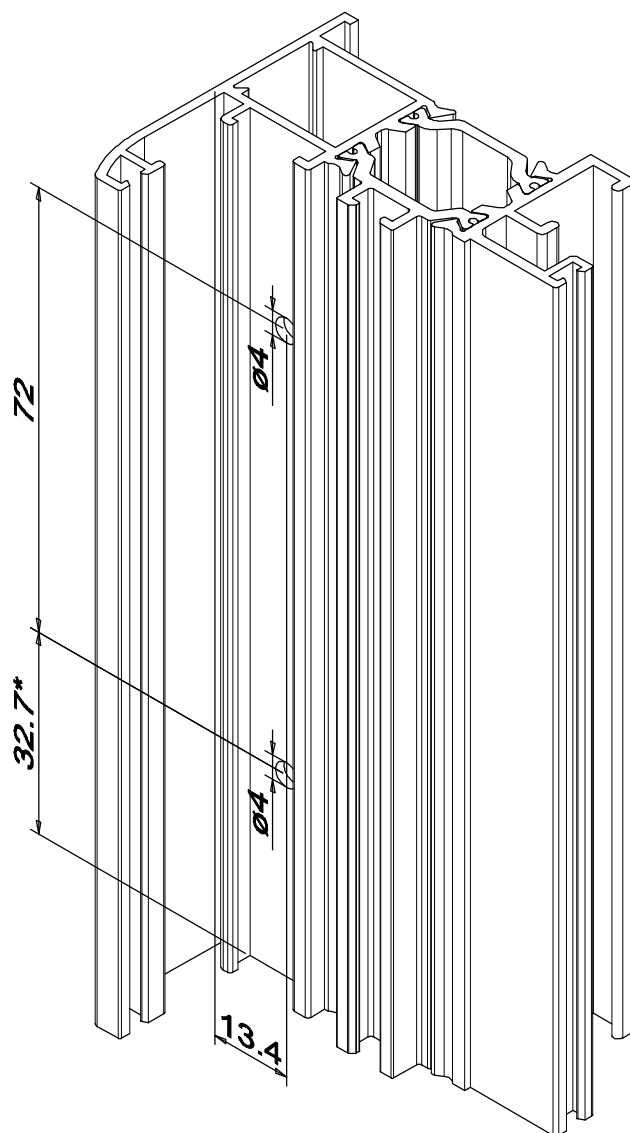
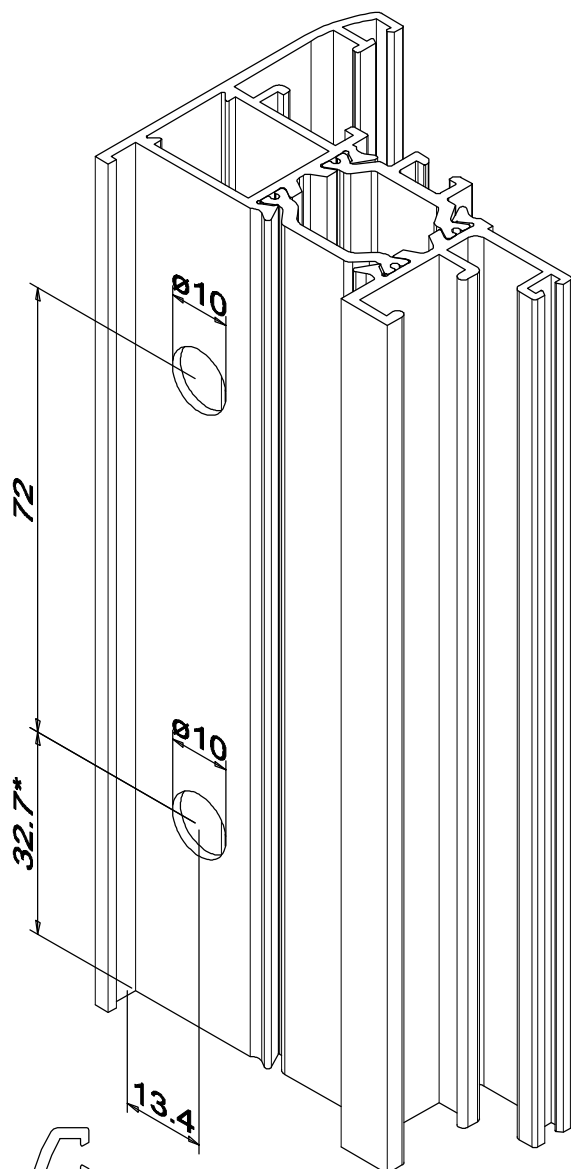
*INTERASSE PER PROFILO TTWA54 21.4 mm
INTERASSE PER PROFILO TTWA60 51.4 mm

CENTER DISTANCE FOR PROFILE TTWA54 21.4 mm
CENTER DISTANCE FOR PROFILE TTWA60 51.4 mm

Lavorazioni - Tooling

LAVORAZIONE PER FISSAGGIO ZOCCOLO RIPORTATO TTWA63
SU TELAI FISSI

TOOLING FOR FIXING LOWER ADDITIONAL TRANSOM TTWA63
FOR FIXED FRAME



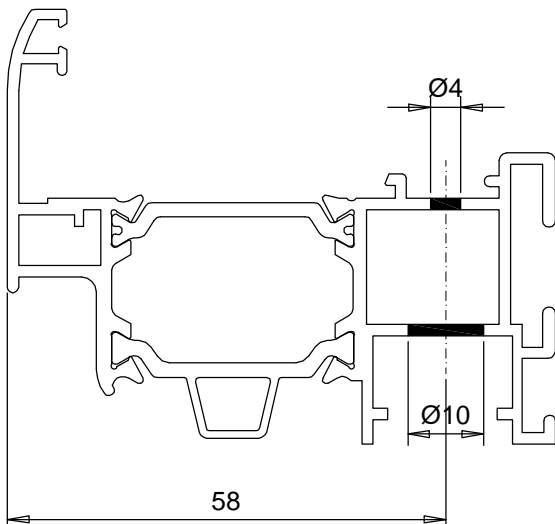
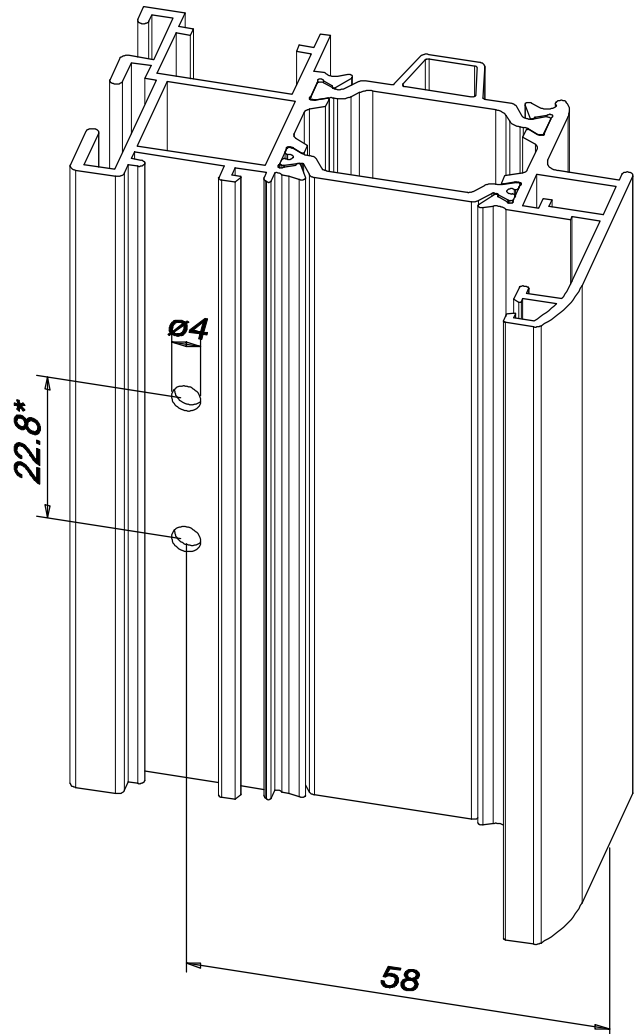
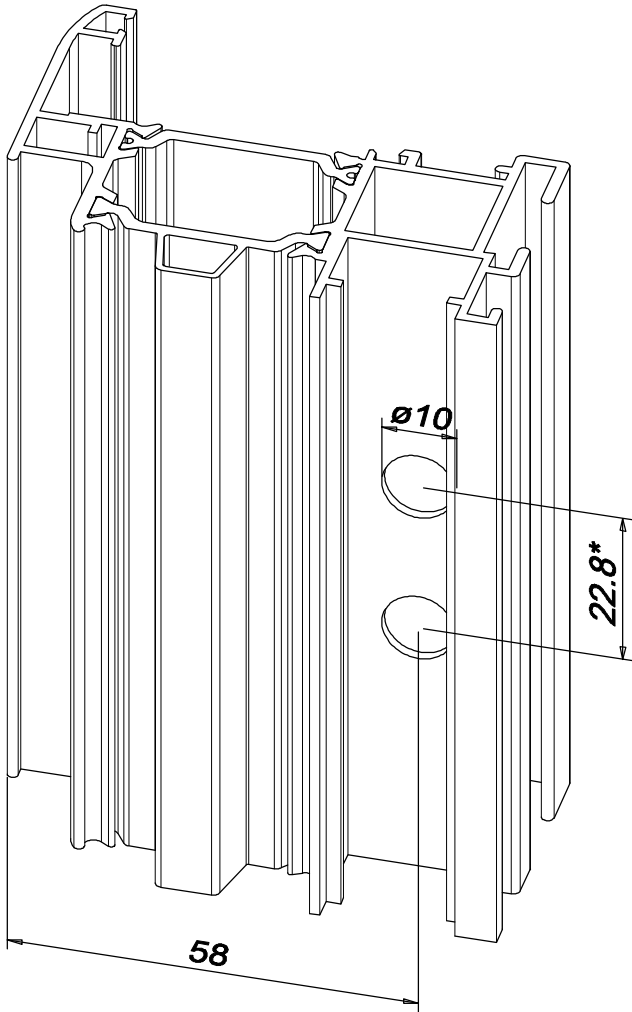
*INTERASSE PER PROFILO TTWA51 32.7 mm
INTERASSE PER PROFILO TTWA52 49.7 mm

CENTER DISTANCE FOR PROFILE TTWA51 32.7 mm
CENTER DISTANCE FOR PROFILE TTWA52 49.7 mm

Lavorazioni - Tooling

LAVORAZIONE PER FISSAGGIO TRAVERSI
SU ANTE

TOOLING FOR FIXING TRANSOM
FOR WINGS



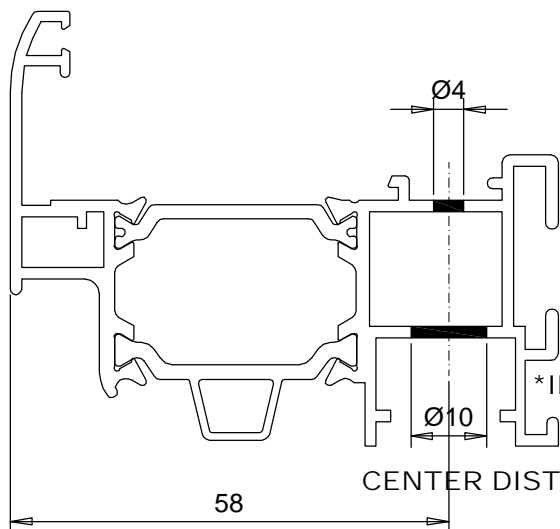
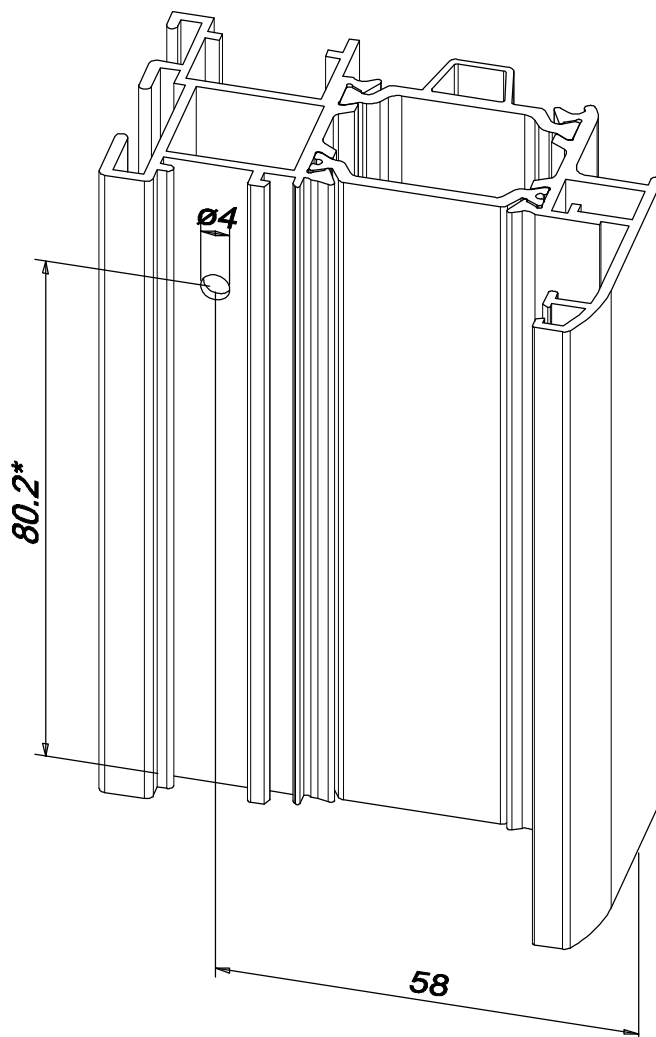
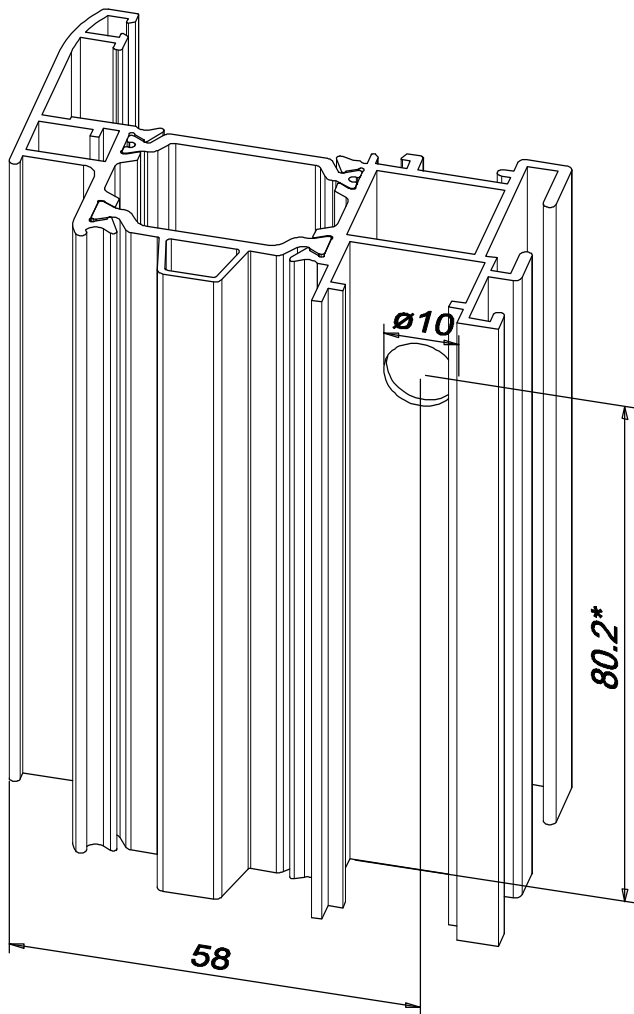
*INTERASSE PER PROFILO TTWA57 22.8 mm
INTERASSE PER PROFILO TTWA58 102.8 mm

CENTER DISTANCE FOR PROFILE TTWA57 22.8 mm
CENTER DISTANCE FOR PROFILE TTWA58 102.8 mm

Lavorazioni - Tooling

LAVORAZIONE PER FISSAGGIO ZOCCOLO RIPORTATO TTWA71
SU ANTE

TOOLING FOR FIXING LOWER ADDITIONAL TRANSOM TTWA71
FOR WINGS



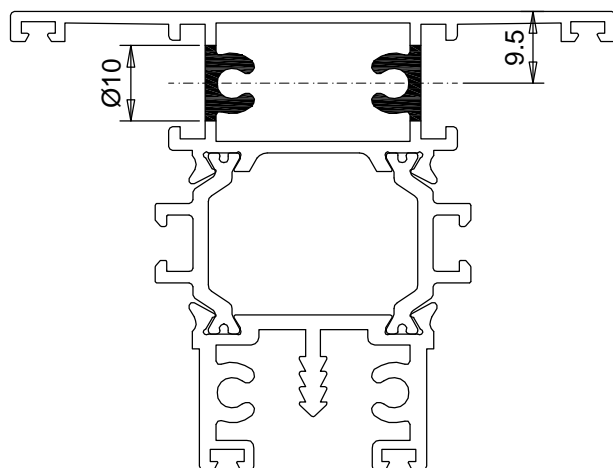
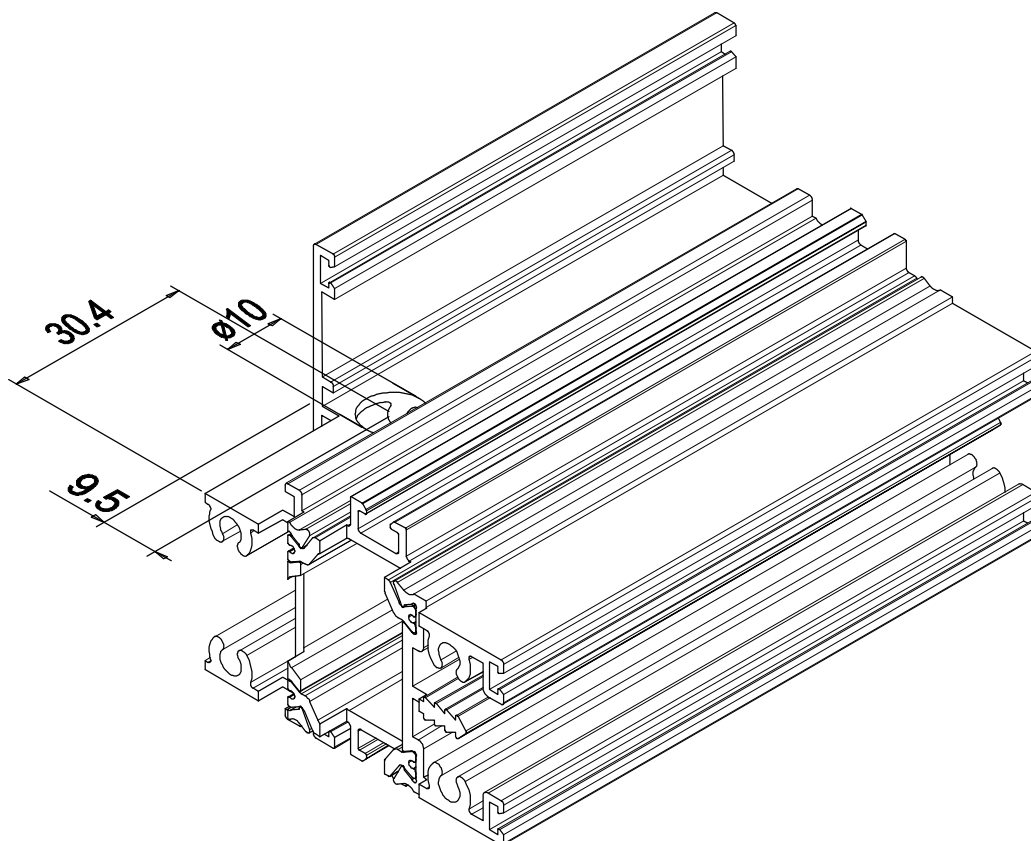
*INTERASSE PER PROFILI TTWA55 E TTWA75 80.2 mm
INTERASSE PER PROFILO TTWA56 107.2 mm

CENTER DISTANCE FOR PROFILES TTWA55 AND TTWA75 80.2 mm
CENTER DISTANCE FOR PROFILE TTWA56 107.2 mm

Lavorazioni - Tooling

LAVORAZIONE PER FORATURA TRAVERSI
PER TELAI FISSI FISSAGGIO CON CAVALLOTTO

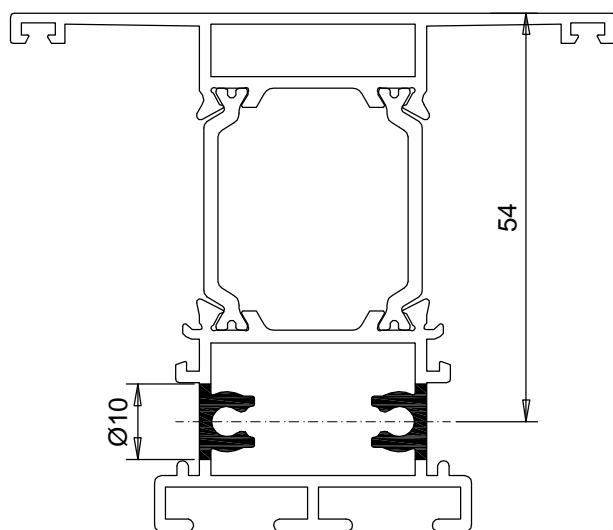
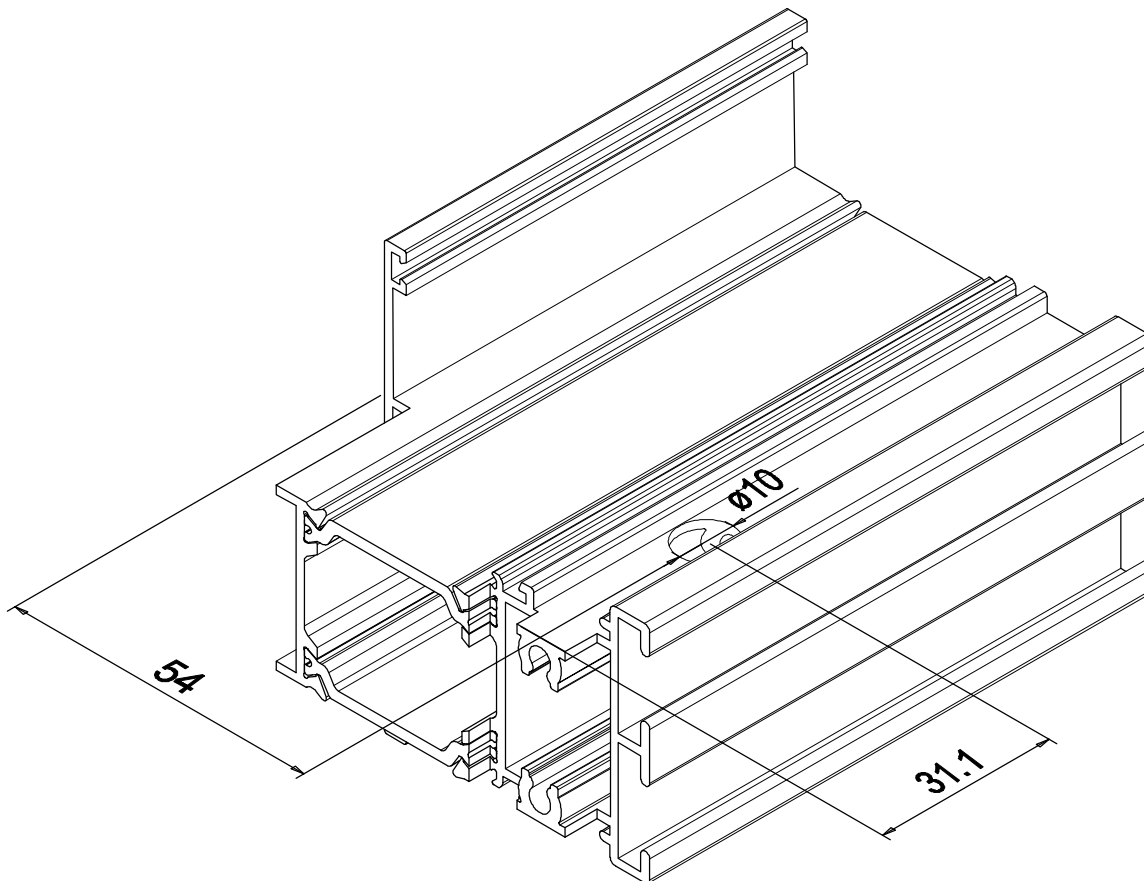
TOOLING FOR FIXING TRANSOM FOR FIXED FRAME
FOR T-JOINT FIXING



Lavorazioni - Tooling

LAVORAZIONE PER FORATURA TRAVERSI
PER ANTA FISSAGGIO CON CAVALLOTTO

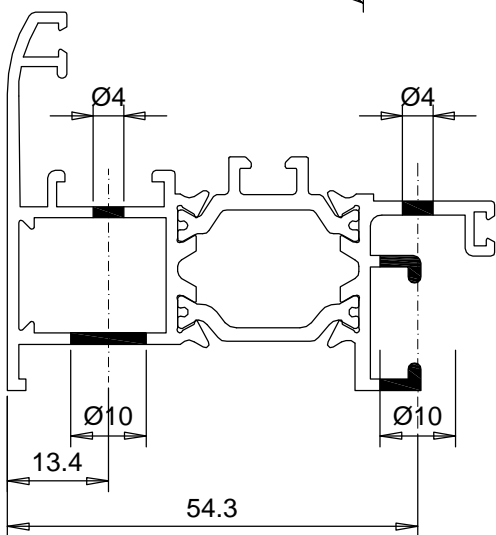
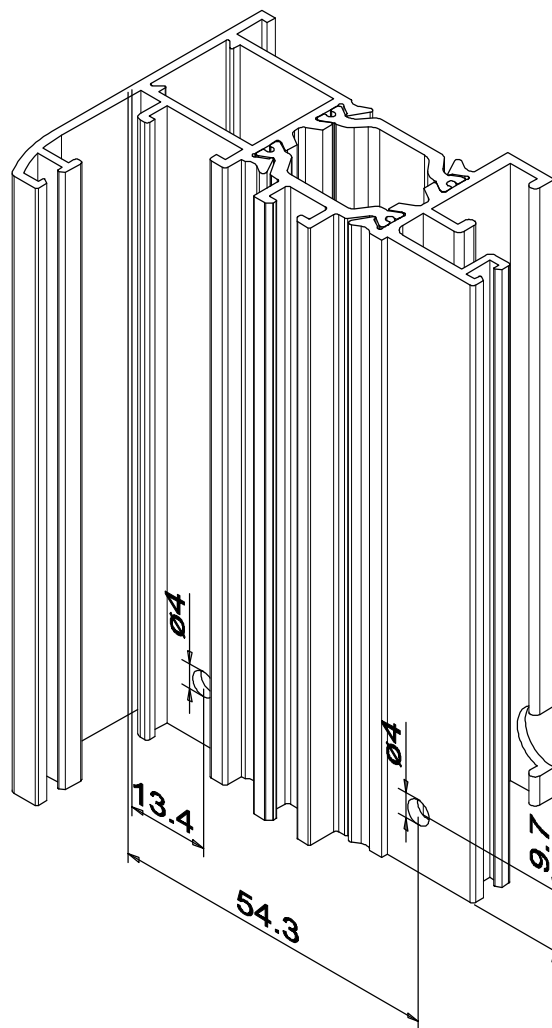
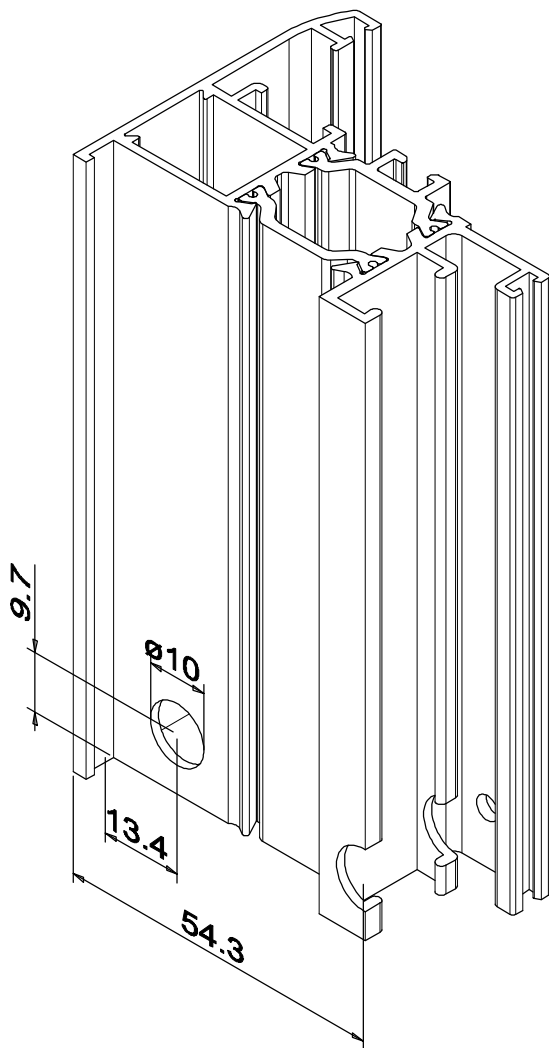
TOOLING FOR FIXING TRANSOM FOR WINGS
FOR T-JOINT FIXING



Lavorazioni - Tooling

LAVORAZIONE PER FISSAGGIO SOGLIA TTWA70
SU TELAI FISSI

TOOLING FOR FIXING LOWER TRANSOM TTWA70
FOR FIXED FRAME

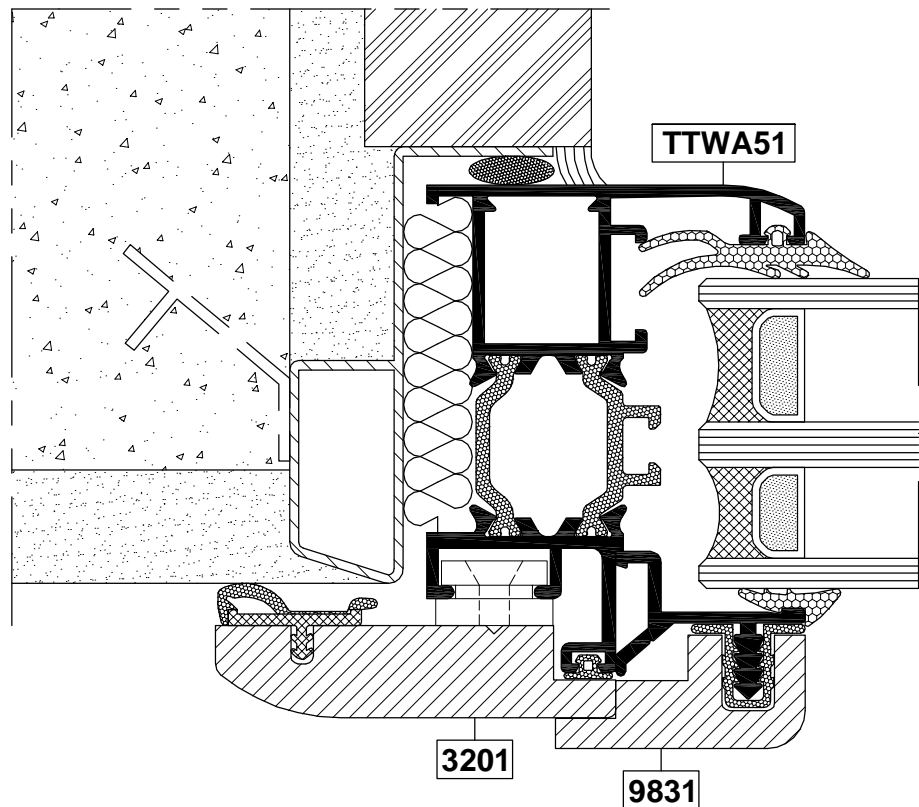
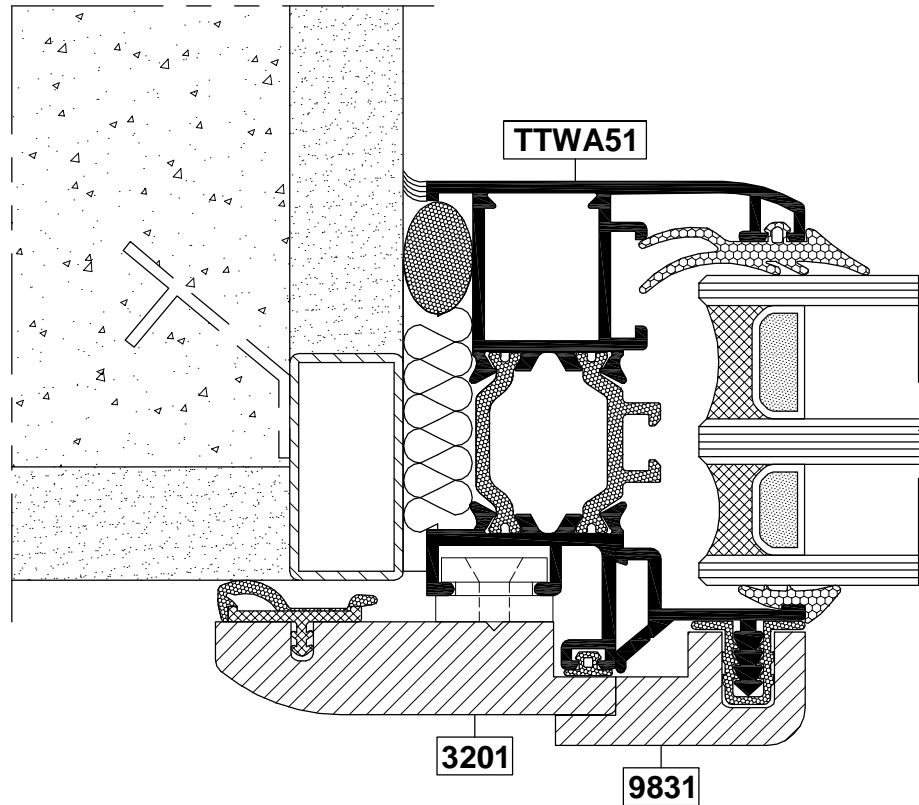
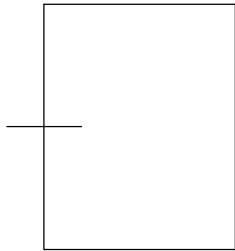


COLLEGAMENTI ALLA MURATURA

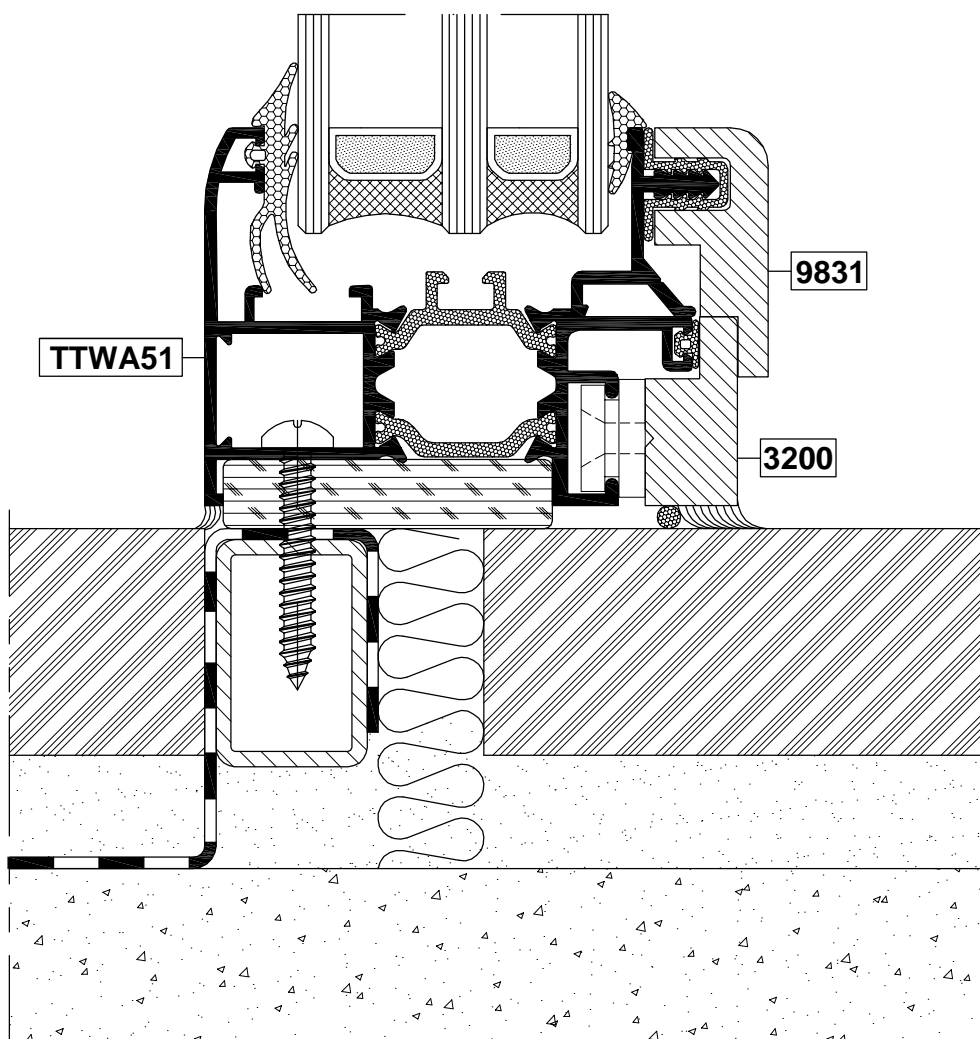
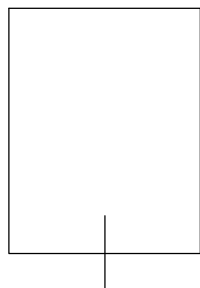


LINKS TO THE WALL

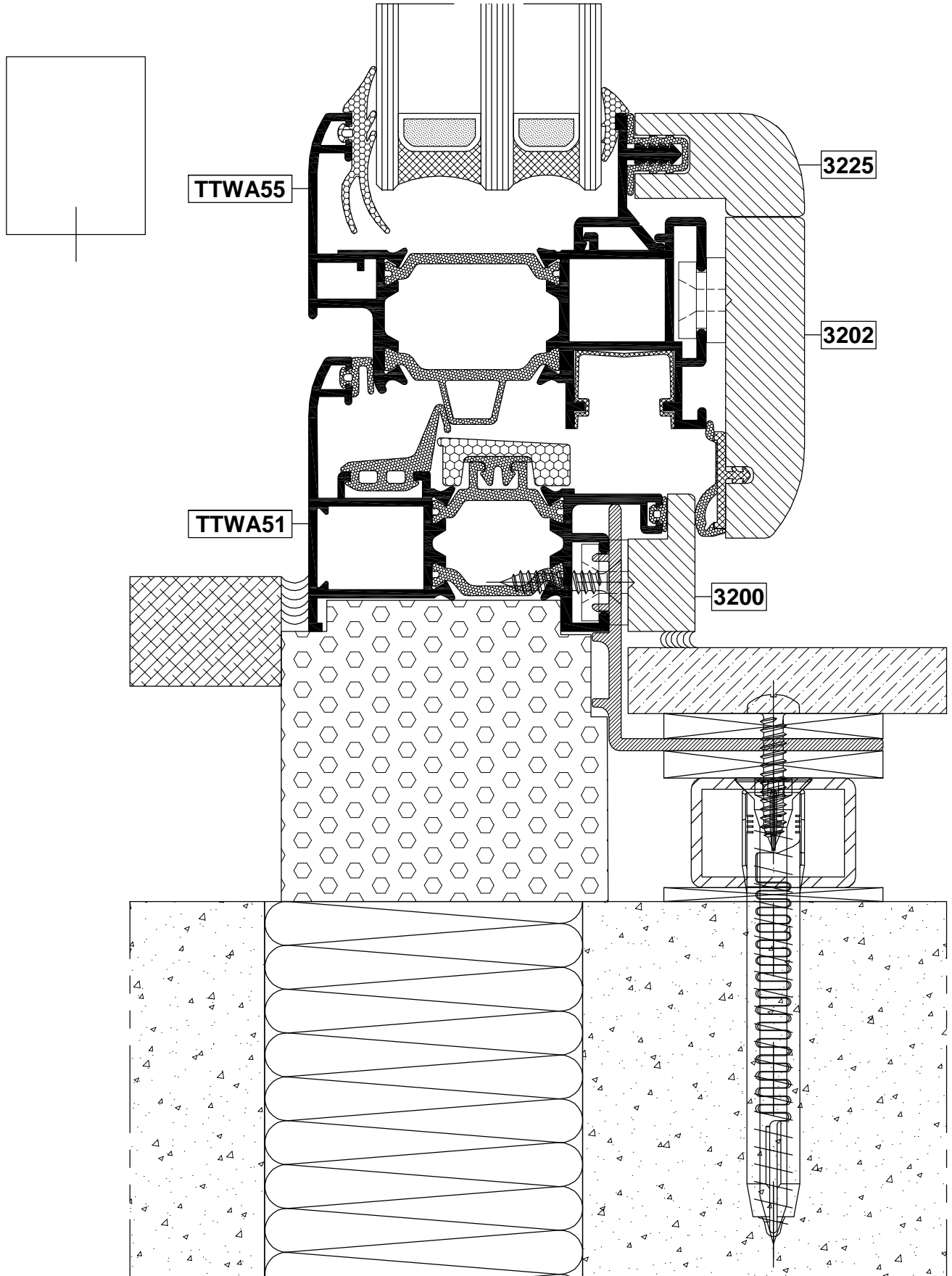
Collegamenti alla muratura - Links to the wall



Collegamenti alla muratura - Links to the wall



Collegamenti alla muratura - Links to the wall



Collegamenti alla muratura - Links to the wall

