



terre 590TH



TO.MA. S.p.a.

ESTRUSIONE ALLUMINIO

CHI SIAMO

TO.MA. è un impianto specializzato nell'**estrusione di profilati in alluminio** che opera nel settore della metallurgia e che nasce nel 2001 sullo stimolo di una gran voglia di impresa. Essa, infatti, rappresenta **l'unica realtà** solida e competitiva **in Puglia** operante nel settore della lavorazione a caldo di metalli non ferrosi. L'azienda è in grado di garantire servizio, efficienza e qualità al cliente grazie all'alto contenuto innovativo e alla elevata produttività dell'impianto di estrusione, uno dei più moderni impianti in Europa. Il software di ultima generazione, supportato da un controllo accurato dei processi, permette di garantire un prodotto di alta qualità, dal rispetto della perfetta geometria del profilo alle sue proprietà meccaniche e fisiche conformi alle normative UNI.

L'azienda ha fatto del concetto di **qualità** il principio fondamentale delle strategie di progettazione, di produzione, di assistenza ai clienti e di innovazione del prodotto. La soddisfazione del cliente viene perseguita offrendo la migliore qualità nell'utilizzo quotidiano del prodotto, assicurando una sua continua innovazione, (grazie soprattutto alla collaborazione del cliente stesso), fissando un prezzo competitivo e offrendo adeguati servizi collegati alla vendita e all'utilizzo del prodotto.

La stretta **collaborazione tra TO.MA. e l'Università degli Studi di Lecce** Dipartimento di Ingegneria dell'Innovazione dimostra la profonda attenzione dell'azienda ad affrontare problemi relativi alla corrosione filiforme e alla ricerca e sperimentazione di nuove leghe di alluminio e di nuovi processi produttivi.

SISTEMI TO.MA.

Il rapido e costante sviluppo dei prodotti, determinato dalle più svariate necessità di mercato, richiede la continua realizzazione di nuove soluzioni e l'aggiornamento di quelli esistenti. I **sistemi TO.MA.**, ideati a tal fine e noti per il particolare stile dai contorni arrotondati, sono i profili con cui l'azienda ha comunicato al cliente le novità riguardanti i propri prodotti.

I **sistemi TO.MA.** offrono una gamma completa di prodotti, normali e a taglio termico, giunto aperto, scorrevoli, con classi di tenuta eccezionali. Sono progettate nei minimi particolari con un nuovo e moderno design che Vi permetterà di realizzare serramenti eleganti e raffinati ottenendo prodotti di alta qualità con finiture estetiche esclusive.

Profilati Estrusi Lega: EN AW 6060 (EN 573-3 e EN 755-2).

Stato di Fornitura: T5 secondo UNI EN 515.

Tolleranze Dimensionali e Spessori: UNI EN 12020-2.

Tipo di Tenuta Aria-Acqua: Giunto Aperto (Serie Finestra); Doppia Battuta (Serie Porta).

Assemblaggio profili a taglio termico: L'accoppiamento è realizzato mediante l'inserimento di listelli in poliammide rinforzata con fibre di vetro di lunghezza 28 mm e spessore 2 mm bloccati mediante rullatura in continuo.

Applicazione Vetro: Fermavetro con inserimento a scatto e soluzione con vetro ad infilare.

Altezza Sede Vetro: 22 mm.

Spazio per Vetro e Guarnizioni: da 13 mm a 50 mm per la serie finestra e per la serie porta.

Dimensioni Base del Sistema Serie Finestra:

- | | | |
|---------------------|--------------------|-------------------------------------|
| • Telaio: | profondità 59 mm | - linea a sormonto - |
| | profondità 67 mm | - linea complanare - |
| • Anta: | profondità 59 mm | |
| • Fascia e Zoccolo: | profondità 58,7 mm | - soluzione con fermavetro - |
| | profondità 50 mm | - soluzione con vetro ad infilare - |

Dimensioni Base del Sistema Serie Porta:

- | | |
|---------------------|--------------------|
| • Telaio: | profondità 59 mm |
| • Anta: | profondità 67 mm |
| • Fascia e Zoccolo: | profondità 58,7 mm |

Accessori di chiusura (Ferramenta a nastro): Il sistema utilizza per la movimentazione, le chiusure, e per le varie tipologie di apertura, una serie di accessori "commerciali". Per la scelta di tali accessori è indispensabile conoscere i seguenti parametri del sistema:

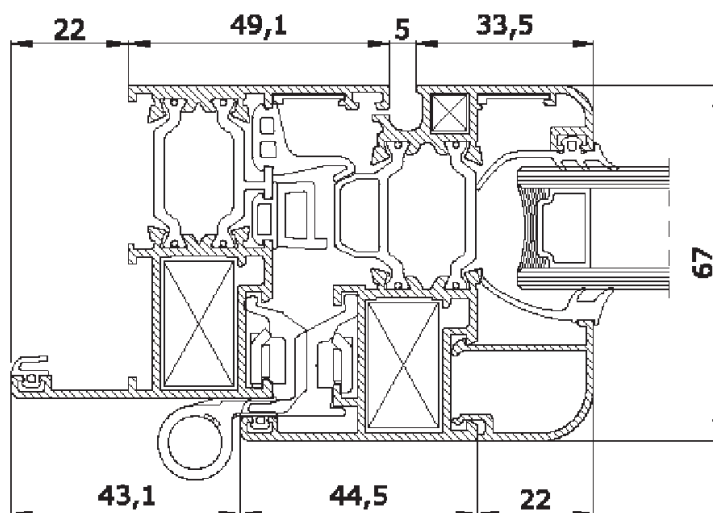
Aria: 12 mm

Interasse: 9 mm

Impiego: Il sistema consente la costruzione di finestre a battente con la possibilità di eseguire le principali aperture ad anta, anta ribalta, scorrere parallelo, con sopraluci, sottoluci, laterali fissi ecc. e di porte ad una o più ante sia ad apertura interna che esterna.

Profilati per finestre: Il sistema consente la costruzione di finestre o porte-finestre a due, tre o più ante a battente nella versione giunto aperto. Sono possibili anche specchiature fisse, finestre con apertura verso l'esterno, vasistas, anta-ribalta, serramenti a monoblocco.

Profilati per porte: Tali profili consentono la costruzione di porte a una, due o più ante apribili verso l'interno, verso l'esterno, con sopraluci fissi o apribili.



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COLLAUDI PRESTAZIONALI

Le prove di permeabilità all'aria, di tenuta all'acqua e di resistenza al carico del vento sono state eseguite nel rispetto delle seguenti norme:

- **UNI EN 1026:2001** Determinazione della permeabilità all'aria
- **UNI EN 1027:2001** Determinazione della tenuta all'acqua
- **UNI EN 12211:2001** Determinazione della resistenza al carico del vento
- **UNI EN 12207:2000, UNI EN 12208:2000, UNI EN 12210:2000 con EN 12210:2001** Norme di classificazione

Classi di prestazione del Sistema Tierre 590TH

Campione: Finestra a 2 ante con ribalta avente dimensioni: L = 1.400 mm x H = 1.600 mm
(Cert. Control. N. 2017-CPD-RP0010/010AAV del 21/09/2010)

Tipologia di prova		Norme di prova	Norme di classificazione	Classe
Permeabilità all'aria	referita all'area complessiva	UNI EN 1026	UNI EN 12207	4
	referita alla lunghezza dei giunti apribili			4
	finale			4
Tenuta all'acqua		UNI EN 1027	UNI EN 12208	E1500
Resistenza al carico del vento		UNI EN 12211	UNI EN 12210	C5

Campione: Portafinestra a 2 ante con ribalta avente dimensioni: L = 1.400 mm x H = 2.400 mm
(Cert. Control. N. 2017-CPD-RP0003/011AAV del 03/10/2011)

Tipologia di prova		Norme di prova	Norme di classificazione	Classe
Permeabilità all'aria	referita all'area complessiva	UNI EN 1026	UNI EN 12207	4
	referita alla lunghezza dei giunti apribili			4
	finale			4
Tenuta all'acqua		UNI EN 1027	UNI EN 12208	E1500
Resistenza al carico del vento		UNI EN 12211	UNI EN 12210	C4

I calcoli della trasmittanza termica sono stati eseguiti nel rispetto delle seguenti norme:

- **UNI EN ISO 10077-1:2007** Calcolo della trasmittanza termica
Metodo semplificato
- **UNI EN ISO 10077-2:2004** Calcolo della trasmittanza termica
Metodo numerico per telai

Campione prova: Finestra a 2 ante avente dimensioni: L = 1230 mm x H = 1480 mm
(Cert. Istedil N. 1970-2010 del 11/10/2010)

Nodo laterale $U_f = 2,33 \text{ W/m}^2 \text{ K}$
Nodo centrale $U_d = 2,22 \text{ W/m}^2 \text{ K}$

Infisso (L = 1230 mm x H = 1480 mm)

$U_w = 1,64 \text{ W/m}^2 \text{ K}$

Considerando:

- un vetro con trasmittanza termica centrale $U_g = 1,0 \text{ W/m}^2 \text{ K}$
- trasmittanza termica lineare $\psi_g = 0,05 \text{ W/m K}$

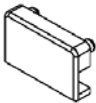
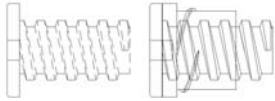
Accessori

「**tierre 590TH**」

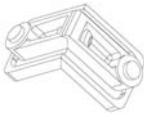
Accessories



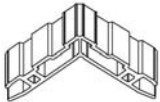
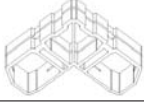
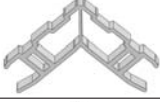
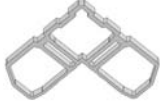
ACCESSORI TIERRE 590TH "VARI"

sigla	profilo	descrizione
Ra 1033		CAPPETTA DI DRENAGGIO
Ra 1404		REGOLATORE A MURO
Ra 1420		CAVALLOTTO PER TR5910
Ra 1421		CAVALLOTTO PER TR5911
Ra 1422		ANGOLI PER FERMAVETRI ARROTONDATI
Ra 2601		BOCCOLA SCARICO ACQUA
Ra 1737		CLIP PER FERMAVETRI
Ra 2342		RUOTA PER INSERIMENTO GUARNIZIONE Rg 406
Ra 3822		ESPANSO SOTTOVETRO 25X6 mm

ACCESSORI TIERRE 590TH "SQUADRETTE"

sigla	profilo	descrizione
Ra 1048		SQUADRETTA A TIRAGGIO MECCANICO PER IMBOTTI CAPANNONI
Ra 1410		SQUADRETTA DI ALLINEAMENTO PER TR5930, TR5931, TR5939 E TR5941
Ra 1411		SQUADRETTA DI ALLINEAMENTO PER IMBOTTI CAPANNONI
Ra 1704		SQUADRETTA DI ALLINEAMENTO PER ANTE V.I.
Ra 3804		SQUADRETTA DI ALLINEAMENTO A TIRAGGIO

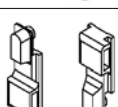
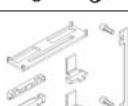
ACCESSORI TIERRE 590TH "SQUADRETTE"

sigla	profilo	descrizione
Ra 1711		SQUADRETTA A CIANFRINARE CASSA INTERNA
Ra 3813		SQUADRETTA A TIRAGGIO MECCANICO CASSA INTERNA CON BOTTONE DA 8 mm
Ra 3817		SQUADRETTA A TIRAGGIO MECCANICO CASSA INTERNA PER MAGGIORATI CON BOTTONE DA 8 mm
Ra 1423		SPINA DA 8 mm
Ra 1705		SQUADRETTA A SPINARE CASSA INTERNA
Ra 1707		SQUADRETTA A SPINARE CASSA INTERNA PER MAGGIORATI
Ra 1714		SQUADRETTA A SPINARE CASSA INTERNA PER TR5932 E TR5941
Ra 3806		SQUADRETTA A CIANFRINARE CASSA ESTERNA ANTA MAGGIORATA
Ra 3807		SQUADRETTA A CIANFRINARE CASSA INTERNA PER ANTE TR5943
Ra 3808		SQUADRETTA A CIANFRINARE CASSA ESTERNA PER ANTA TR5932 E TR5933
Ra 3809		SQUADRETTA A CIANFRINARE CASSA ESTERNA PER ANTA TR5938 E TR5941
Ra 3805		SQUADRETTA A CIANFRINARE
Ra 3819		SQUADRETTA A AVVITARE CASSA ESTERNA TR5905
Ra 3826		SQUADRETTA A SPINARE, CIANFRINARE E CON GRANO CASSA ESTERNA ANTA

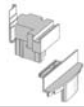
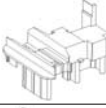
ACCESSORI TIERRE 590TH "CERNIERE"

sigla	profilo	descrizione
Ra 1427		CERNIERA FLASH BASE
Ra 1428		CERNIERA FLASH BASE PER SOLUZIONE COMPLANARE O 3ª ANTA
Ra 1430		CERNIERA PER PORTE FLASH XL
Ra 1431		CERNIERE PER PORTE FLASH XL SOL. COMPLANARE O 3ª ANTA
Ra 1440		CERNIERA PER VASISTAS

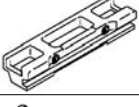
ACCESSORI TIERRE 590TH "CREMONESI"

sigla	profilo	descrizione
Ra 1031		CREMONESE UNICA SENZA ARTICOLI CORRELATI
Ra 1056		CREMONESE PRIMA
Ra 1057		CREMONESE PRIMA 900 PER ANTA RIBALTA
Ra 1447		BLOCCHETTI DI COLLEGAMENTO
Ra 1454		CURSORI E VITI IN ABBINAMENTO A Ra 1031 PER APERTURA INTERNA
Ra 1429		CRICCHETTO CICO

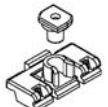
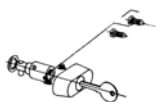
ACCESSORI TIERRE 590TH "TAPPI"

sigla	profilo	descrizione
Ra 3820		TAPPO RISCONTRO CENTRALE GIUNTO APERTO
Ra 3823		TAPPO RISCONTRO CENTRALE DOPPIA BATTUTA
Ra 3821		TAPPO RISCONTRO CENTRALE PER SISTEMA CON FERRAMENTA A NASTRO
Ra 3830		TAPPO RISCONTRO CENTRALE PIANO PER GIUNTO APERTO
Ra 3831		TAPPO RISCONTRO CENTRALE PIANO PER FERRAMENTA A NASTRO

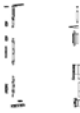
ACCESSORI TIERRE 590TH "ACCESSORI DI CHIUSURA"

sigla	profilo	descrizione
Ra 1002		TERMINALE PER ASTE
Ra 1035		CATENACCIO GIAP
Ra 2905		INCONTRO ASTE E TERZA CHIUSURA
Ra 2906		INCONTRO SINGOLO O DOPPIO
Ra 2907		INCONTRO PER art. Ra 2918
Ra 2908		INCONTRO DOPPIO
Ra 2909		ROSTRO DI CHIUSURA REGISTRABILE
Ra 2910		BRACCIO LIMITATORE DI APERTURA FRIZ
Ra 2911		BRACCIO LUNGO RALLENTY mm 250

ACCESSORI TIERRE 590TH "ACCESSORI DI CHIUSURA"

sigla	profilo	descrizione
Ra 2912		BRACCIO CORTO RALLENTY mm 150
Ra 2913		CATENACCIO REGISTRABILE
Ra 2914		TAPPO SOSTENIMENTO ANTE
Ra 2915		MARTELLINA MASTERMAR
Ra 2918		NOTTOLINO DI CHIUSURA
Ra 1433		MOVIMENTAZIONE INTERNA BIDIREZIONALE
Ra 1436		INCONTRO PER DOPPIA E TERZA CHIUSURA
Ra 1437		INCONTRO SINGOLO
Ra 1441		TERMINALE REGISTRABILE
Ra 1442		CATENACCIO TOTEM
Ra 1444		COMANDO BIDIREZIONALE A LEVA
Ra 1445		FERMA ANTA
Ra 1452		ASTINA DI COLLEGAMENTO 15/20
Ra 1457		SERRATURA DI BLOCCAGGIO

ACCESSORI TIERRE 590TH “ANTA RIBALTA BASE”

sigla	profilo	descrizione
Ra 1458		MECC. BASE AR FUTURA
Ra 1459		BRACCIO TIPO 1 ANTA RIBALTA FUTURA
Ra 1460		BRACCIO TIPO 2 ANTA RIBALTA FUTURA
Ra 1461		CHIUSURA SUPPLEMENTARE FUTURA
Ra 2921		CATENACCIO REGISTRABILE ANTA ABBINATA
Ra 2922		CATENACCIO GIAP ANTA ABBINATA
Ra 2923		BRACCIO SUPPLEMENTARE PER ANTA RIBALTA
Ra 1456		CATENACCIO ANTA ABBINATA
Ra 1443		COMANDO BIDIREZIONALE A LEVA NELLA SOLUZIONE ANTA RIBALTA
Ra 1435		MOVIMENTAZIONE INTERNA MONODIREZIONALE
Ra 1462		CERNIERA ANTA ABBINATA

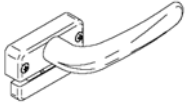
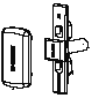
ACCESSORI TIERRE 590TH “ANTA RIBALTA COMPLANARE”

sigla	profilo	descrizione
Ra 1455		MECCANISMO ANTA RIBALTA PER SOLUZIONE COMPLANARE

ACCESSORI TIERRE 590TH "ANTA RIBALTA COMPLANARE"

sigla	profilo	descrizione
Ra 1025		CATENACCI ANTA ABBINATA A Ra 1455
Ra 1044		BRACCIO TIPO 1 ANTA RIBALTA APPLICABILE A Ra 1455
Ra 1045		BRACCIO TIPO 2 ANTA RIBALTA APPLICABILE A Ra 1455
Ra 2919		CHIUSURE SUPPL. VERTICALI APPLICABILI A Ra 1455
Ra 2920		CHIUSURE SUPPL. ORIZZONTALI APPLICABILI A Ra 1455

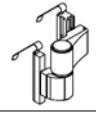
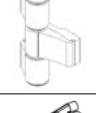
ACCESSORI TIERRE 590TH "SPORGERE"

sigla	profilo	descrizione
Ra 1729		BRACCIO PER SPORGERE
Ra 1730		MANIGLIA A TAVELLINO "BRAVO 1" PER GRADINO 8 mm
Ra 1731		KIT PER APERTURA ESTERNA MONODIREZIONALE
Ra 1732		TRAINO PER ASTINA
Ra 1733		BRACCI LASER INOX
Ra 1734		BRACCI LASER ZINCATO

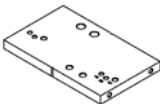
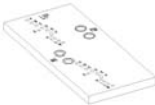
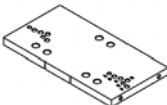
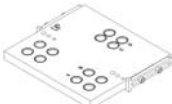
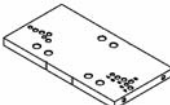
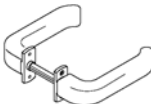
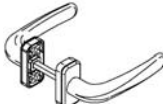
ACCESSORI TIERRE 590TH "MONOBLOCCO"

sigla	profilo	descrizione
Ra 1036		PASSACINTINO
Ra 1058		TAPPO RACCOGLI CONDENSA
Ra 1073		TAPPI CASSONETTO MONOBLOCCO
Ra 1419		COPPIA INVITI PER GUIDA TAPPARELLA
Ra 1476		KIT MOVIMENTAZIONE MONOBLOCCO

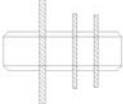
ACCESSORI TIERRE 590TH "SERIE PORTA"

sigla	profilo	descrizione
Ra 1426		CERNIERA DOMINA 2 ALI int. 55,5 mm
Ra 1432		CERNIERA DOMINA 2 ALI 3D int. 55,5 mm
Ra 1424		CERNIERA DOMINA 2 ALI int. 61 mm
Ra 1425		CERNIERA DOMINA 3 ALI int. 61 mm
Ra 1463		CERNIERA DOMINA HP 2 ALI int. 62,5 mm
Ra 1464		CERNIERA DOMINA HP 3 ALI int. 62,5 mm
Ra 1473		CERNIERA DOMINA 2 ALI INTERASSE 68,5 mm

ACCESSORI TIERRE 590TH "SERIE PORTA"

sigla	profilo	descrizione
Ra 1474		CERNIERA DOMINA 3 ALI INTERASSE 68,5 mm
Ra 1448		DIMA PER CERNIERA Ra1426
Ra 1451		DIMA PER CERNIERA Ra1432
Ra 1449		DIMA PER CERNIERE Ra1424 e Ra1425
Ra 1450		DIMA PER CERNIERE Ra1463 e Ra1464
Ra 1475		DIMA PER CERNIERE Ra 1473 e Ra 1474
Ra 1466		DOPPIA MANIGLIA PER MONTANTE
Ra 1467		DOPPIA MANIGLIA PER FASCIA
Ra 2327		KIT DI TENUTA SOTTOZZOCOLO 1
Ra 2328		KIT DI TENUTA SOTTOZZOCOLO 2

ACCESSORI TIERRE 590TH "GRUPPI FRESE E PUNZONATRICI"

sigla	profilo	descrizione
Ra 3800		PUNZONATRICE TIERRE
Ra 3816		GRUPPO FRESE TIERRE 590TH

Guarnizioni

「**tierre 590TH**」

Weathrstrips



Scala 1:1

Rg 402



Guarnizione di battuta interna e a muro
Materiale EPDM

Rg 406



Guarnizione centrale di tenuta
Materiale EPDM

Ra 1703



Angolo Vulcanizzato per Rg 406
Materiale EPDM

Rg 331



Guarnizione per riscontro centrale
- soluzione a giunto aperto -
Materiale EPDM

Rg 303



Guarnizione per riscontro centrale
- soluzione doppia battuta -
Materiale EPDM

Rg 361



Guarnizione di battuta
- soluzione a doppia battuta -
Materiale EPDM

Rg 407



Guarnizione di isolamento soglia
Materiale EPDM

Rg 329



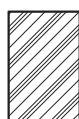
Guarnizione copricava
Materiale EPDM

Rg 405



Guarnizione termoacustica
Materiale EPDM-EPDM espanso

Rg 358



Spugna per Monoblocco

Rg 350



Guarnizione esterna vetro per vano da 2,5 mm
Materiale EPDM

Scala 1:1

Rg 351



Guarnizione esterna vetro per vano da 3,5 mm
Materiale EPDM

Rg 397



Guarnizione esterna vetro con codina
per vano da 2,5÷3,5 mm
Materiale EPDM

Rg 360



Guarnizione esterna vetro per vano da 5 mm
Materiale EPDM

Rg 307



Guarnizione interna vetro per vano da 2 mm
Materiale EPDM

Rg 320



Guarnizione interna vetro per vano da 3 mm
Materiale EPDM

Rg 308



Guarnizione interna vetro per vano da 4 mm
Materiale EPDM

Rg 321



Guarnizione interna vetro per vano da 5 mm
Materiale EPDM

Rg 309



Guarnizione interna vetro per vano da 6 mm
Materiale EPDM

Rg 394



Guarnizione interna vetro con codina
per vano da 2÷3 mm
Materiale EPDM

Rg 395



Guarnizione interna vetro con codina
per vano da 3÷4,5 mm
Materiale EPDM

Rg 396



Guarnizione interna vetro con codina
per vano da 4,5÷6 mm
Materiale EPDM

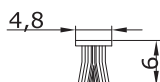
Scala 1:1

Rg 333



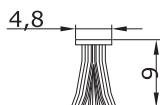
Profilo Canalina
per sistema con ferramenta a nastro
Materiale PVC

48 x 600



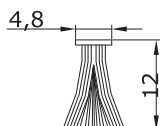
Guarnizione a spazzola 4,8 x 6 mm
Materiale polipropilene

48 x 900



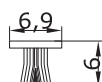
Guarnizione a spazzola 4,8 x 9 mm
Materiale polipropilene

48 x 1200



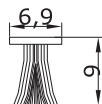
Guarnizione a spazzola 4,8 x 12 mm
Materiale polipropilene

69 x 600



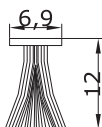
Guarnizione a spazzola 6,9 x 6 mm
Materiale polipropilene

69 x 900



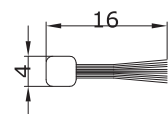
Guarnizione a spazzola 6,9 x 9 mm
Materiale polipropilene

69 x 1200



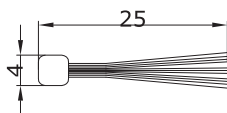
Guarnizione a spazzola 6,9 x 12 mm
Materiale polipropilene

40 x 1600



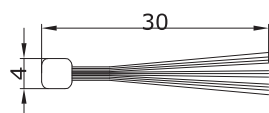
Guarnizione sottozoccolo a spazzola 16 mm
Materiale polipropilene

40 x 2500



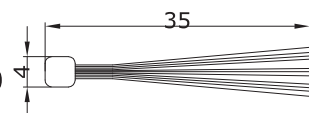
Guarnizione sottozoccolo a spazzola 25 mm
Materiale polipropilene

40 x 3000



Guarnizione sottozoccolo a spazzola 30 mm
Materiale polipropilene

40 x 3500



Guarnizione sottozoccolo a spazzola 35 mm
Materiale polipropilene

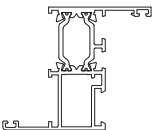
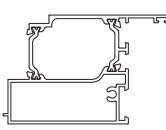
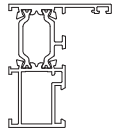
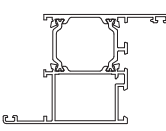
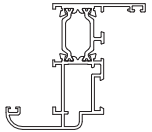
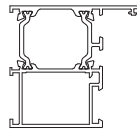
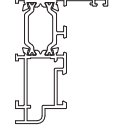
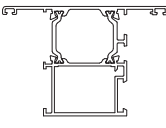
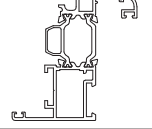
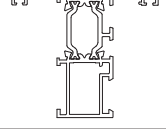
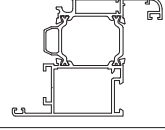
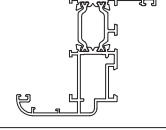
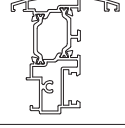
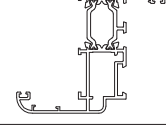
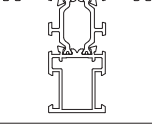
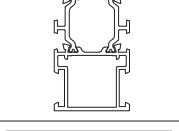
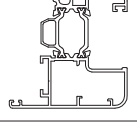
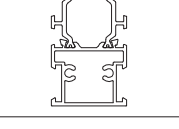
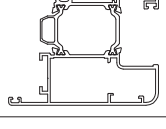
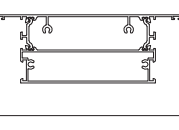
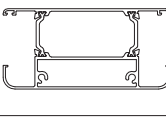
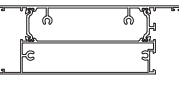
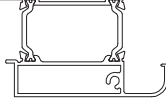
Profili

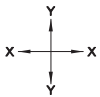
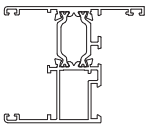
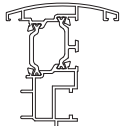
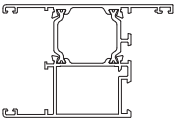
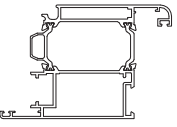
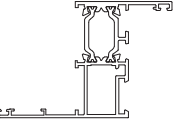
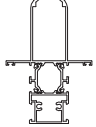
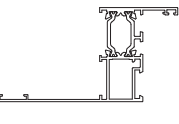
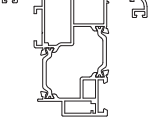
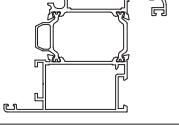
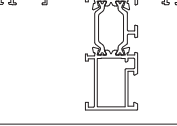
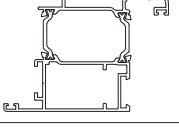
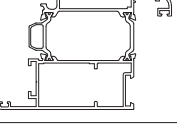
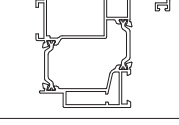
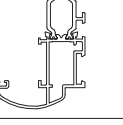
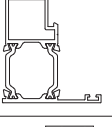
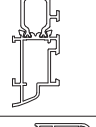
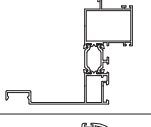
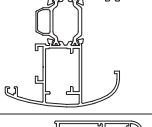
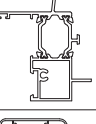
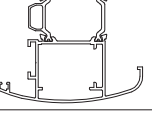
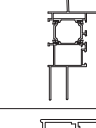
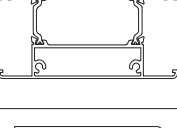
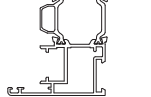
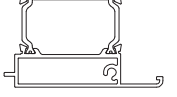
「**tierre 590TH**」

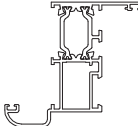
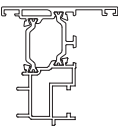
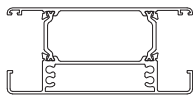
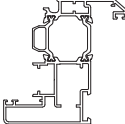
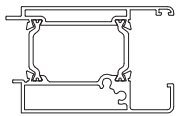
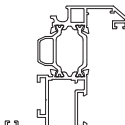
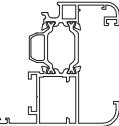
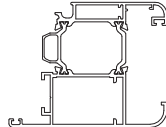
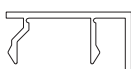
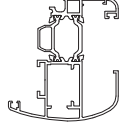
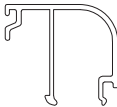
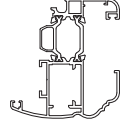
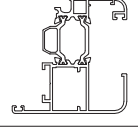
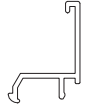
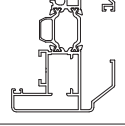
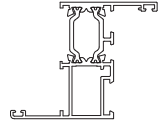
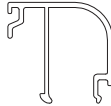
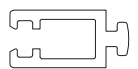
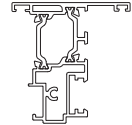
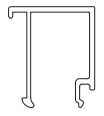
Profiles

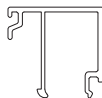
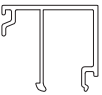
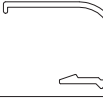
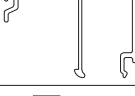
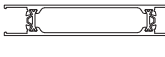
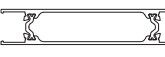


Scala ridotta

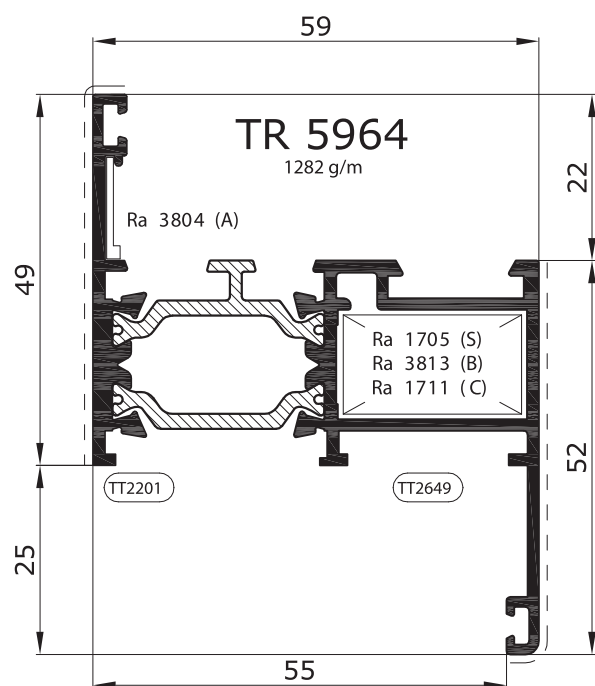
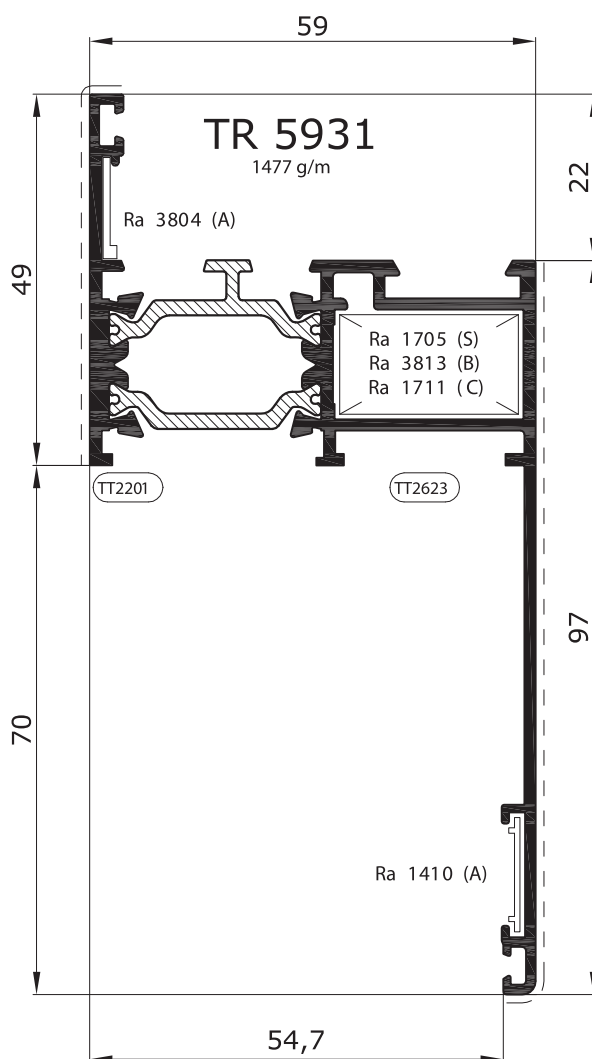
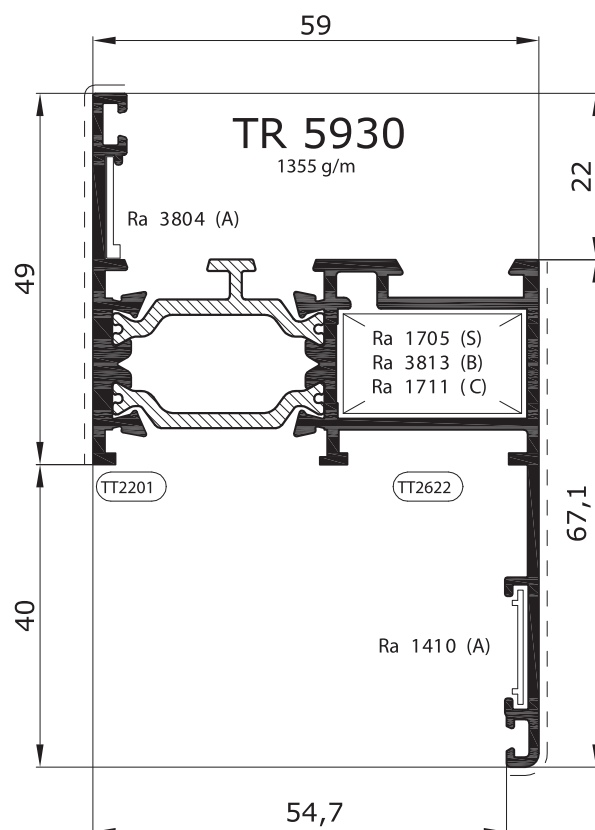
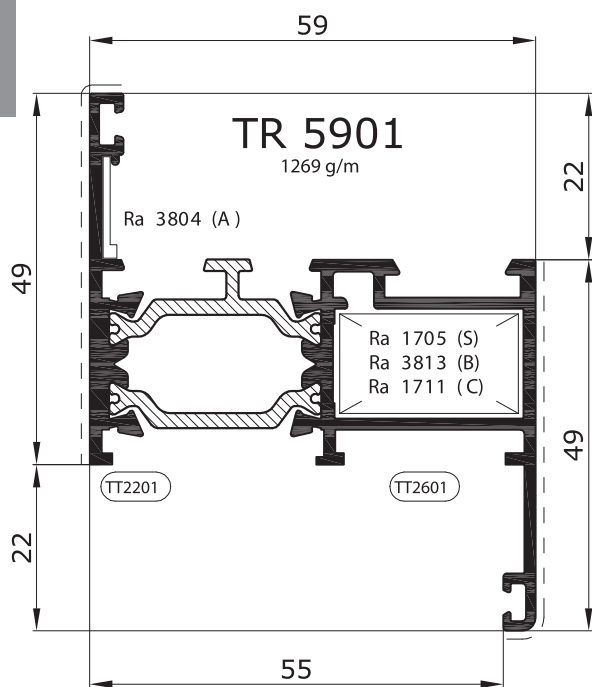
							
profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzazione	profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzazione
	TR 5901 Jx = 23,20 Jy = 8,93	1269	Telaio - aletta 22 mm -		TR 5915 Jx = 28,11 Jy = 36,44	1640	Zoccolo Riportato
	TR 5902 Jx = 18,82 Jy = 5,62	1159	Telaio a " L "		TR 5916 Jx = 28,12 Jy = 23,46	1507	Telaio Maggiorato - aletta 22 mm -
	TR 5903 Jx = 31,51 Jy = 11,86	1410	Telaio Complanare - aletta 25 mm -		TR 5917 Jx = 23,93 Jy = 17,64	1397	Telaio Maggiorato a " L "
	TR 5904 Jx = 24,07 Jy = 5,93	1243	Telaio Complanare a " L "		TR 5918 Jx = 26,00 Jy = 23,45	1507	Telaio Maggiorato a " T "
	TR 5905 Jx = 27,29 Jy = 9,77	1375	Anta		TR 5919 Jx = 20,72 Jy = 8,92	1269	Telaio a " T "
	TR 5906 Jx = 35,21 Jy = 24,50	1695	Anta Maggiorata		TR 5920 Jx = 33,34 Jy = 14,46	1449	Telaio Complanare - aletta 30 mm -
	TR 5909 Jx = 26,52 Jy = 8,92	1452	Riscontro Centrale		TR 5921 Jx = 34,27 Jy = 17,07	1469	Telaio Complanare - aletta 35 mm -
	TR 5910 Jx = 21,06 Jy = 9,58	1325	Traverso - H= 71,5 mm -		TR 5922 Jx = 11,17 Jy = 0,88	699	Soglia
	TR 5911 Jx = 23,57 Jy = 16,10	1438	Traverso - H= 80,5 mm -		TR 5924 Jx = 32,88 Jy = 15,84	1564	Anta V.I.
	TR 5912 Jx = 25,28 Jy = 16,43	1545	Traverso - H= 80,5 mm -		TR 5925 Jx = 40,98 Jy = 36,60	1882	Anta Maggiorata V.I.
	TR 5913 Jx = 49,97 Jy = 223,5	2856	Fascia		TR 5926 Jx = 27,55 Jy = 71,45	1915	Fascia V.I.
	TR 5914 Jx = 54,24 Jy = 241,3	2958	Zoccolo		TR 5927 Jx = 22,17 Jy = 30,42	1665	Zoccolo Riportato V.I.

							
profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzazione	profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzazione
	TR 5928 Jx = 25,56 Jy = 11,80	1379	Telaio a "L" - H= 71 mm -		TR 5940 Jx = 23,60 Jy = 8,72	1353	Riscontro centrale per ferramenta a nastro
	TR 5929 Jx = 30,60 Jy = 28,59	1617	Telaio a "L" Maggiorato - H= 89 mm -		TR 5941 Jx = 44,04 Jy = 51,11	2006	Anta maggiorata per ferramenta a nastro
	TR 5930 Jx = 26,16 Jy = 15,83	1355	Telaio - aletta 40 mm -		TR 5942 Jx = 114,9 Jy = 22,71	2349	Montante rinforzato
	TR 5931 Jx = 30,01 Jy = 38,55	1477	Telaio - aletta 70 mm -		TR 5943 Jx = 35,24 Jy = 21,36	1727	Anta apertura esterna
	TR 5932 Jx = 38,70 Jy = 35,81	1806	Anta maggiorata		TR 5944 Jx = 22,31 Jy = 18,53	1374	Telaio a " T " - - aletta 45 mm -
	TR 5933 Jx = 39,68 Jy = 37,54	1801	Anta serie porta apertura interna		TR 5945 Jx = 43,46 Jy = 51,44	1986	Anta super maggiorata
	TR 5934 Jx = 39,97 Jy = 37,83	1900	Anta serie porta apertura esterna		TR 5946 Jx = 33,77 Jy = 12,26	1432	Telaio Complanare Bombato a " Z "
	TR 5935 Jx = 15,95 Jy = 6,81	1067	Inversione di battuta		TR 5947 Jx = 25,42 Jy = 5,99	1258	Telaio Complanare Bombato a " L "
	TR 5936 Jx = 115,5 Jy = 64,76	2249	Spalla Monoblocco		TR 5948 Jx = 40,14 Jy = 14,18	1593	Anta Bombata V.I. vuoto 41 mm
	TR 5937 Jx = 34,79 Jy = 9,82	1532	Traverso Superiore Monoblocco		TR 5949 Jx = 47,50 Jy = 32,35	1895	Anta Bombata maggiorata V.I. vuoto 41 mm
	TR 5938 Jx = 196,9 Jy = 77,13	2833	Imbotte esterno per capannoni		TR 5950 Jx = 26,83 Jy = 65,13	1846	Fascia V.I. vuoto 41 mm
	TR 5939 Jx = 33,84 Jy = 17,06	1601	Anta per ferramenta a nastro		TR 5951 Jx = 21,95 Jy = 28,90	1638	Zoccolo Riportato V.I. vuoto 41 mm

							
profili	sigla $J_x \text{ cm}^4$ $J_y \text{ cm}^4$	peso g/m	utilizzazione	profili	sigla $J_x \text{ cm}^4$ $J_y \text{ cm}^4$	peso g/m	utilizzazione
	TR 5953 $J_x = 28,38$ $J_y = 11,92$	1355	Telaio Complanare		TR 5967 $J_x = 21,08$ $J_y = 8,02$	1301	Riscontro centrale Piano ferramenta a nastro
	TR 2556 $J_x = 26,23$ $J_y = 73,61$	1970	Fascia V.I. vuoto 31,5 mm		TR 5968 $J_x = 49,55$ $J_y = 21,58$	1816	Anta Effetto legno ferramenta a nastro
	TR 2557 $J_x = 21,14$ $J_y = 30,56$	1697	Zoccolo Riportato V.I. vuoto 31,5 mm		TR 5969 $J_x = 26,96$ $J_y = 9,46$	1368	Anta Effetto legno
	TR 5958 $J_x = 32,59$ $J_y = 13,28$	1487	Anta Arrotondata V.I. vuoto 41 mm		AZ 2035	143	Astina
	TR 5959 $J_x = 40,64$ $J_y = 32,14$	1804	Anta maggiorata Arrotondata V.I. vuoto 41 mm		AZ 2047	175	Coprifilo Monoblocco
	TR 5960 $J_x = 40,03$ $J_y = 15,39$	1626	Anta Bombata V.I. vuoto 31,5 mm		AZ 4517	322	Fermavetro Arrotondato Vuoto 24,5 mm
	TR 5961 $J_x = 39,50$ $J_y = 15,16$	1628	Anta Scorniciata V.I. vuoto 31,5 mm		AZ 4518	275	Fermavetro Arrotondato Vuoto 31,5 mm
	TR 5962 $J_x = 32,97$ $J_y = 14,69$	1528	Anta V.I. vuoto 31,5 mm		AZ 4525	197	Fermavetro Dritto Vuoto 50,5 mm
	TR 5963 $J_x = 46,57$ $J_y = 18,32$	1742	Anta Effetto Legno V.I. vuoto 31,5 mm		AZ 4526	156	Vaschetta Raccogli Condensa
	TR 5964 $J_x = 23,66$ $J_y = 9,72$	1282	Telaio - aletta 25 mm -		AZ 4532	313	Fermavetro Arrotondato Vuoto 26,5 mm
	TR 5965	142	Riduttore a muro		AZ 4546	247	Fermavetro Dritto Vuoto 40,5 mm
	TR 5966 $J_x = 23,76$ $J_y = 8,21$	1400	Riscontro Centrale Piano		AZ 4557	278	Fermavetro Dritto Vuoto 31,5 mm

							
profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzo	profili	sigla Jx cm ⁴ Jy cm ⁴	peso g/m	utilizzo
	AZ 4558	330	Fermavetro Dritto Vuoto 26,5 mm		AZ 4618	202	Fermavetro Arrotondato con molletta Vuoto 41 mm
	AZ 4559	337	Fermavetro Dritto Vuoto 24,5 mm		AZ 4619	226	Fermavetro Arrotondato con molletta Vuoto 36,5 mm
	AZ 4560	231	Fermavetro Scorniciato Vuoto 41 mm		AZ 4620	217	Fermavetro Arrotondato con molletta Vuoto 31,5 mm
	AZ 4561	263	Fermavetro Scorniciato Vuoto 31,5 mm		AZ 4621	244	Fermavetro Arrotondato con molletta Vuoto 24,5 mm
	AZ 4562	315	Fermavetro Scorniciato Vuoto 26,5 mm		AZ 4622	237	Fermavetro Arrotondato con molletta Vuoto 26,5 mm
	AZ 4563	322	Fermavetro Scorniciato Vuoto 24,5 mm		AZ 4624	280	Fermavetro Dritto Vuoto 36,5 mm
	AZ 4567	115	Gocciolatoio		AZ 4625	380	Fermavetro Dritto Vuoto 13,5 mm
	AZ 4568	1258	Cassonetto Monoblocco		AZ 4634	269	Fermavetro Effetto legno Vuoto 31,5 mm
	AZ 4569	1140	Frontale Cassonetto Monoblocco		AZ 5243 Jx = 5,83 Jy = 69,15	1462	Doghe Termiche - s = 24 mm -
	AZ 4575	237	Fermavetro Arrotondato Vuoto 41 mm		AZ 5246 Jx = 3,80 Jy = 65,80	1436	Doghe Termiche - s = 20 mm -
	AZ 4576	255	Fermavetro Arrotondato Vuoto 36,5 mm		AZ 5253 Jx = 4,76 Jy = 67,83	1451	Doghe Termiche - s = 22 mm -
	AZ 4591 Jx = 35,36 Jy = 154,08	1482	Imbotte Interno per Capannoni		AZ 6841	173	Coprifuga
	AZ 4592 Jx = 37,74 Jy = 78,92	1652	Imbotte Interno per Capannoni		AZ 6332 Jx = 18,98 Jy = 82,52	1528	Doghe Termiche - s = 40 mm -
	AZ 4617 Jx = 2,02 Jy = 41,82	973	Prolunga Imbotti per Capannoni		AZ 6862 Jx = 9,76 Jy = 73,10	1491	Doghe Termiche - s = 30 mm -

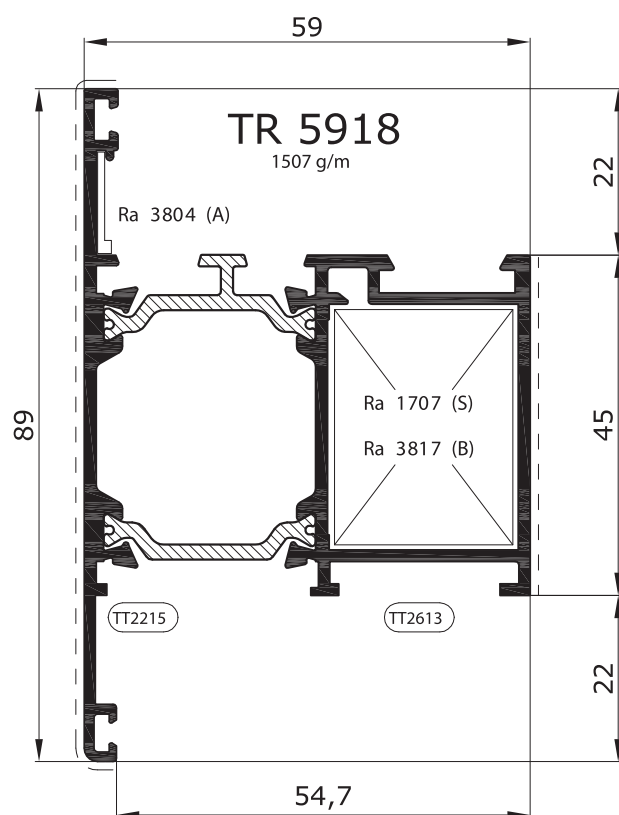
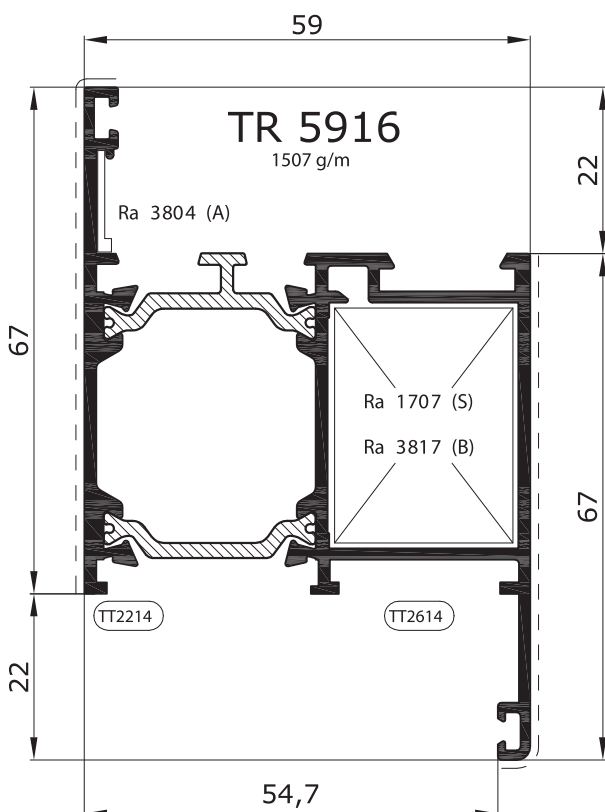
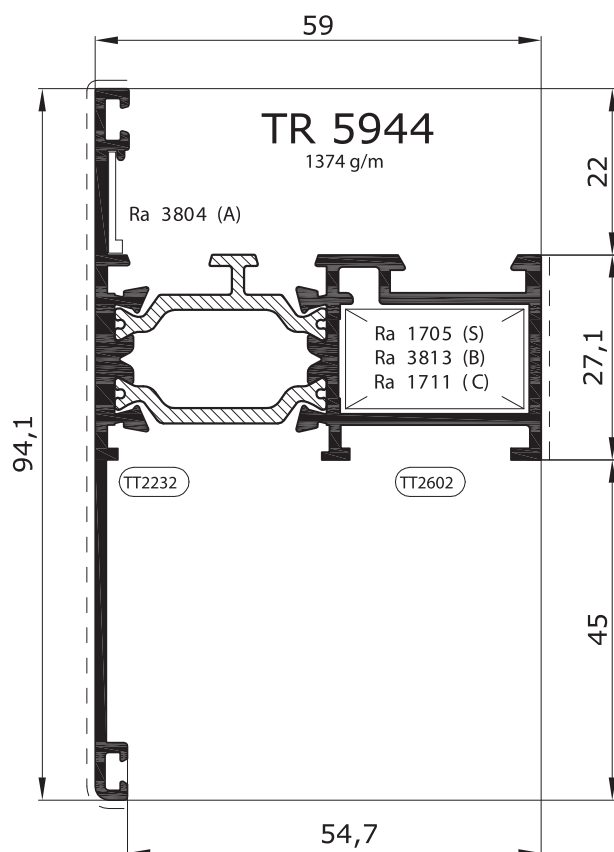
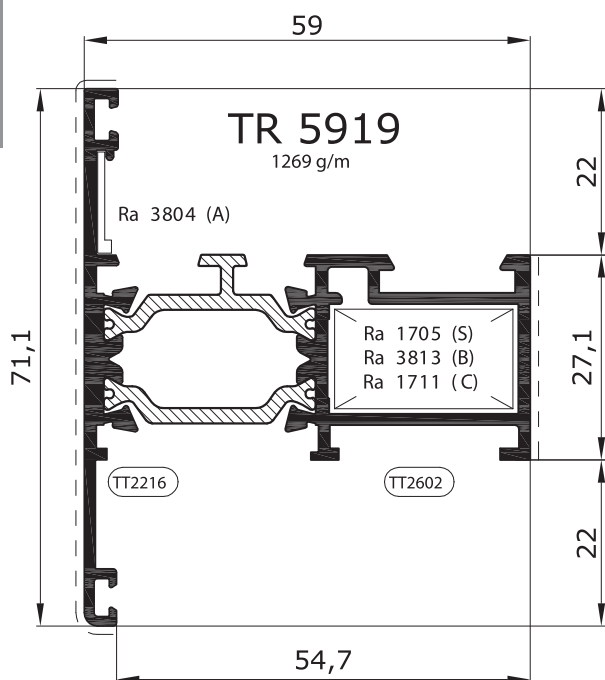
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SQUADRETTE
A = Allineamento
S = Spinare
C = Cianfrinare
B = Tiraggio Meccanico

CODICE MATRICE

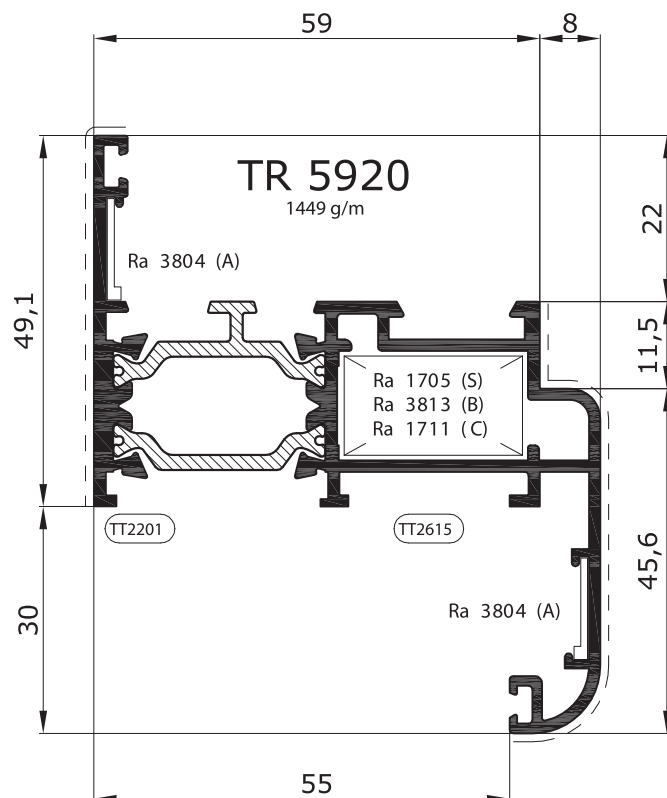
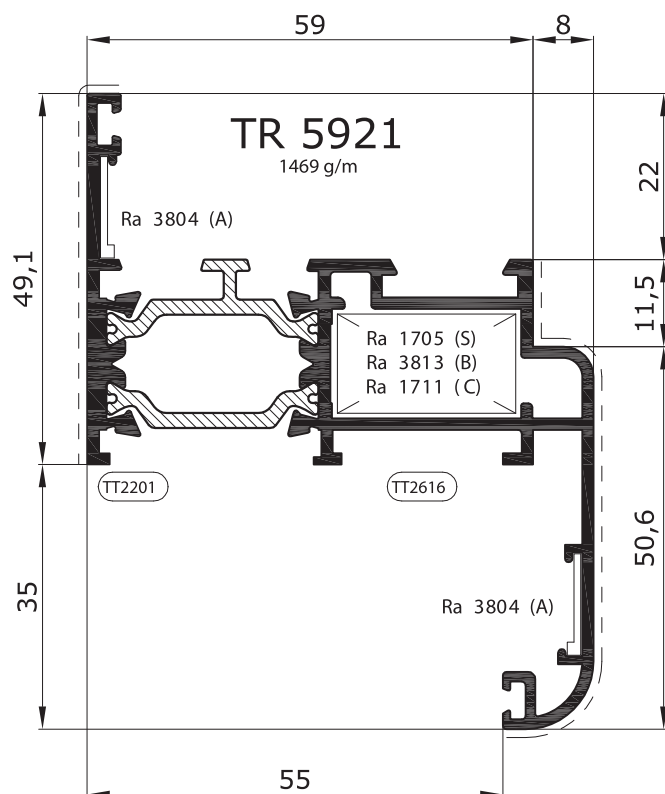
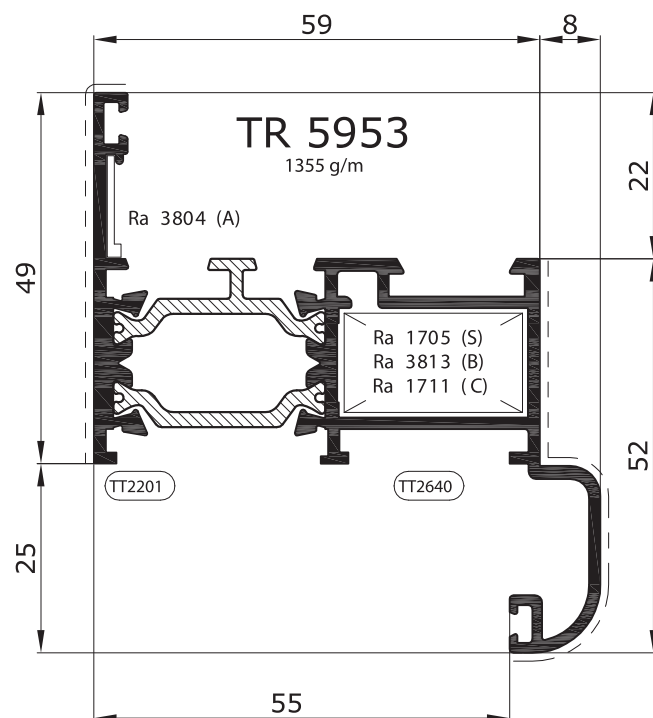
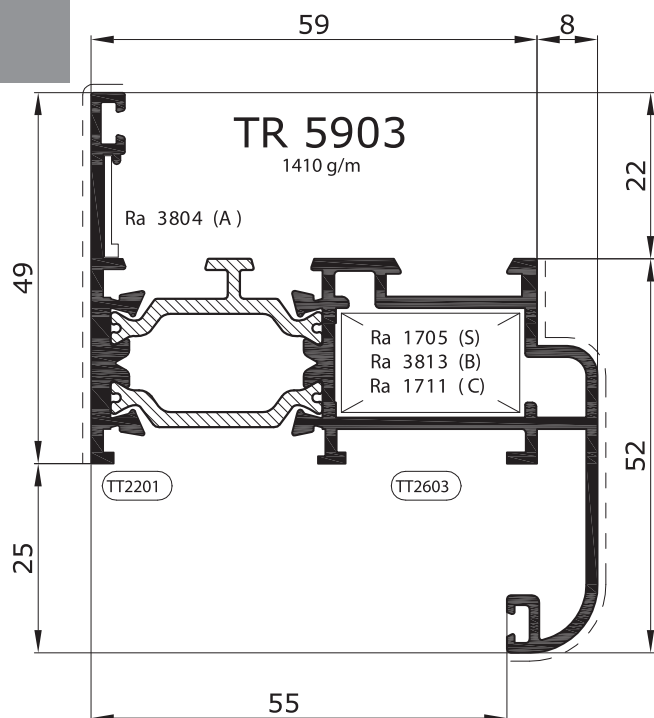
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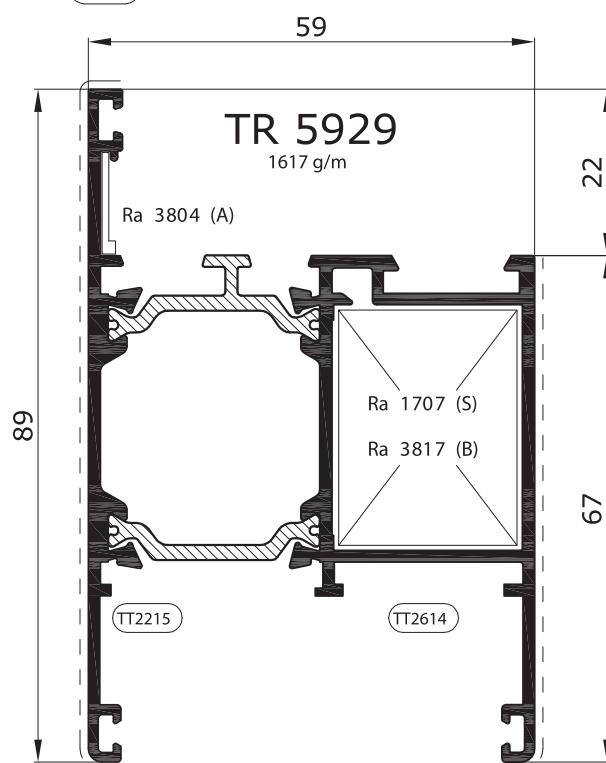
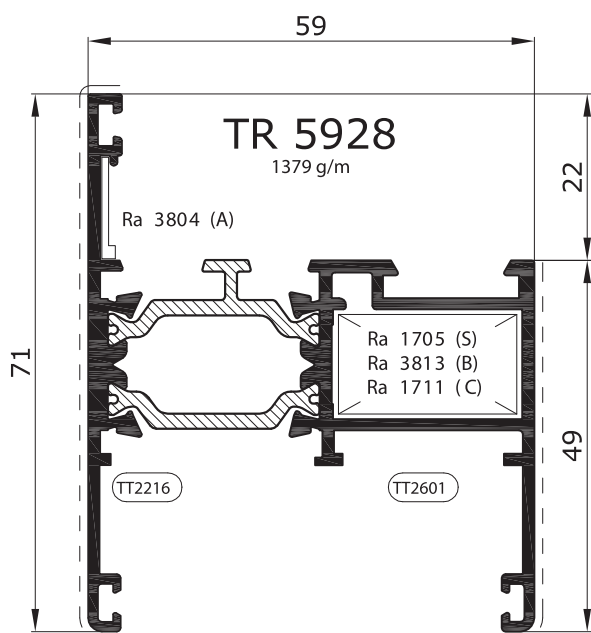
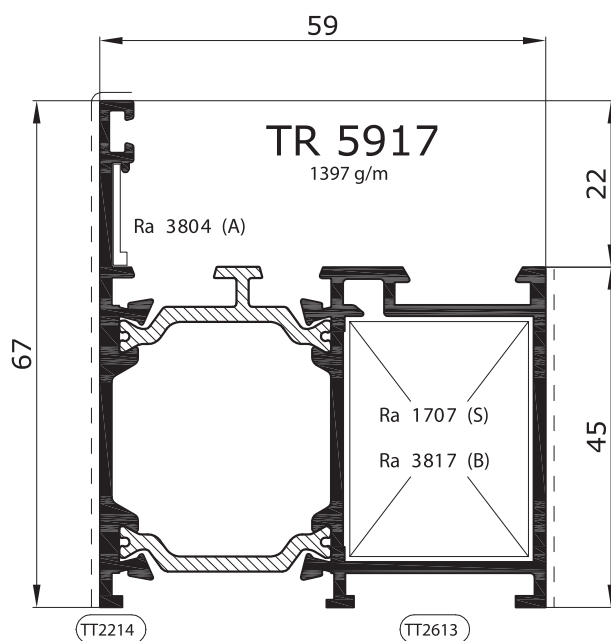
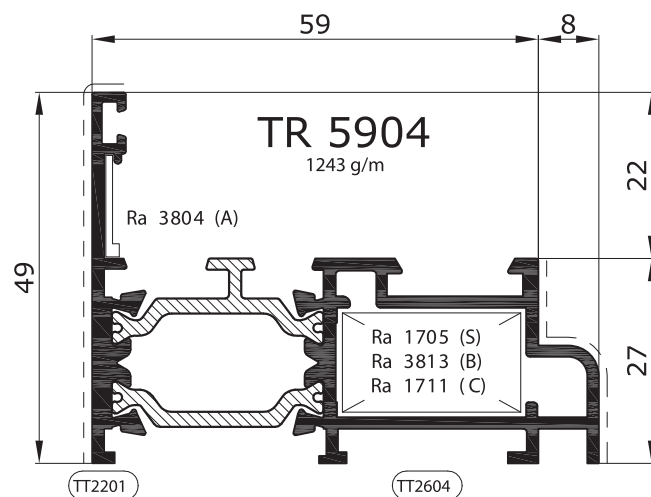
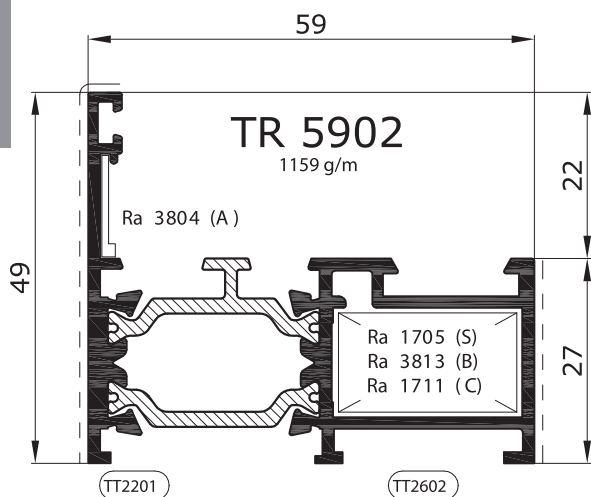
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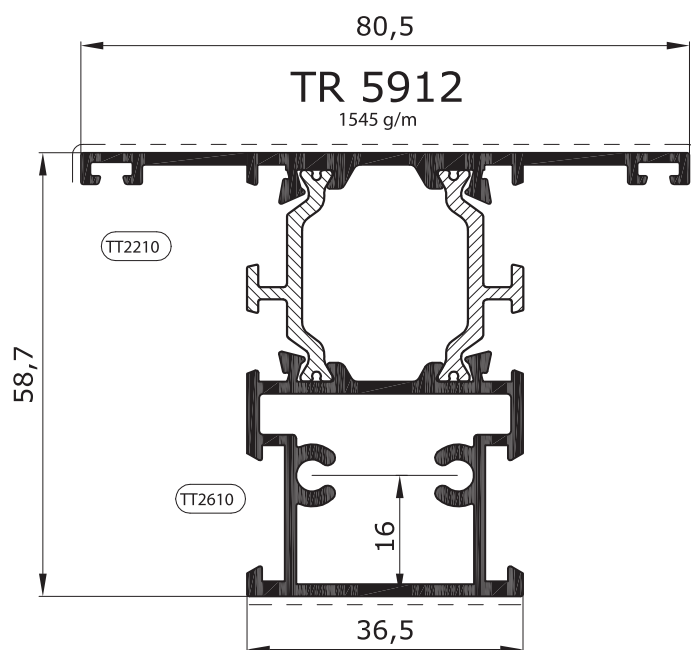
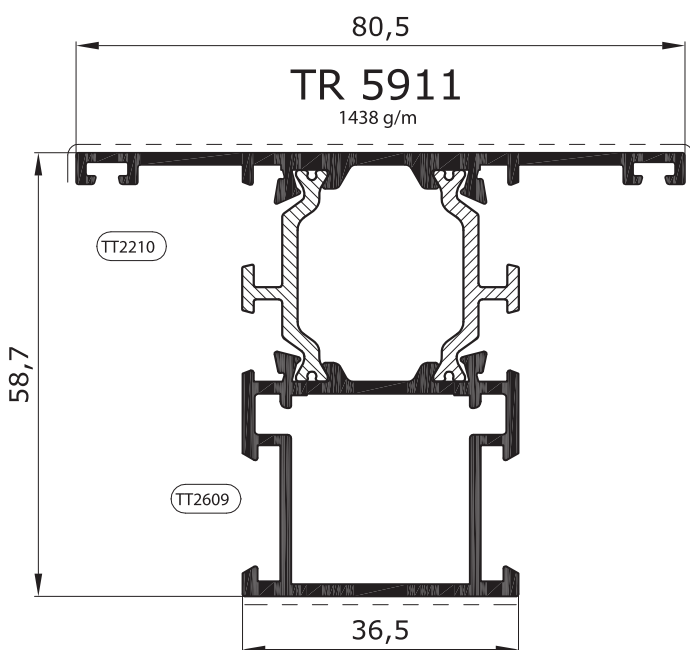
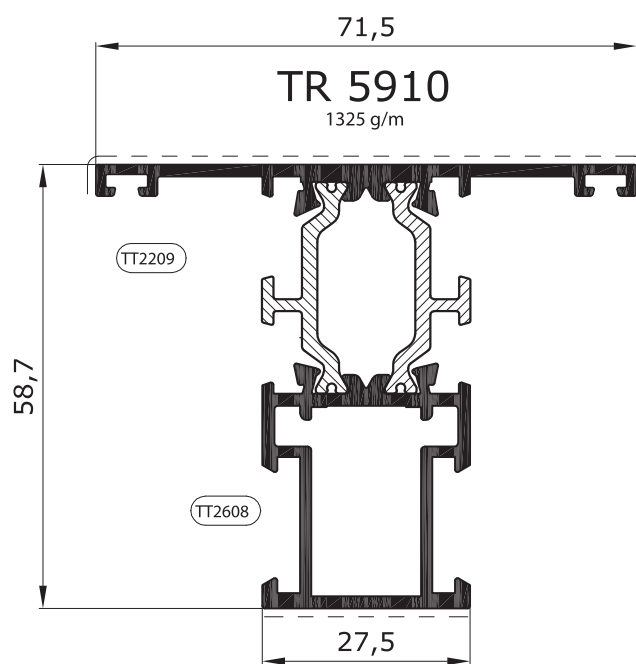
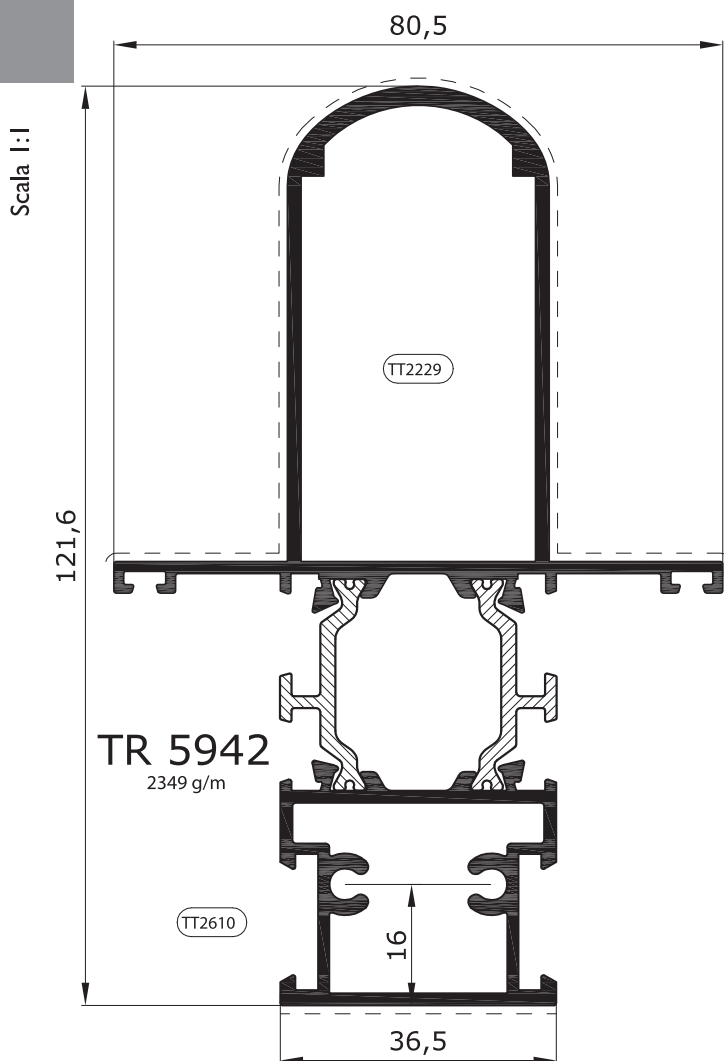
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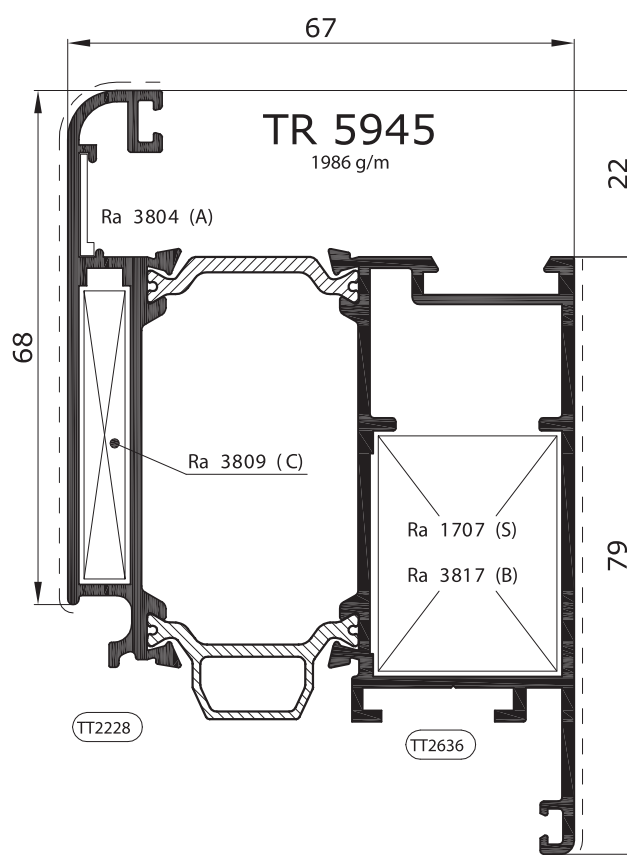
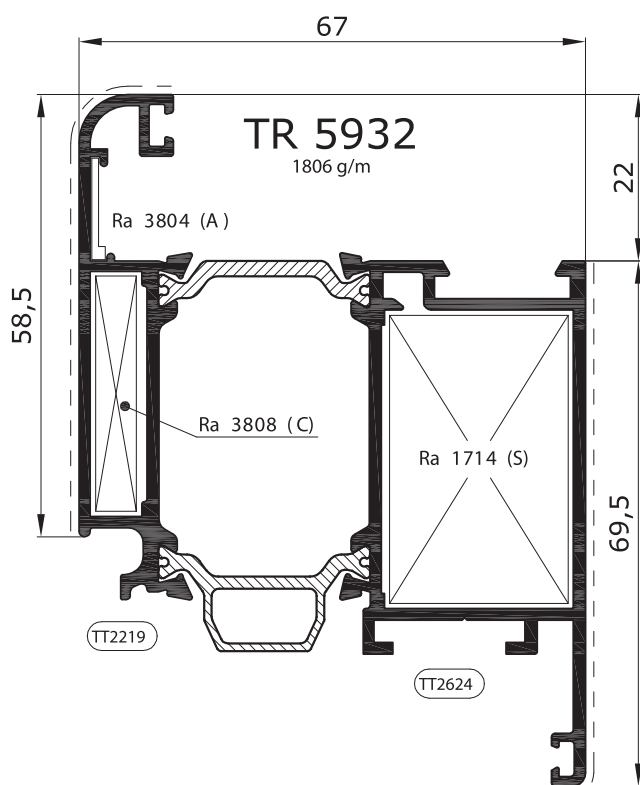
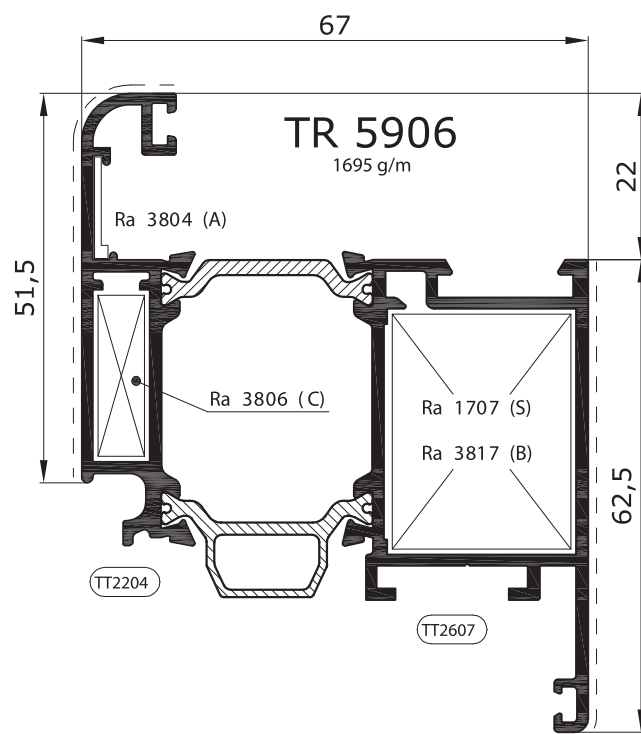
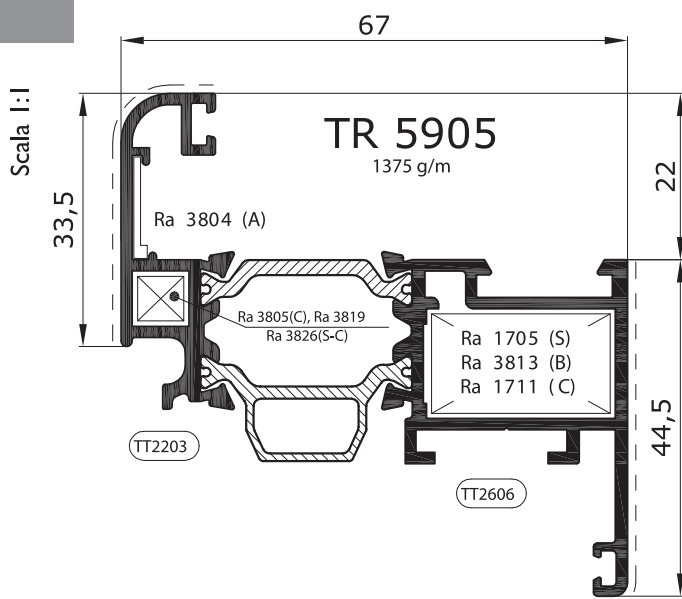


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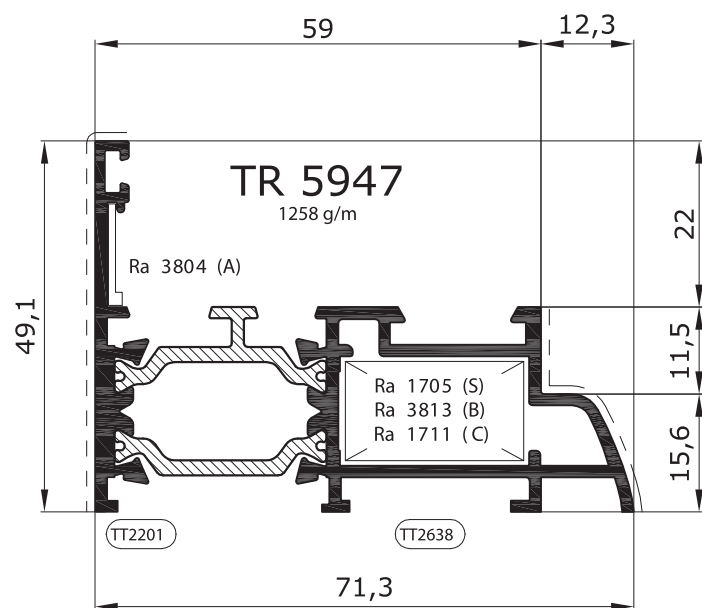
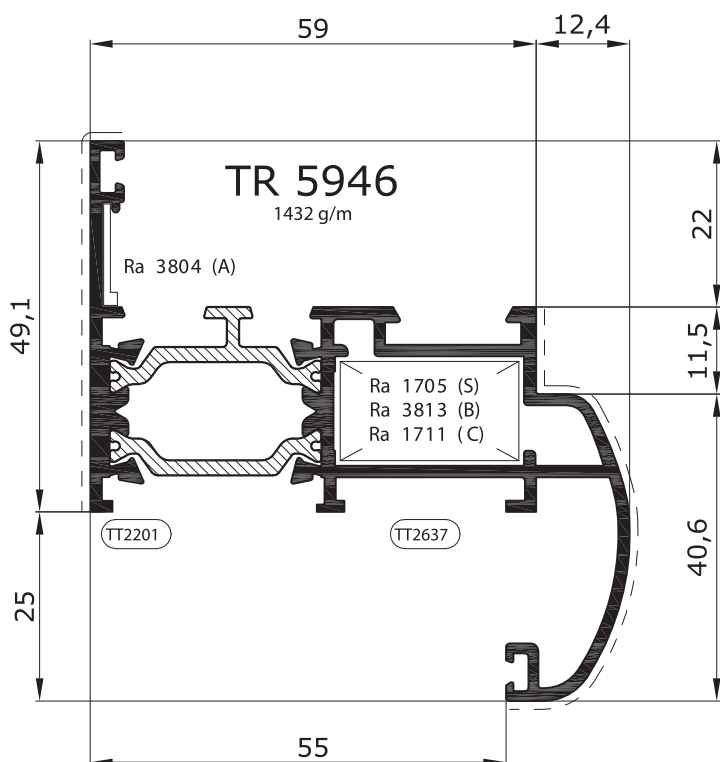
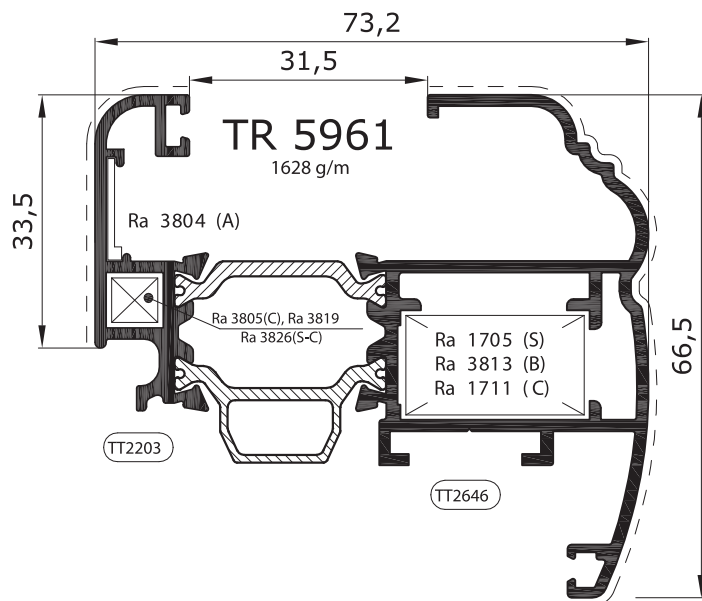
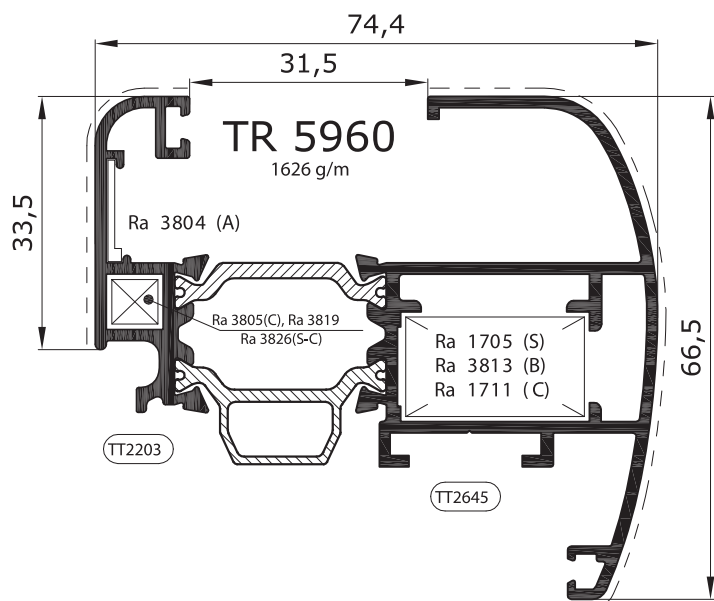
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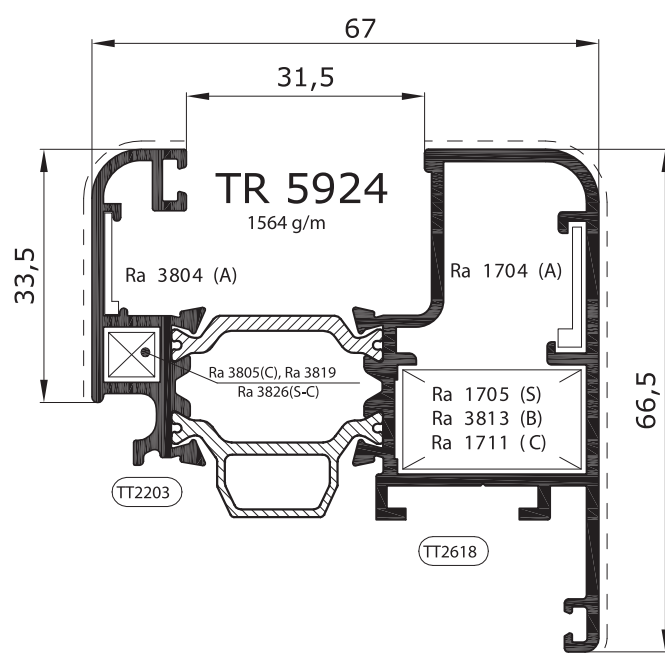
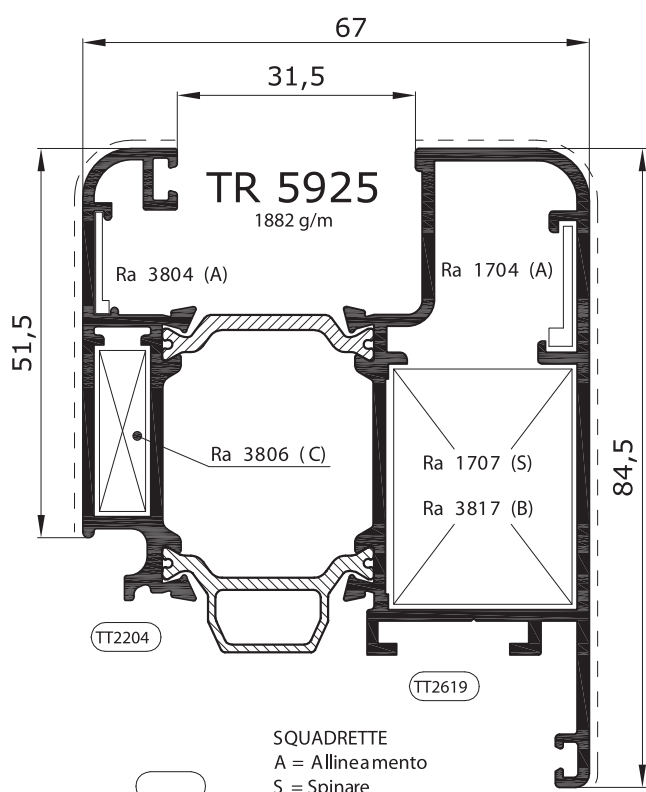
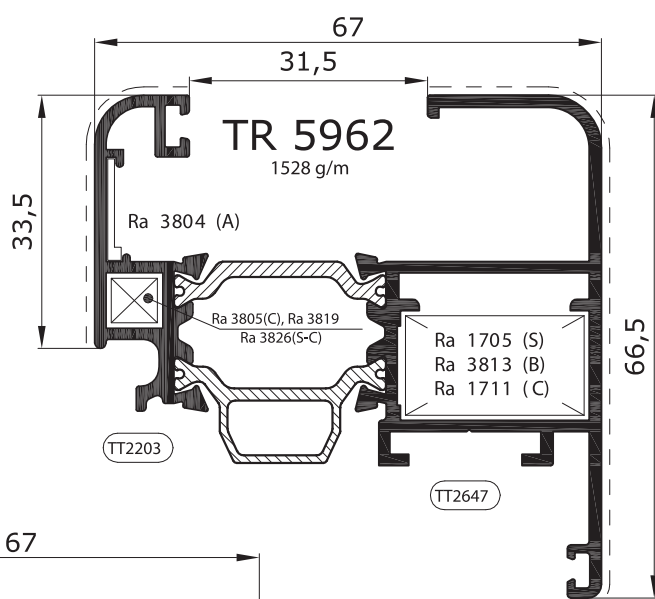
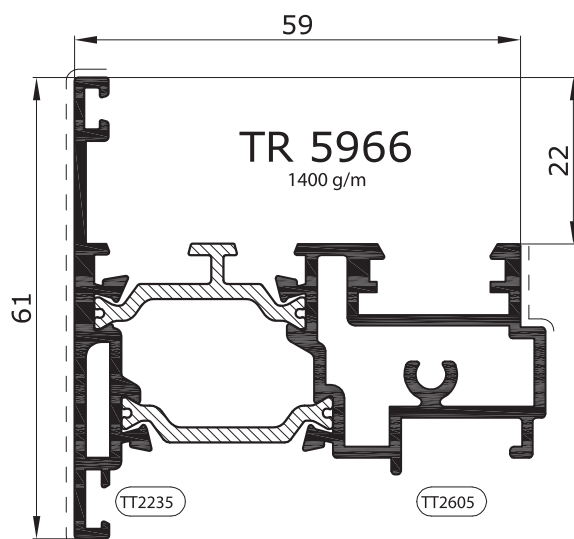
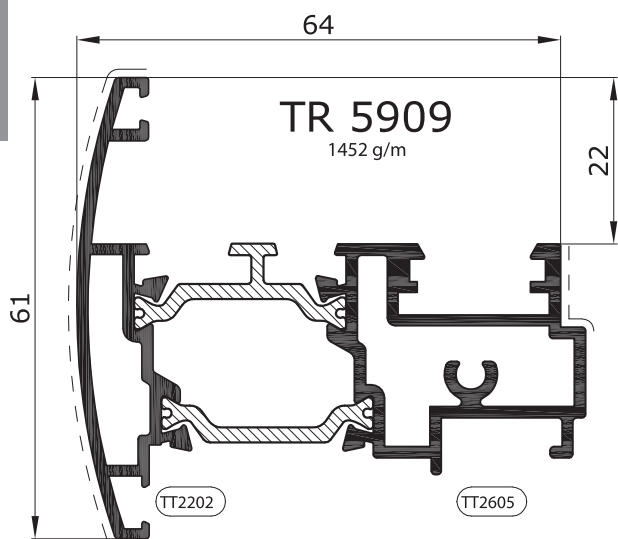
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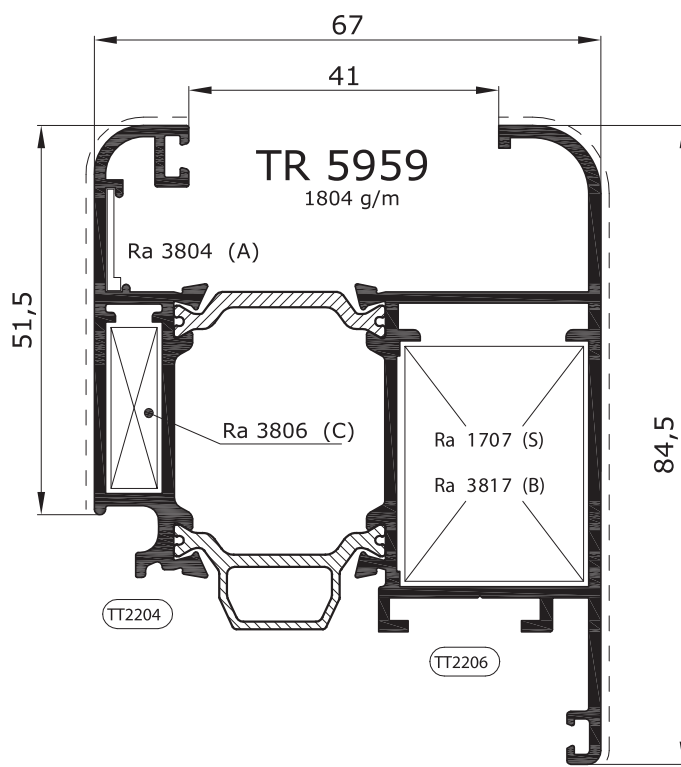
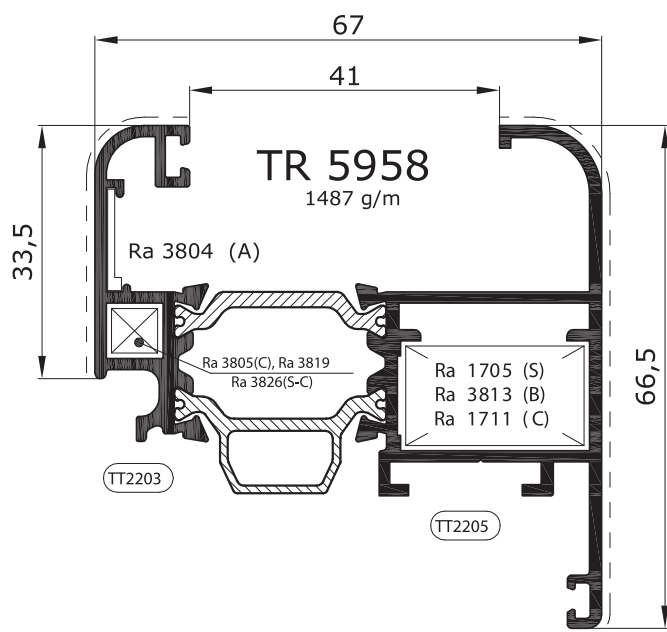
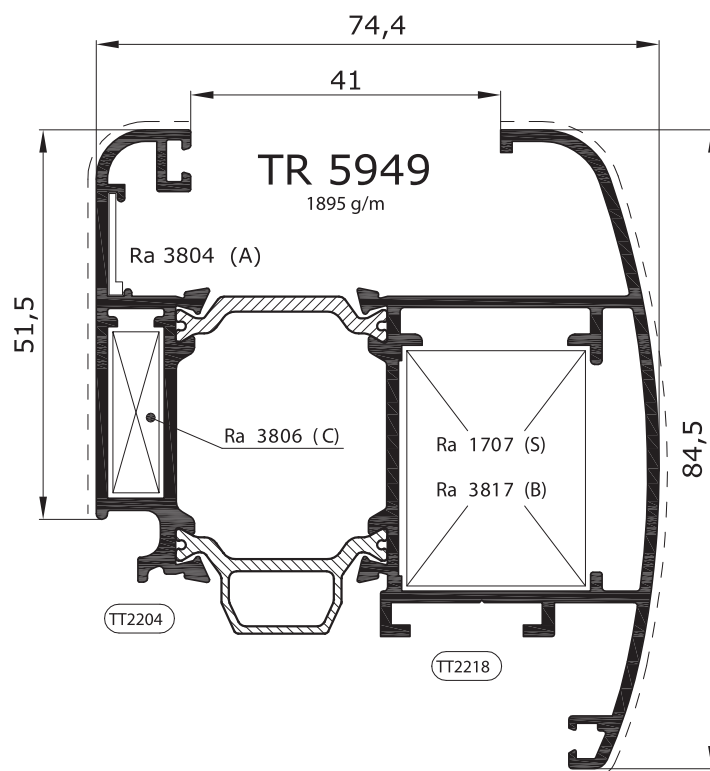
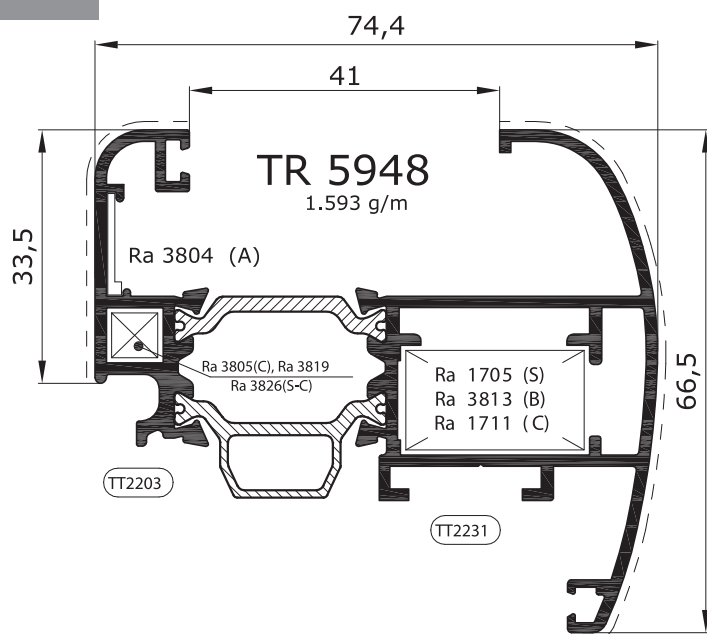
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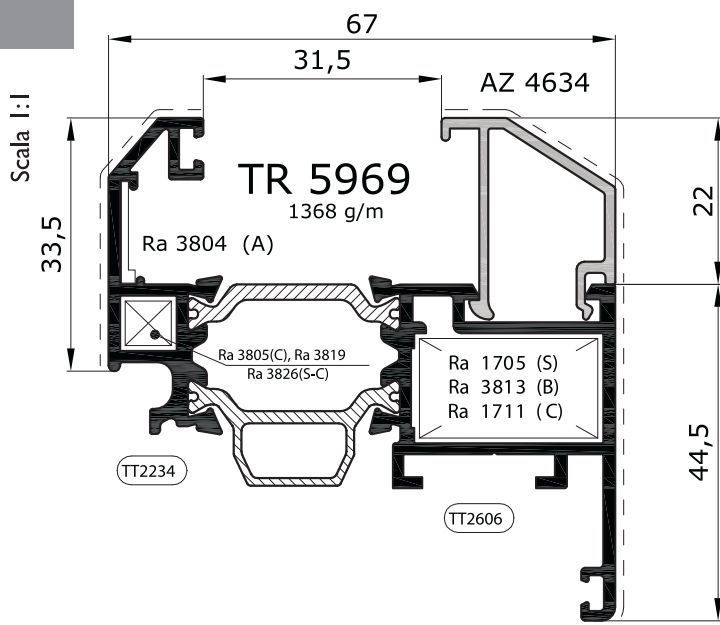
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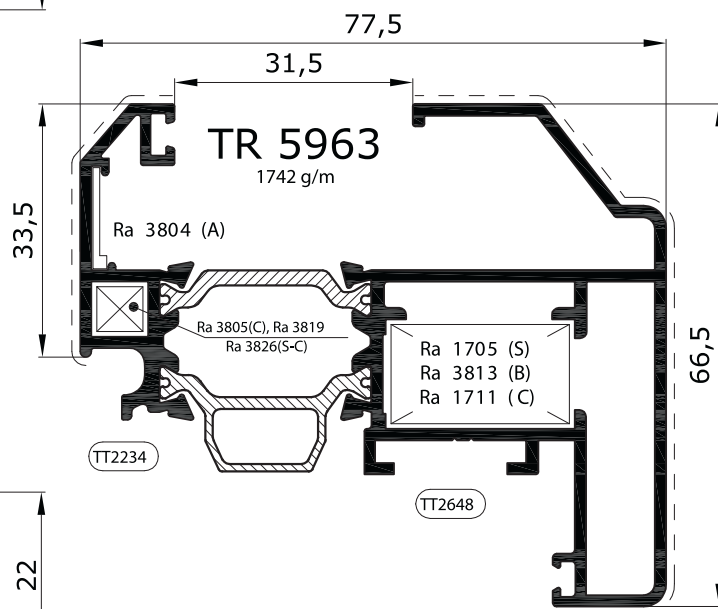
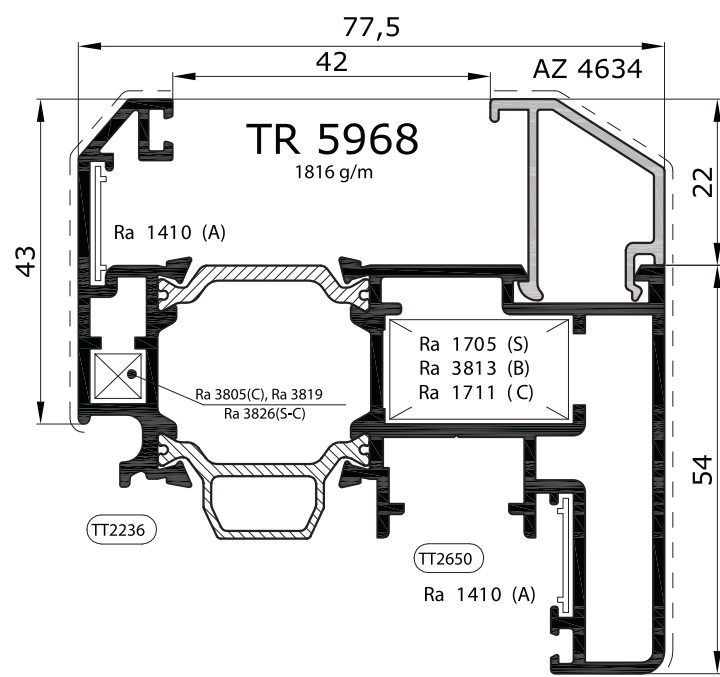
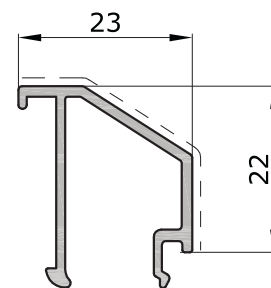
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SQUADRETTE
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AZ 4634

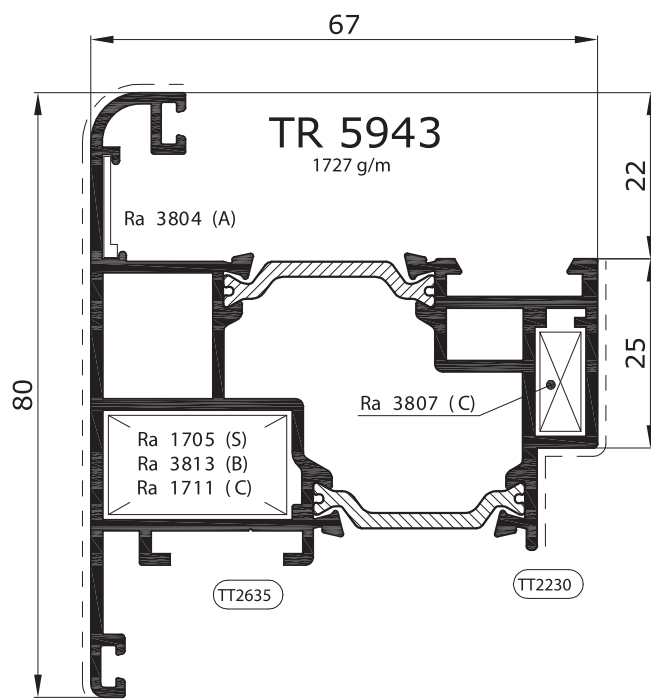
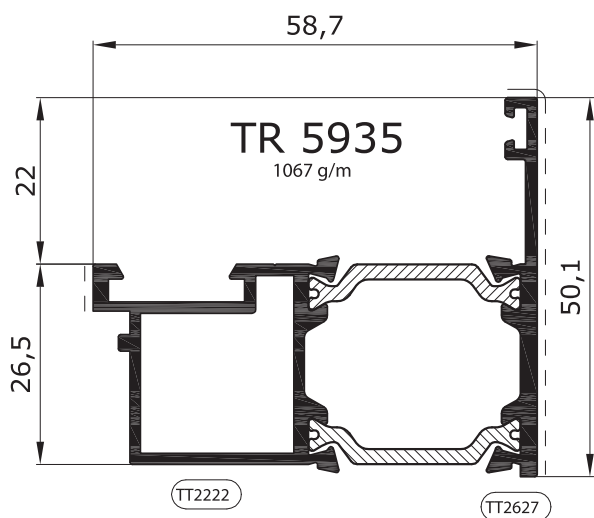
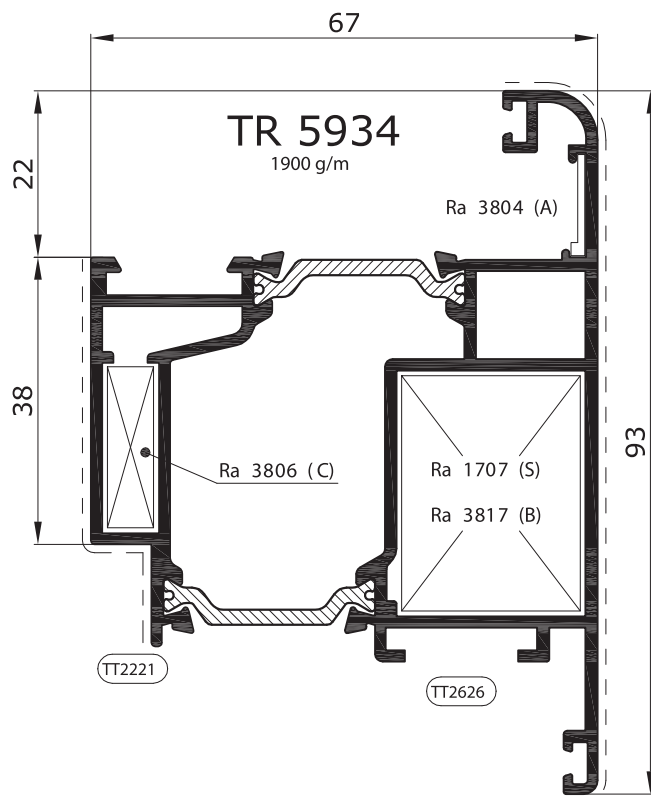
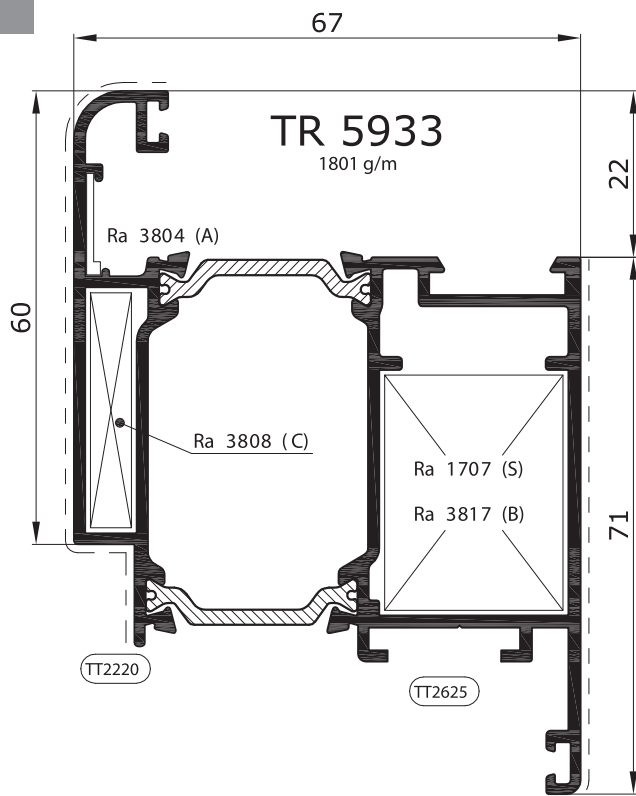
269 g/m



CODICE MATRICE

SQUADRETTE
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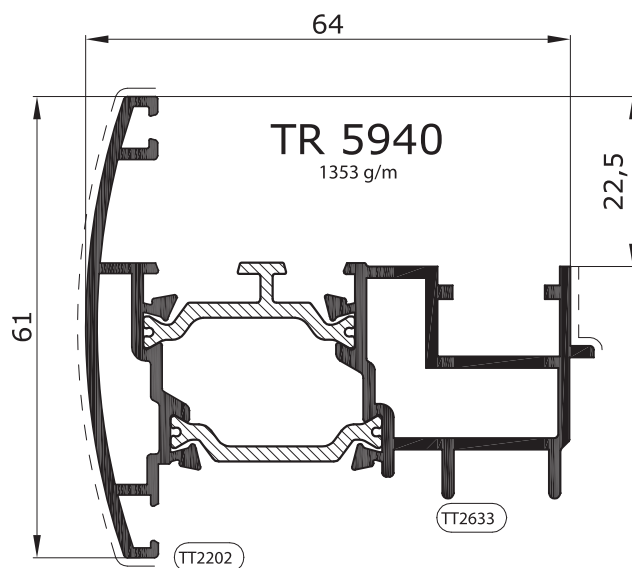
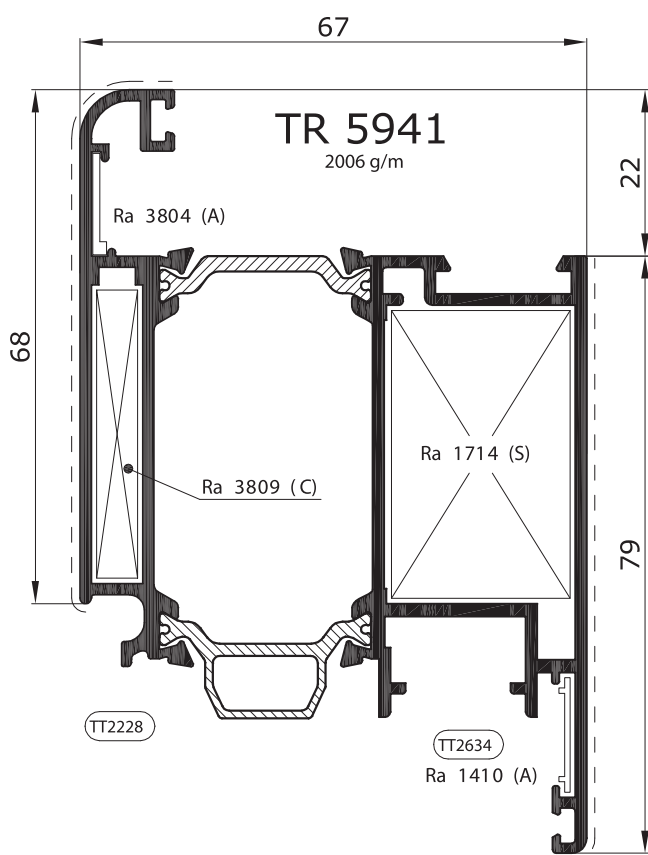
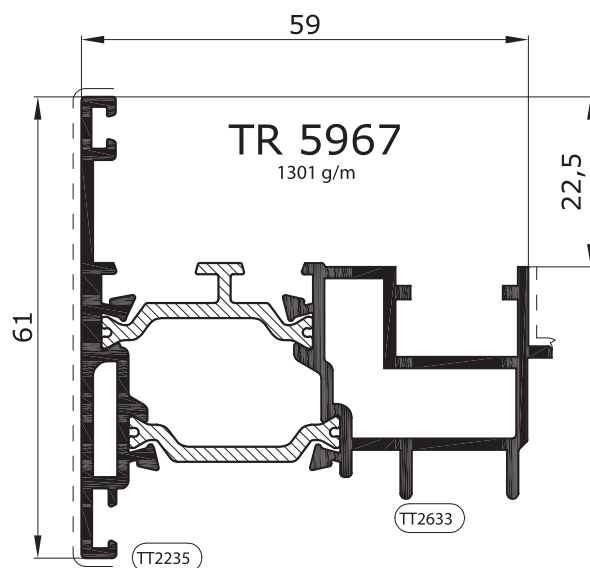
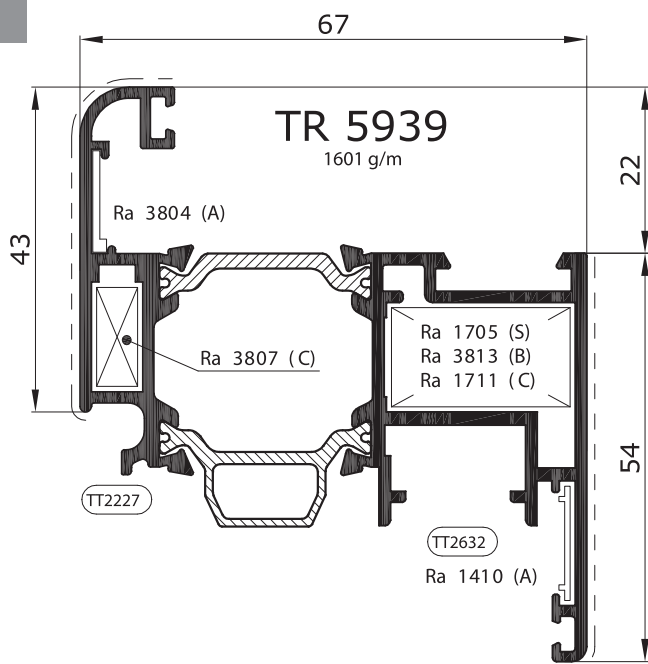
Scala 1:1



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CODICE MATRICE

Scala 1:1

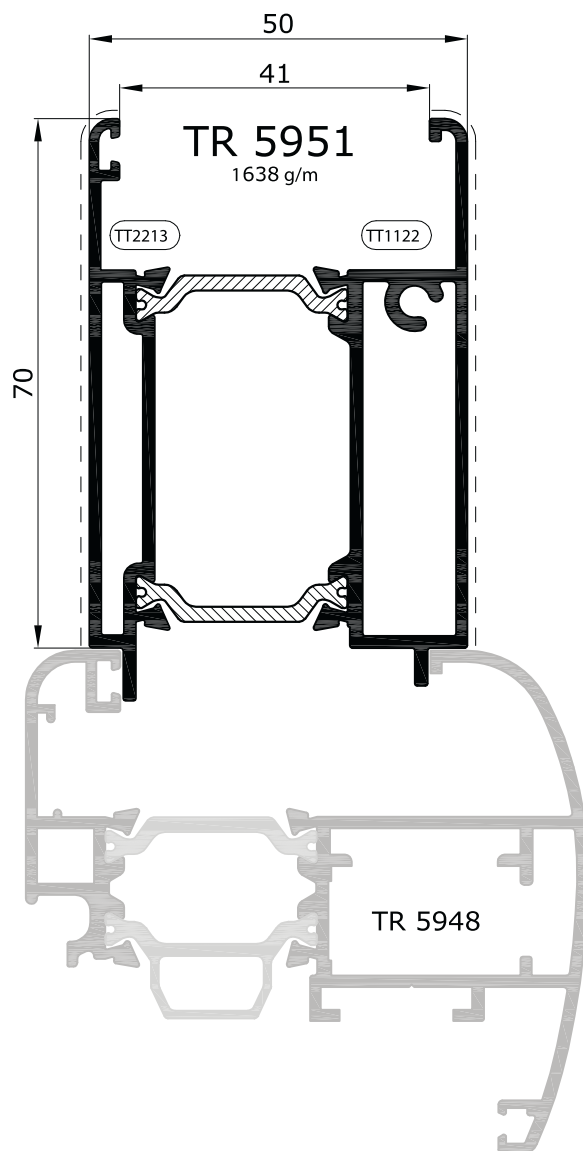
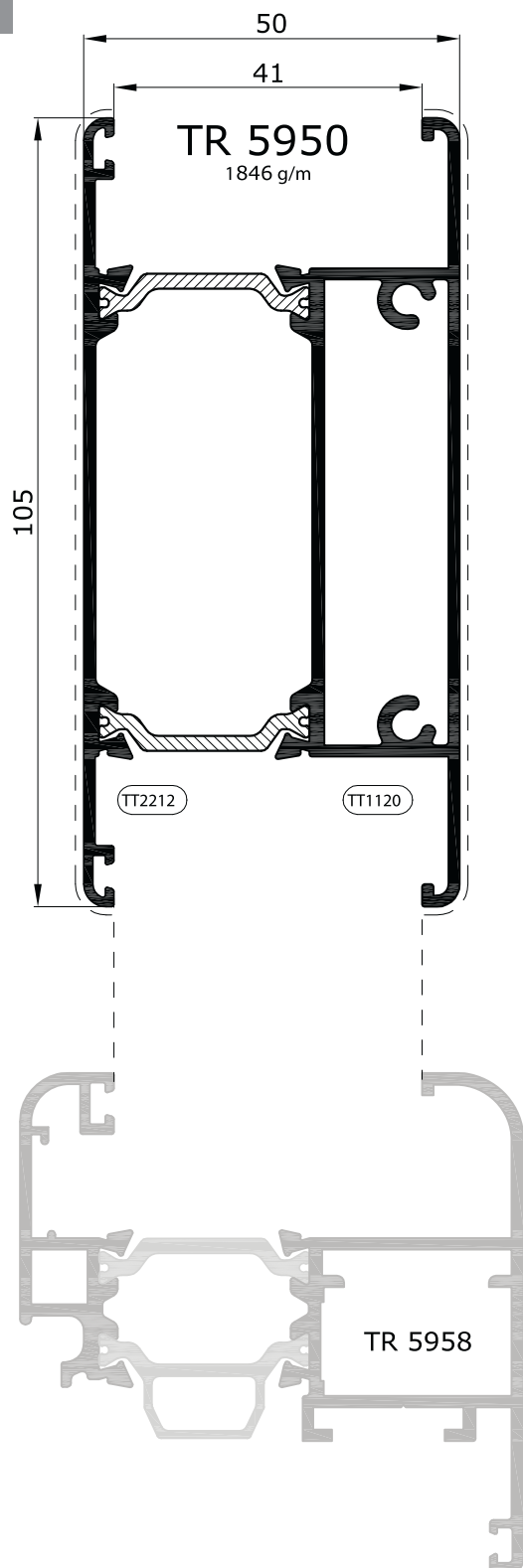


SQUADRETTE
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CODICE MATRICE

Parametri Sistema:
Aria 12 mm
Interasse 9 mm

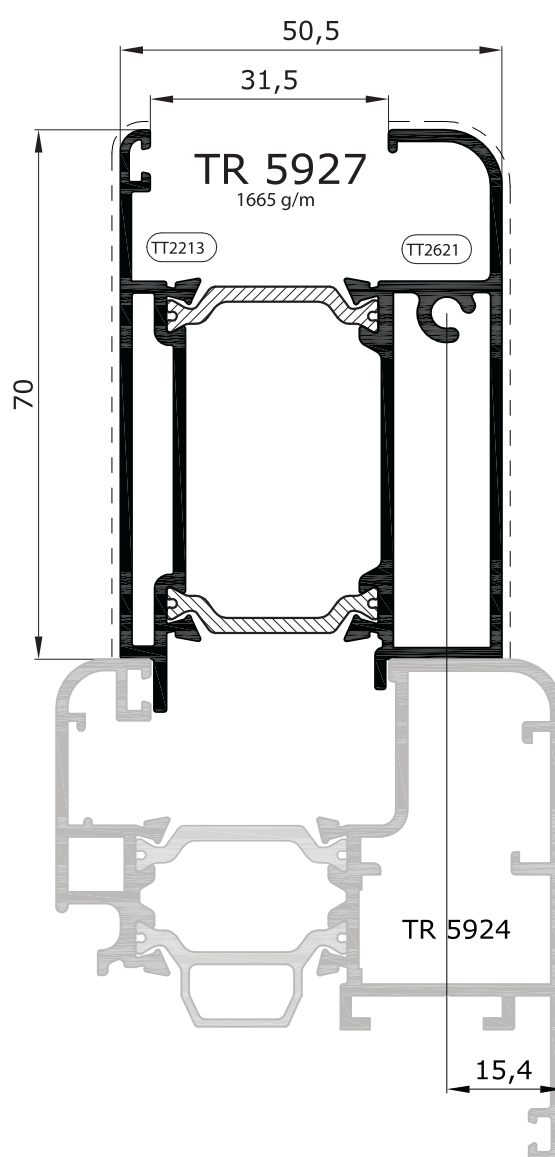
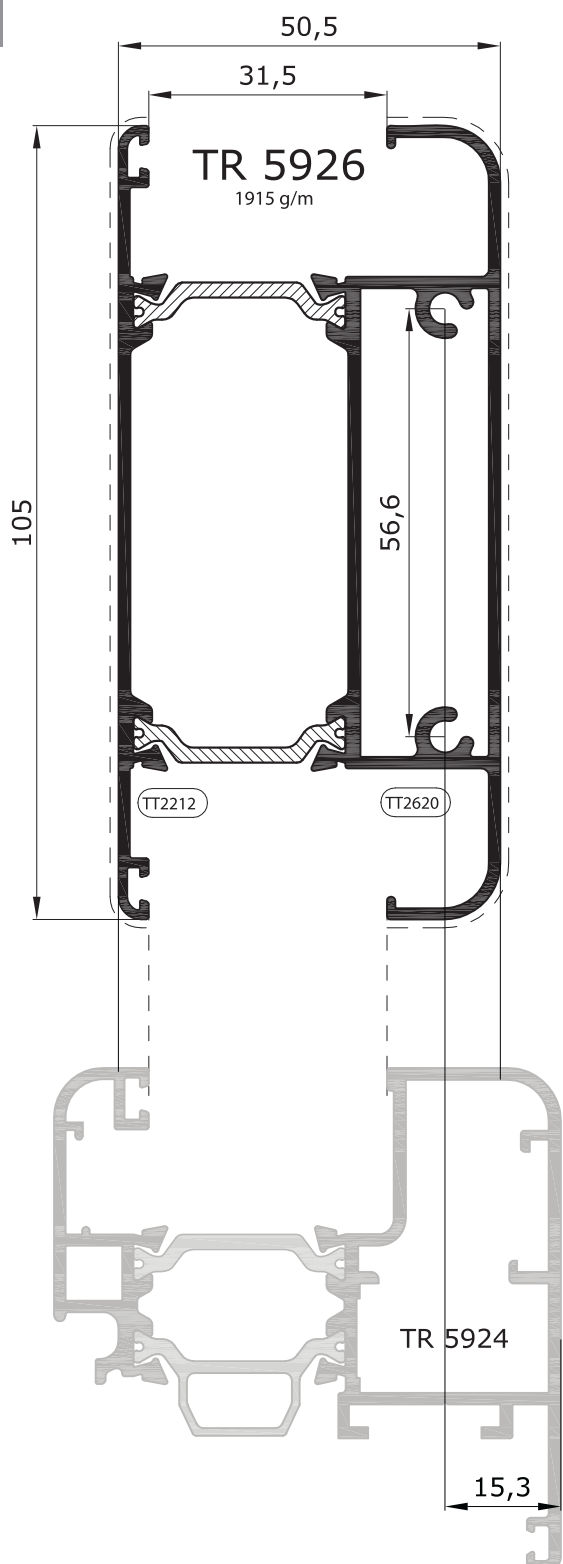
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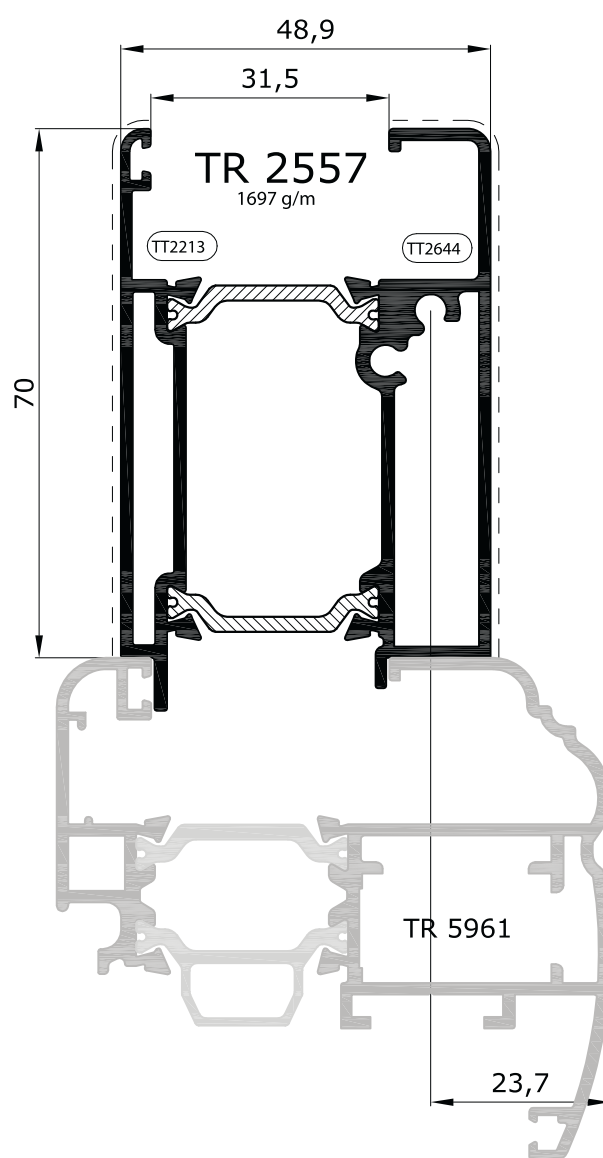
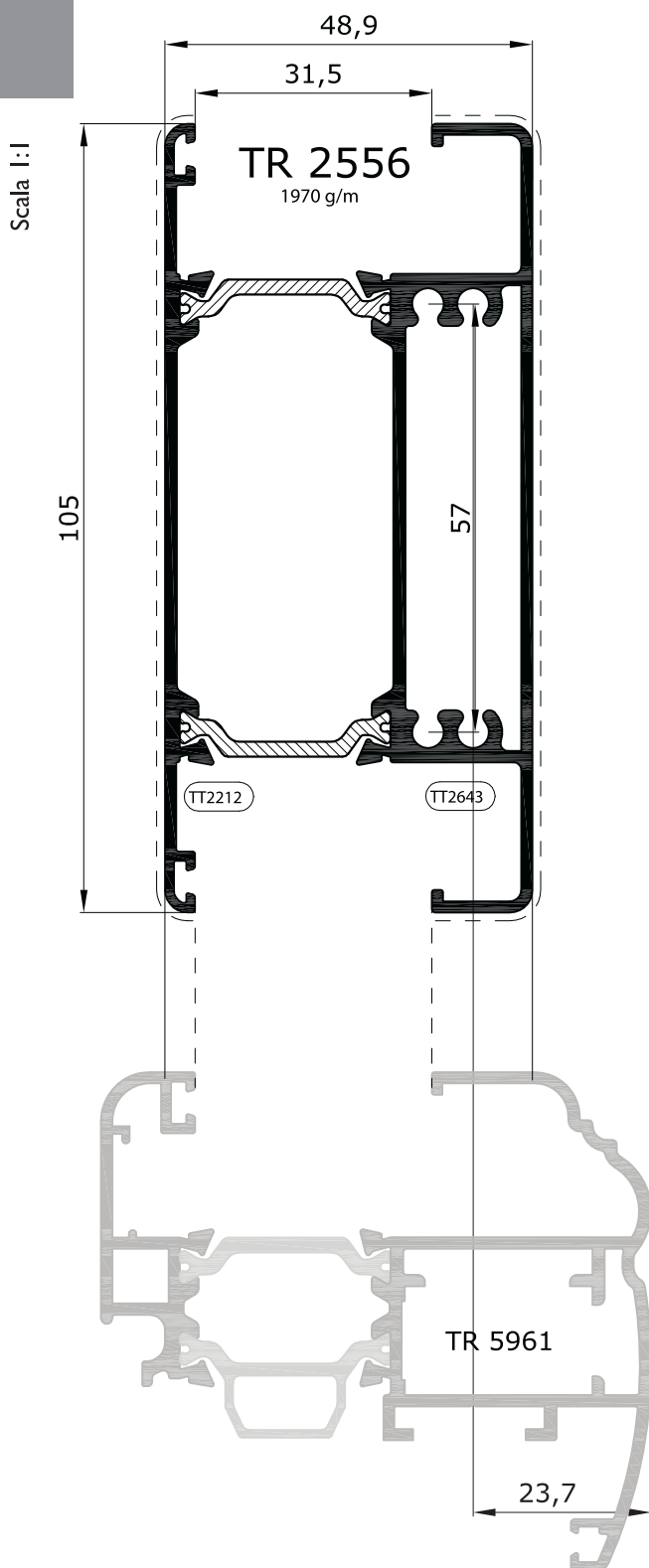
Sulle ante TR 5948, TR 5949, TR 5958 e TR 5959
utilizzare esclusivamente la fascia TR 5950
e lo zoccolo riportato TR 5951


CODICE MATRICE

Scala 1:1

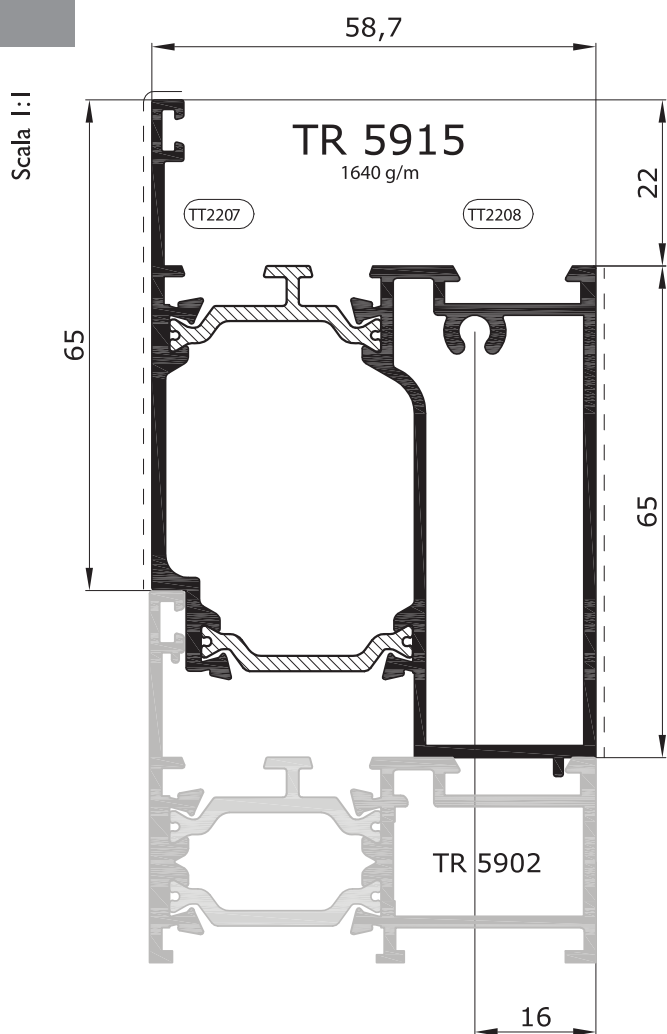


CODICE MATRICE

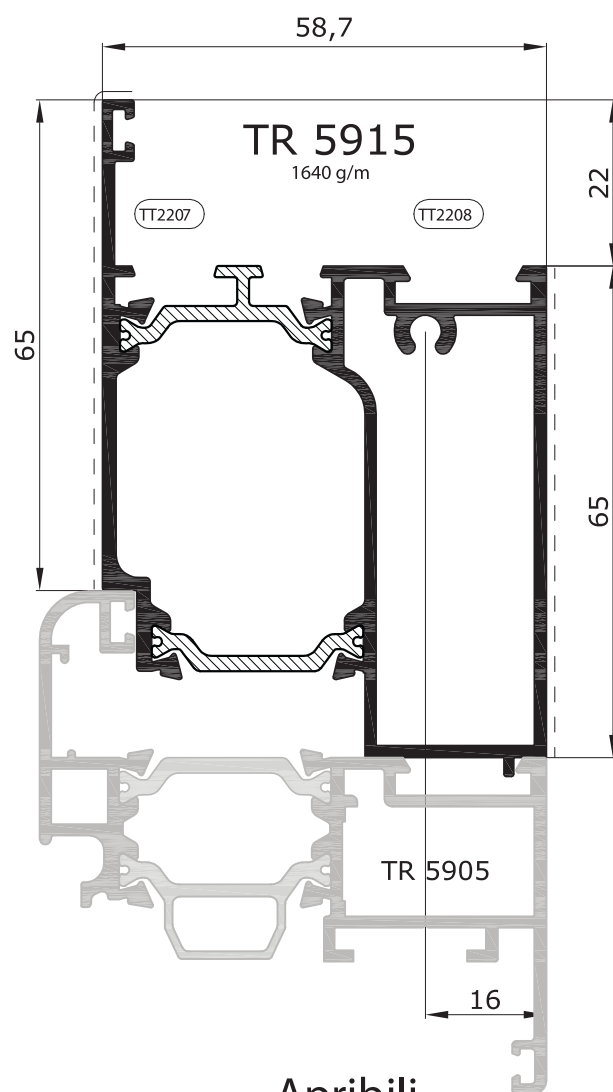


Sull'anta TR 5961 utilizzare esclusivamente la fascia TR 2556 e lo zoccolo riportato TR 2557

CODICE MATRICE



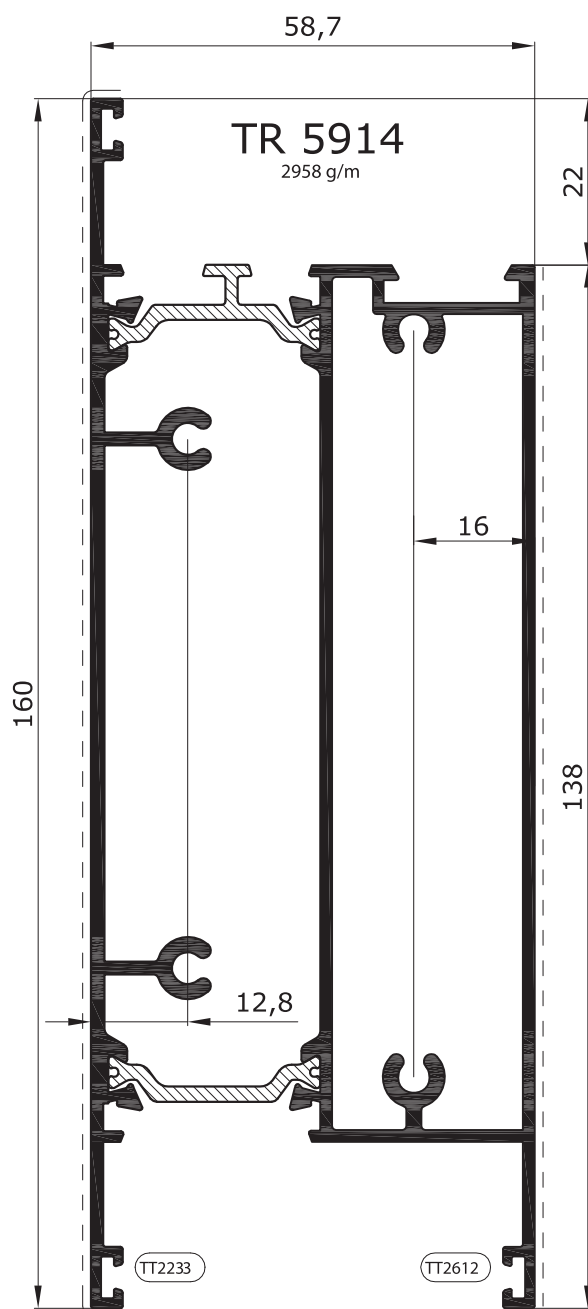
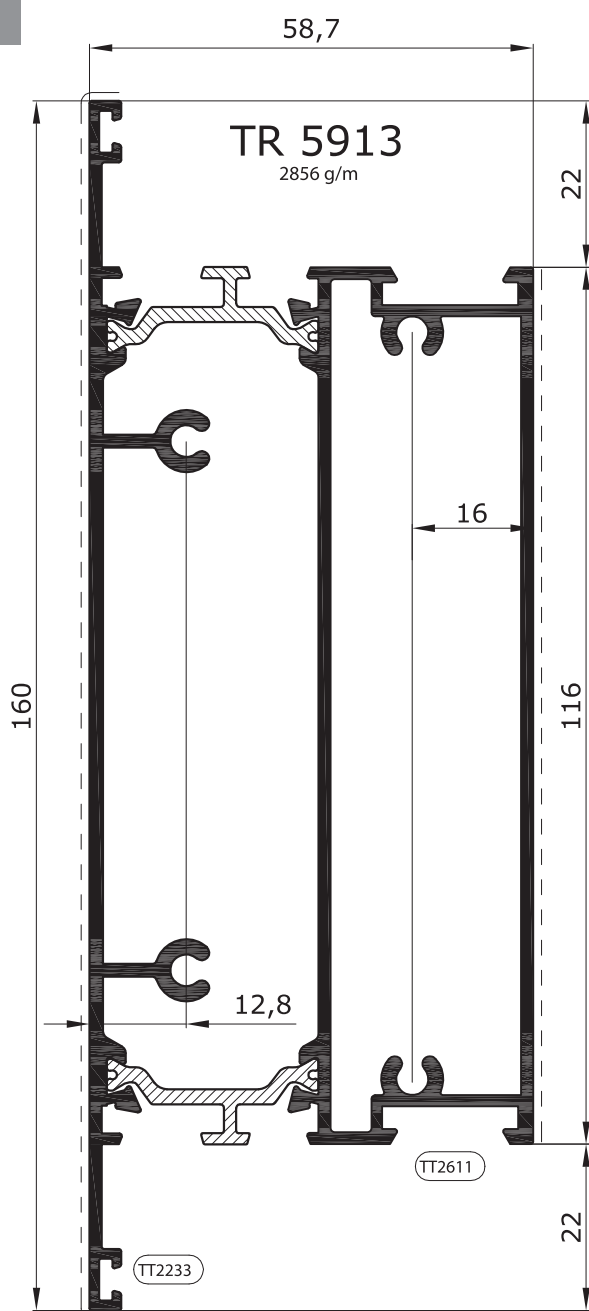
Fissi



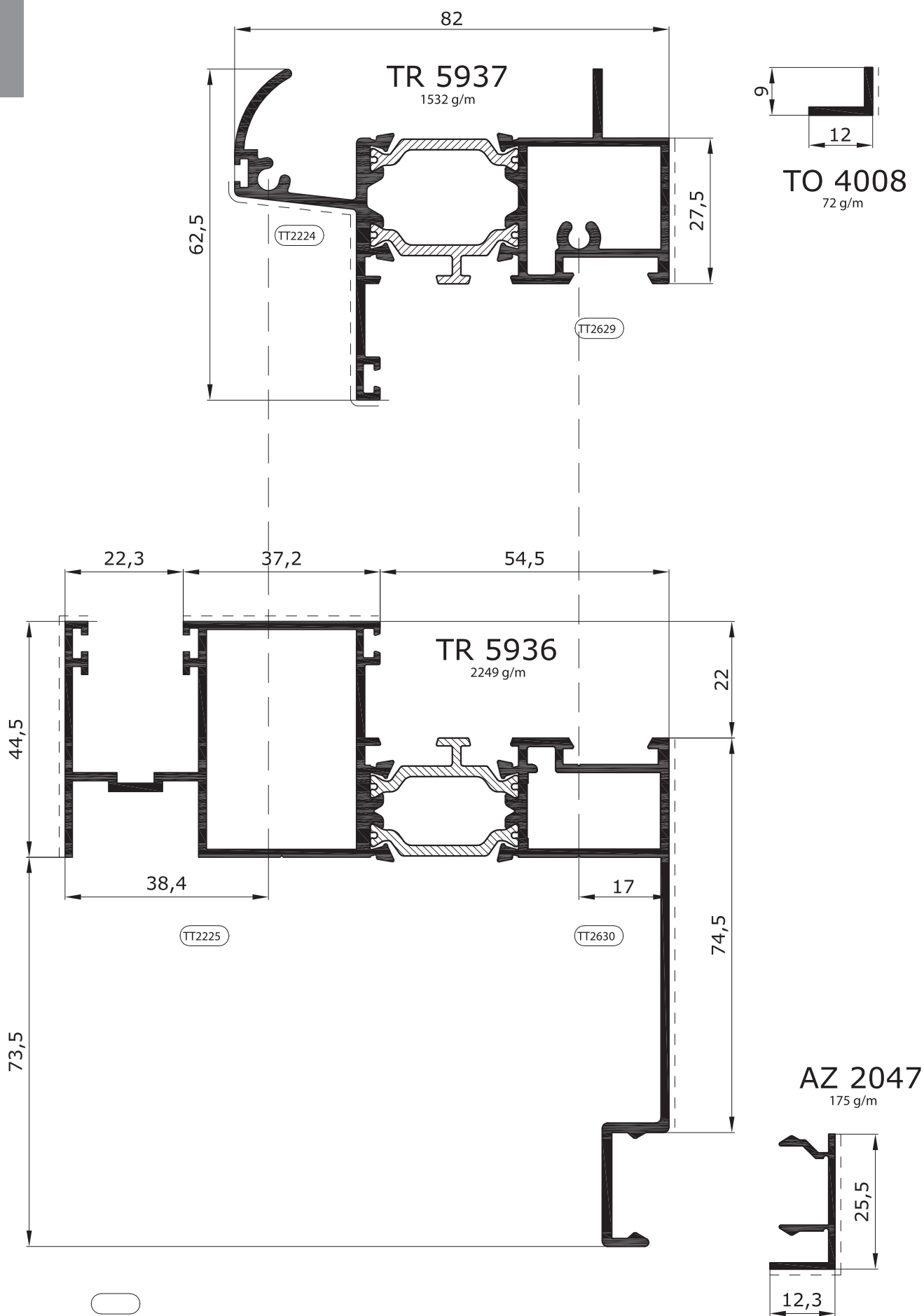
Apribili

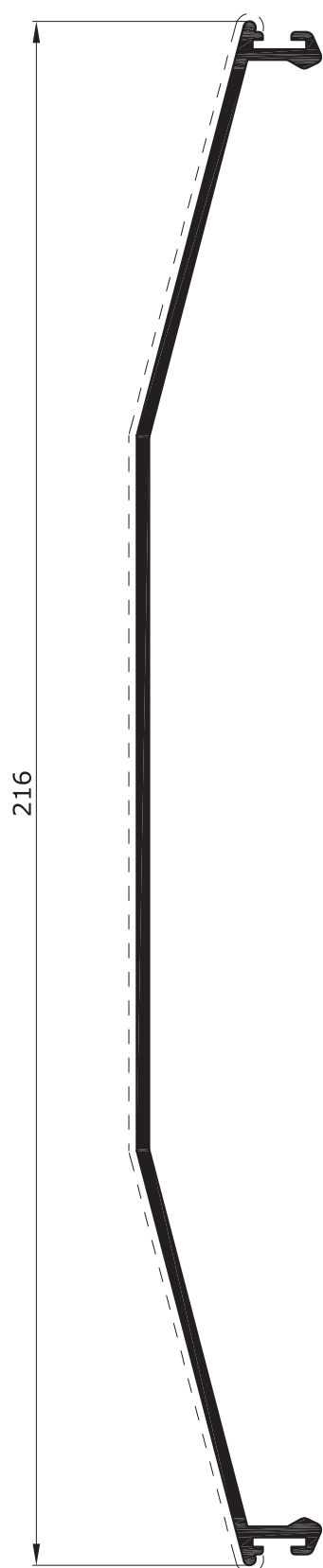

CODICE MATRICE

Scala 1:1



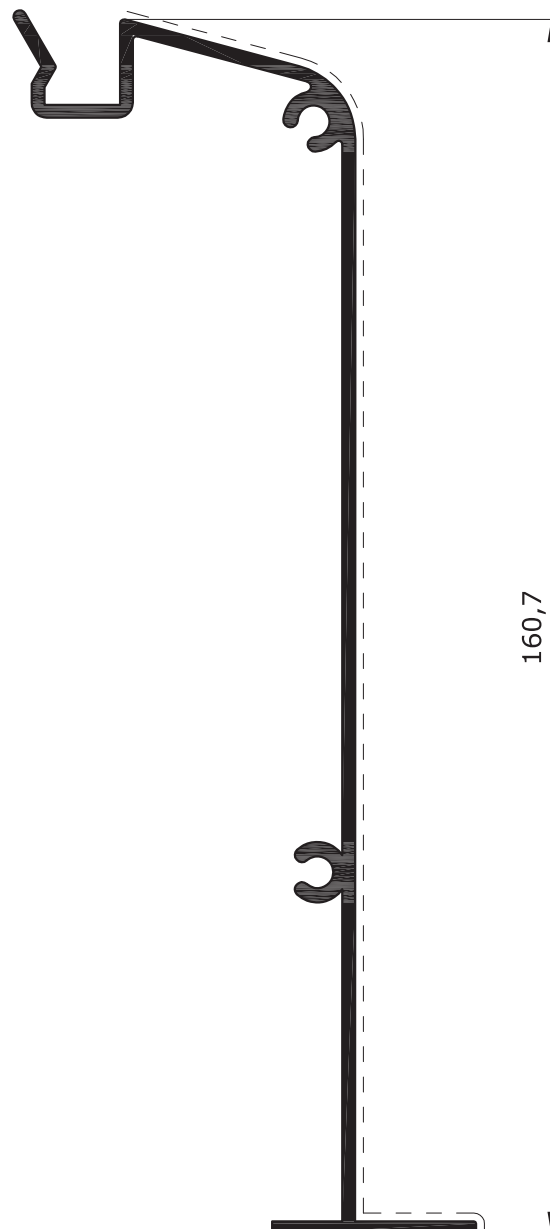
CODICE MATRICE





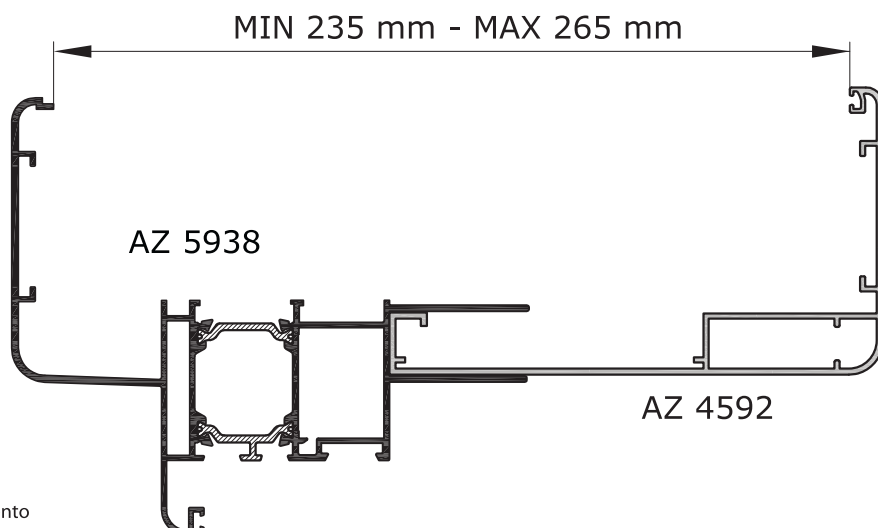
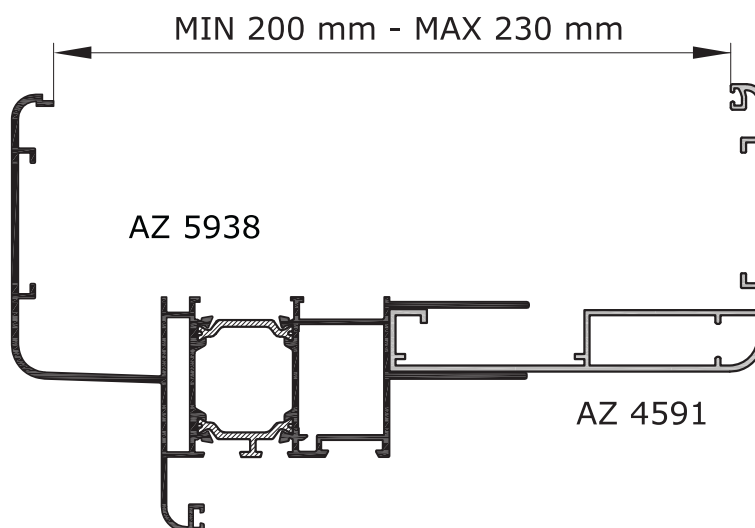
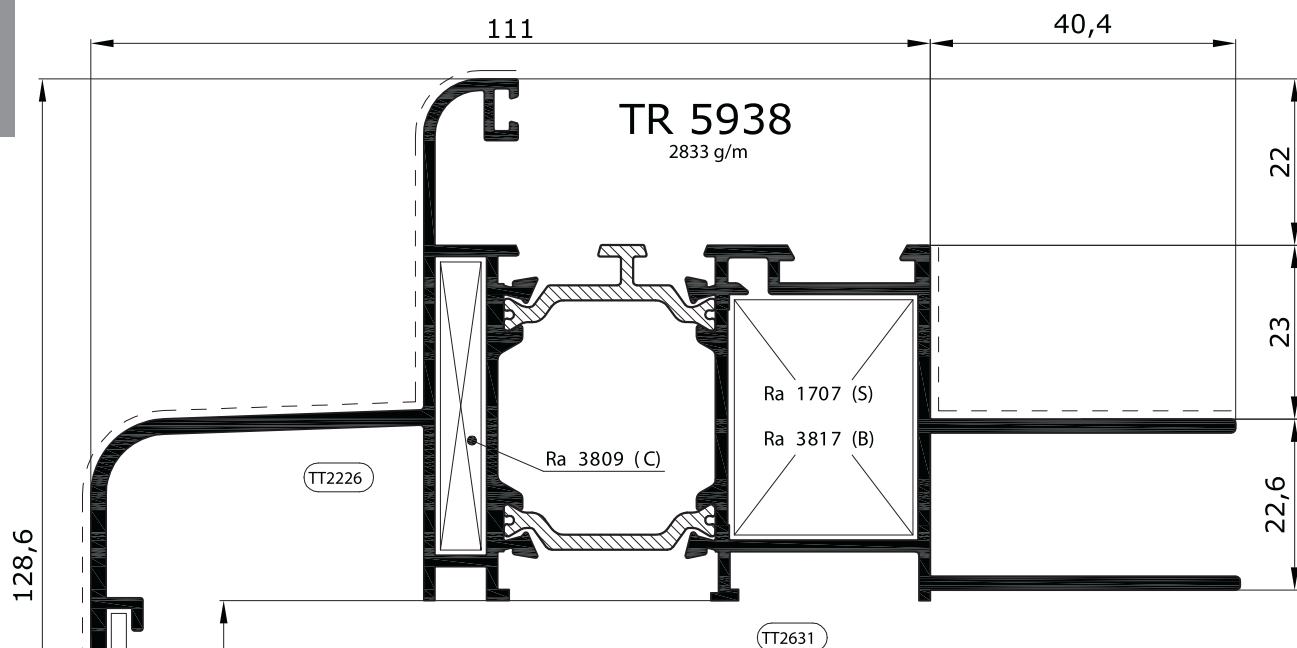
AZ 4569
1140 g/m

CODICE MATRICE



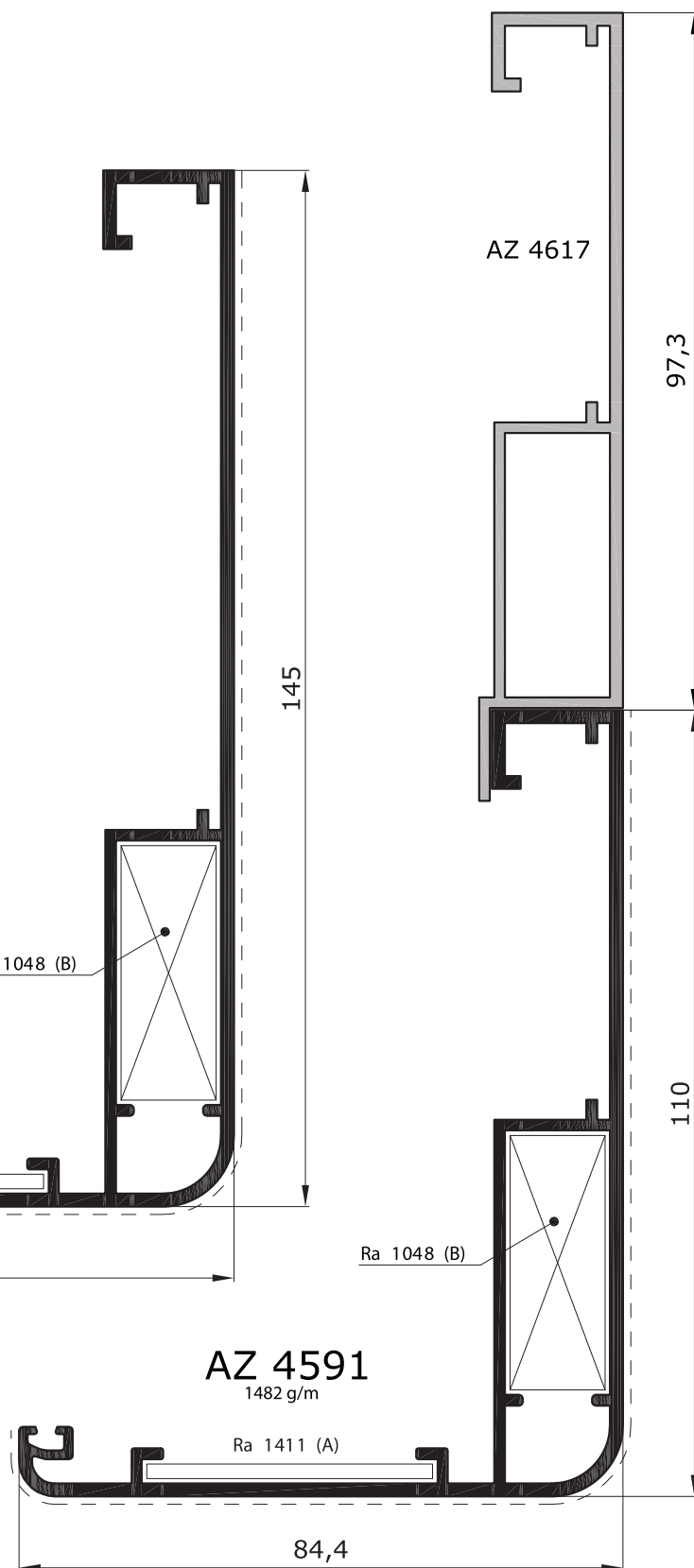
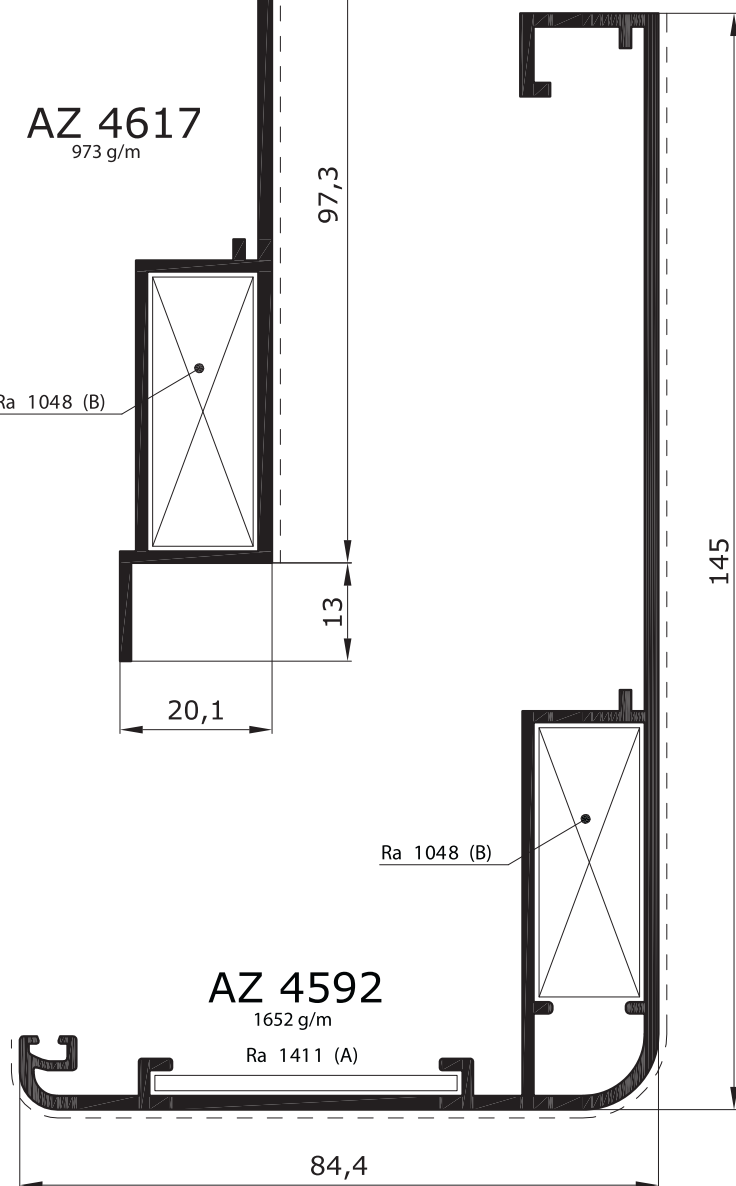
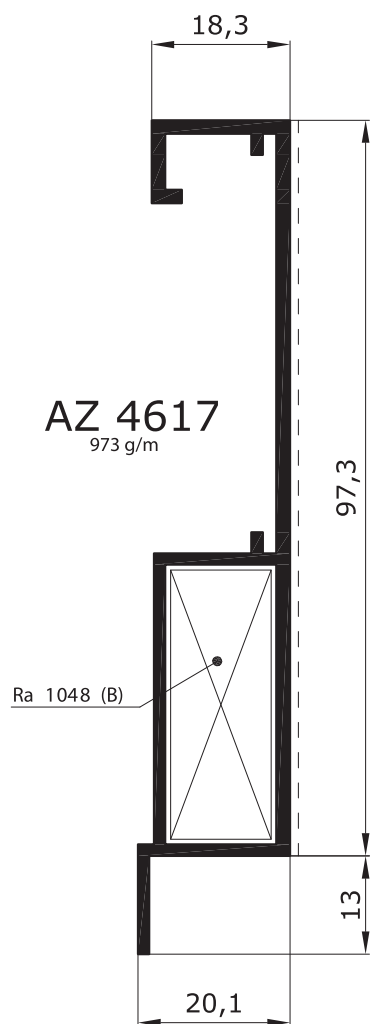
AZ 4568
1258 g/m

Scala 1:1



CODICE MATRICE

SQUADRETTE
A = Allineamento
S = Spinare
C = Cianfrinare
B = Tiraggio Meccanico



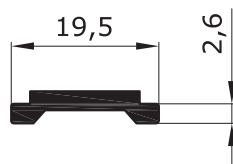
CODICE MATRICE

SQUADRETTE
A = Allineamento
S = Spinare
C = Cianfrinare
B = Tiraggio Meccanico

Scala 1:1

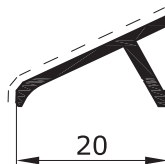
AZ 2035

143 g/m



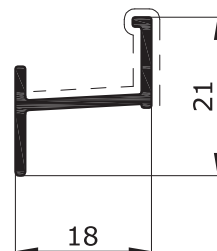
AZ 4567

115 g/m



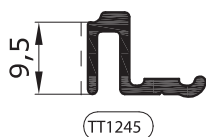
AZ 4526

156 g/m



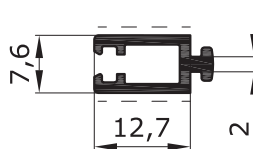
AZ 6841

173 g/m



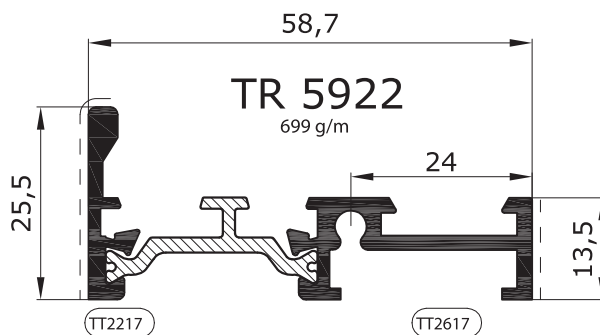
TR 5965

142 g/m



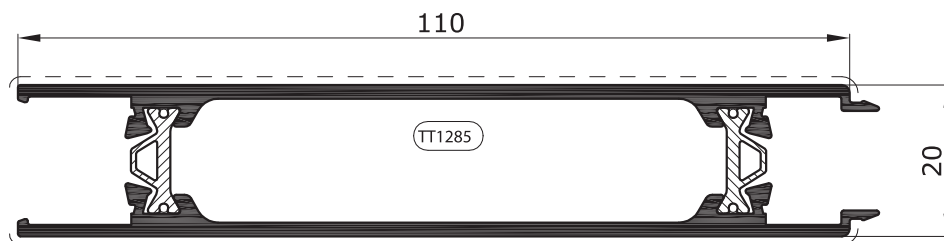
TR 5922

699 g/m

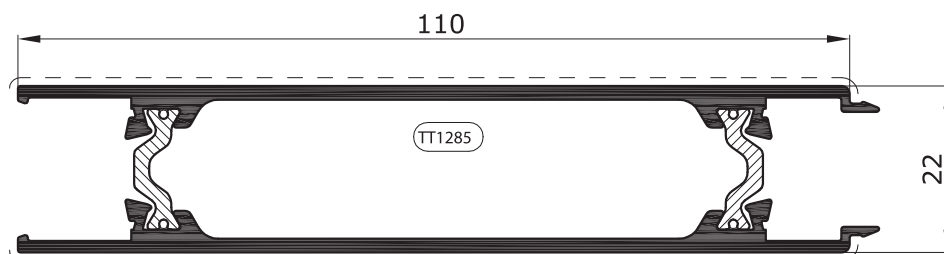


CODICE MATRICE

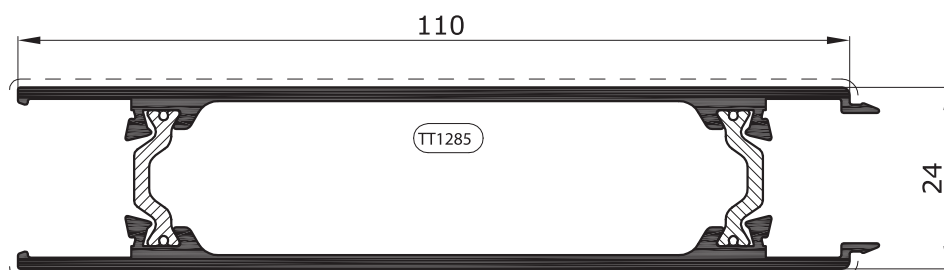
AZ 5246
1436 g/m



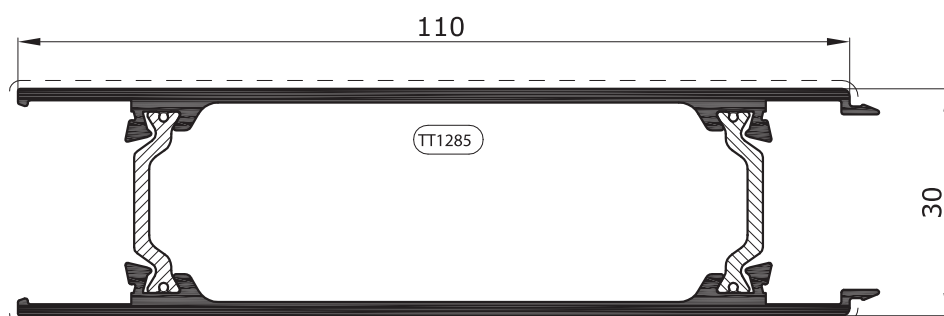
AZ 5253
1451 g/m



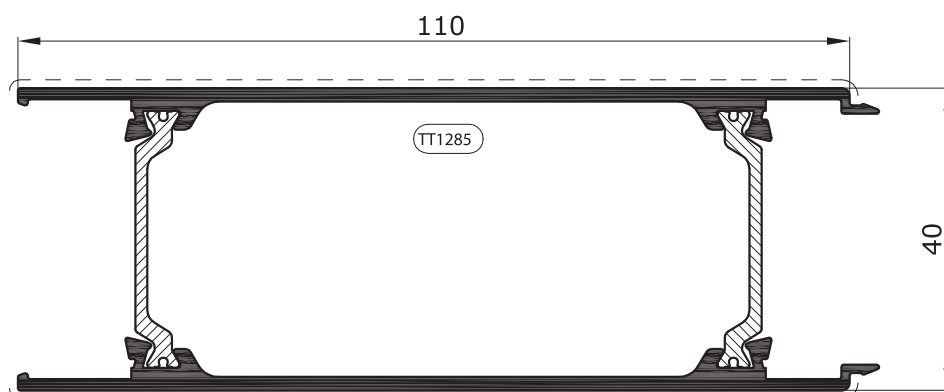
AZ 5243
1462 g/m



AZ 6862
1491 g/m



AZ 6332
1528 g/m

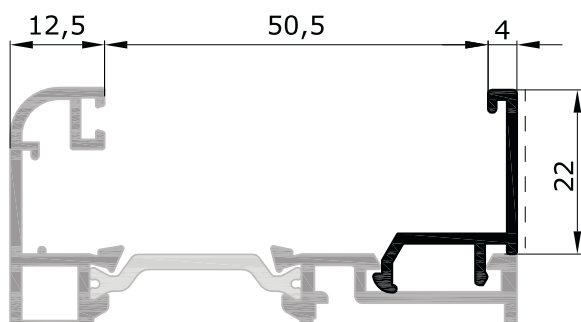


CODICE MATRICE

Scala 1:1

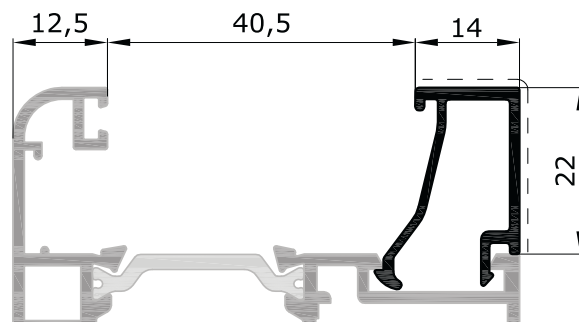
AZ 4525

197 g/m



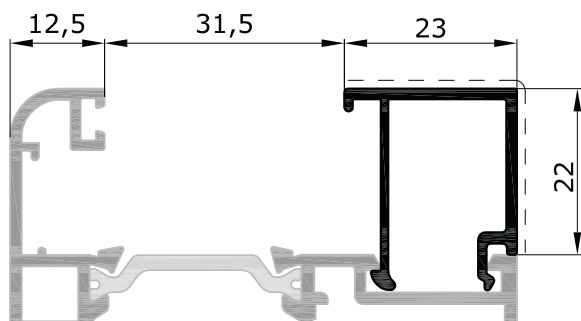
AZ 4546

247 g/m



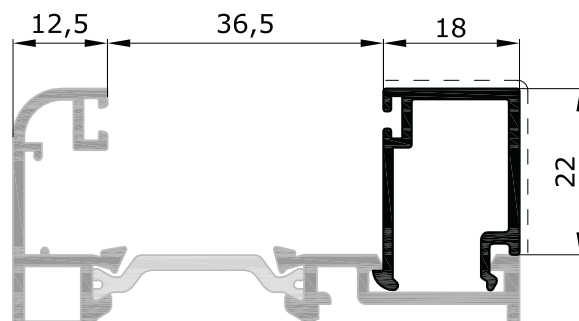
AZ 4557

278 g/m



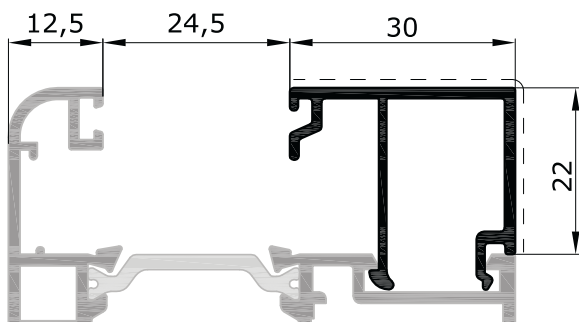
AZ 4624

280 g/m



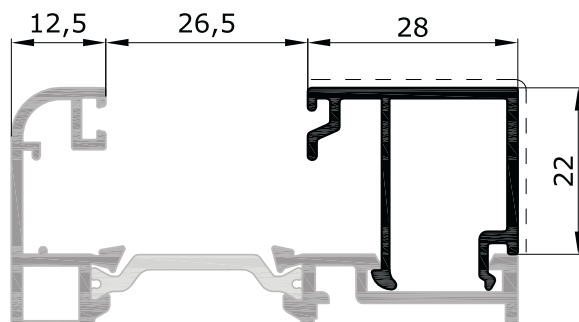
AZ 4559

337 g/m



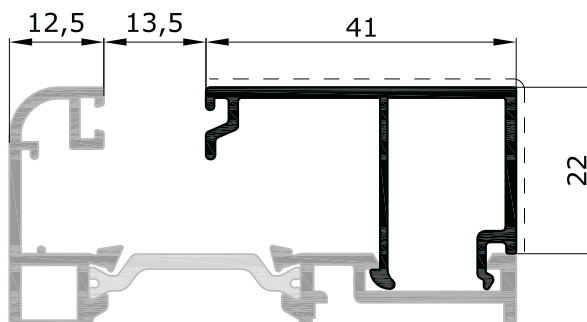
AZ 4558

330 g/m



AZ 4625

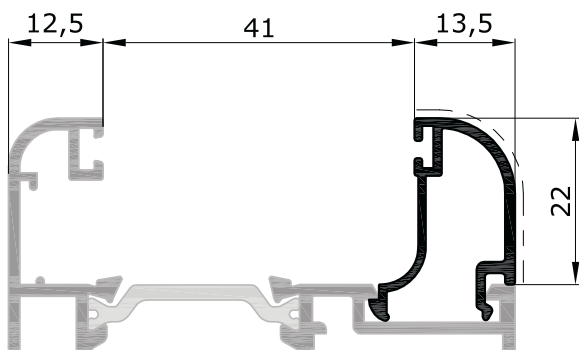
380 g/m



Scala 1:1

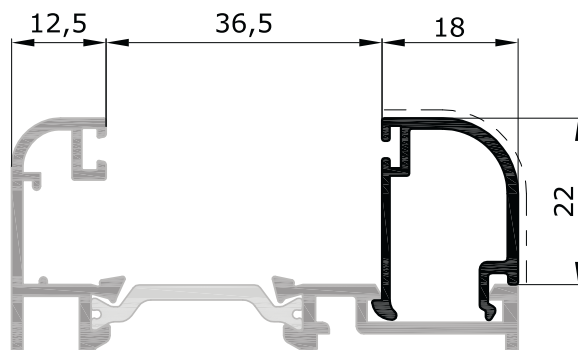
AZ 4575

237 g/m



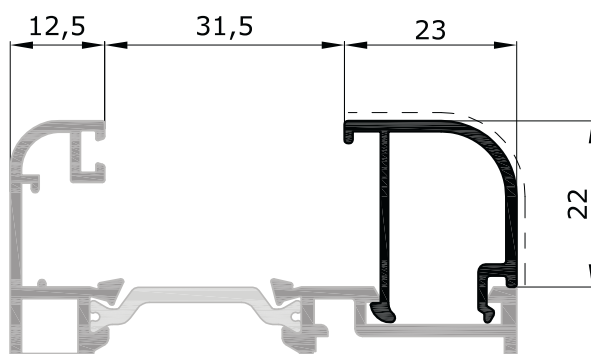
AZ 4576

255 g/m



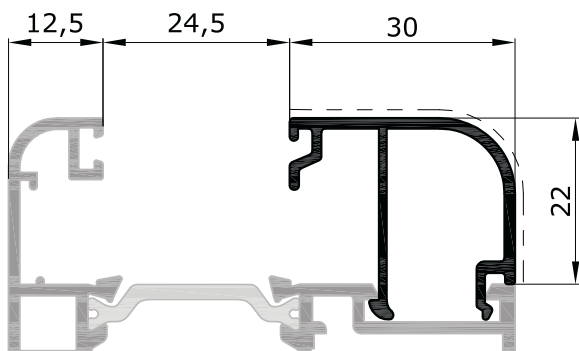
AZ 4518

275 g/m



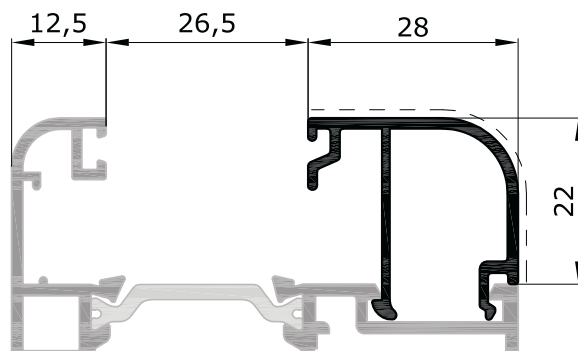
AZ 4517

322 g/m



AZ 4532

313 g/m



Sezioni

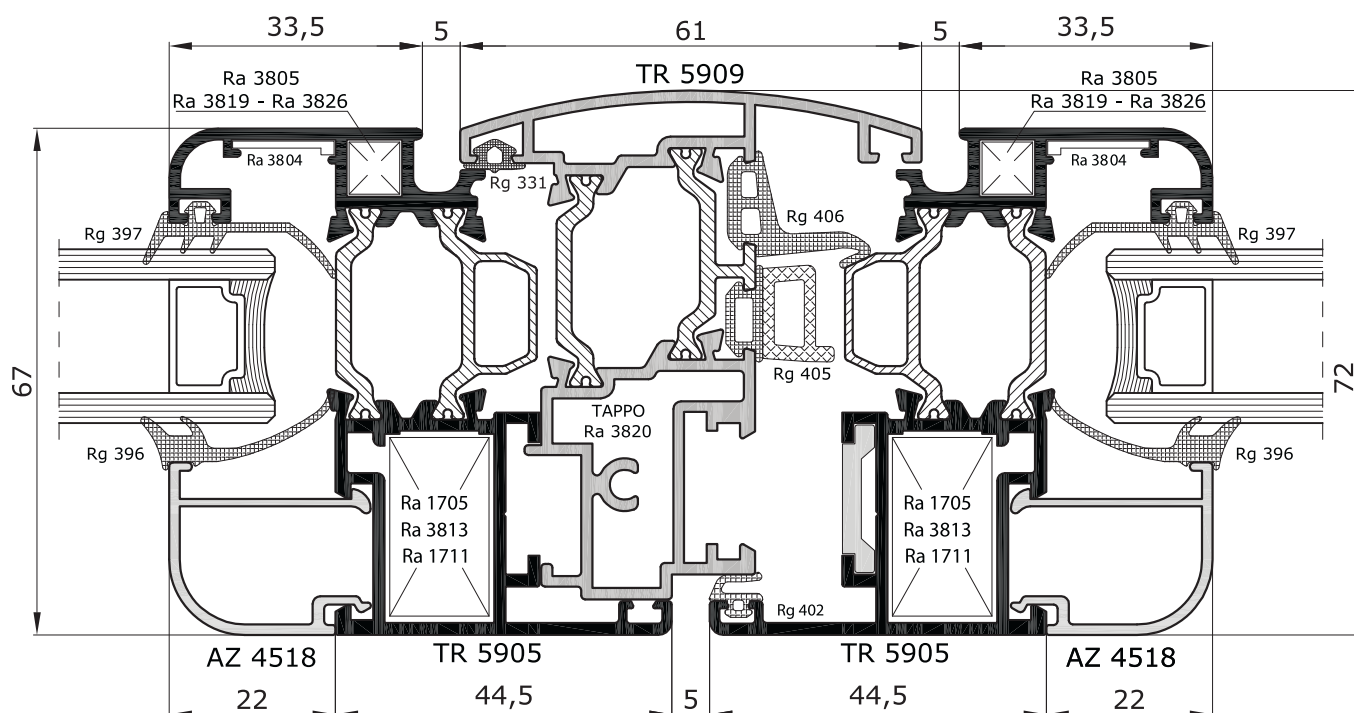
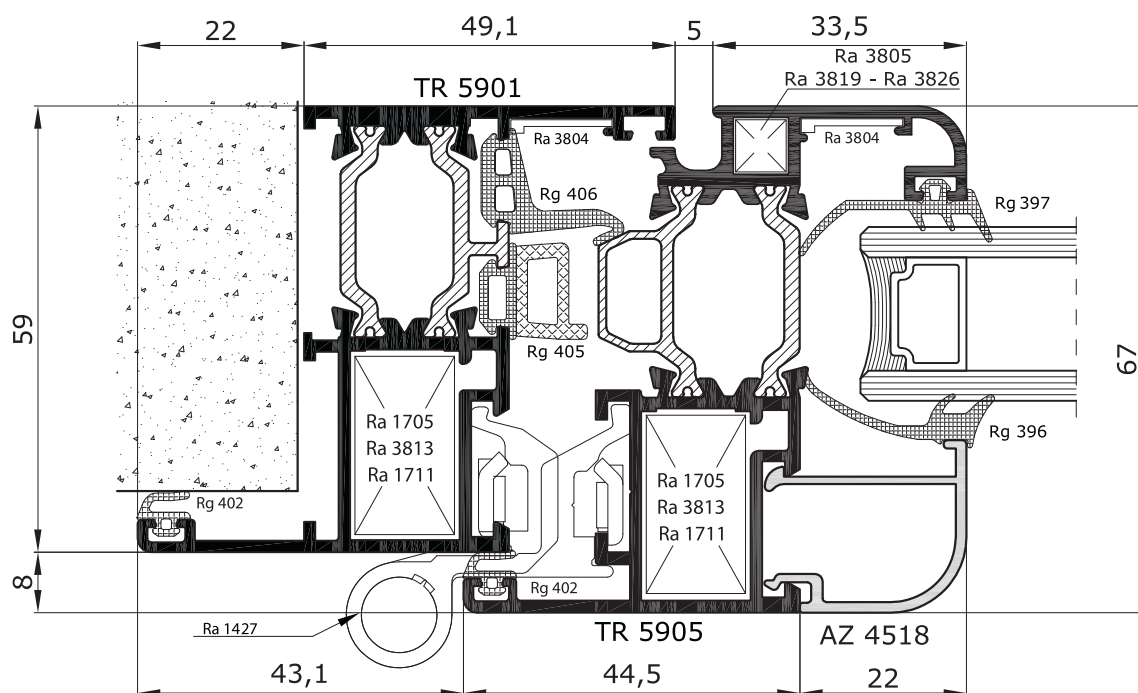
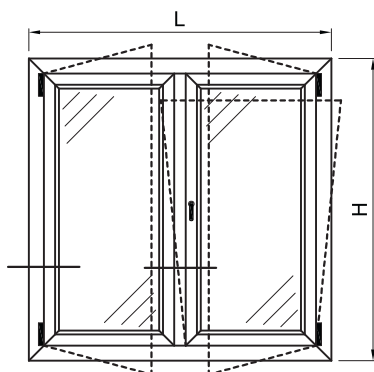
tierre 590TH

Sections

Finestra o portabalcone a due ante

- anta con fermavetro -

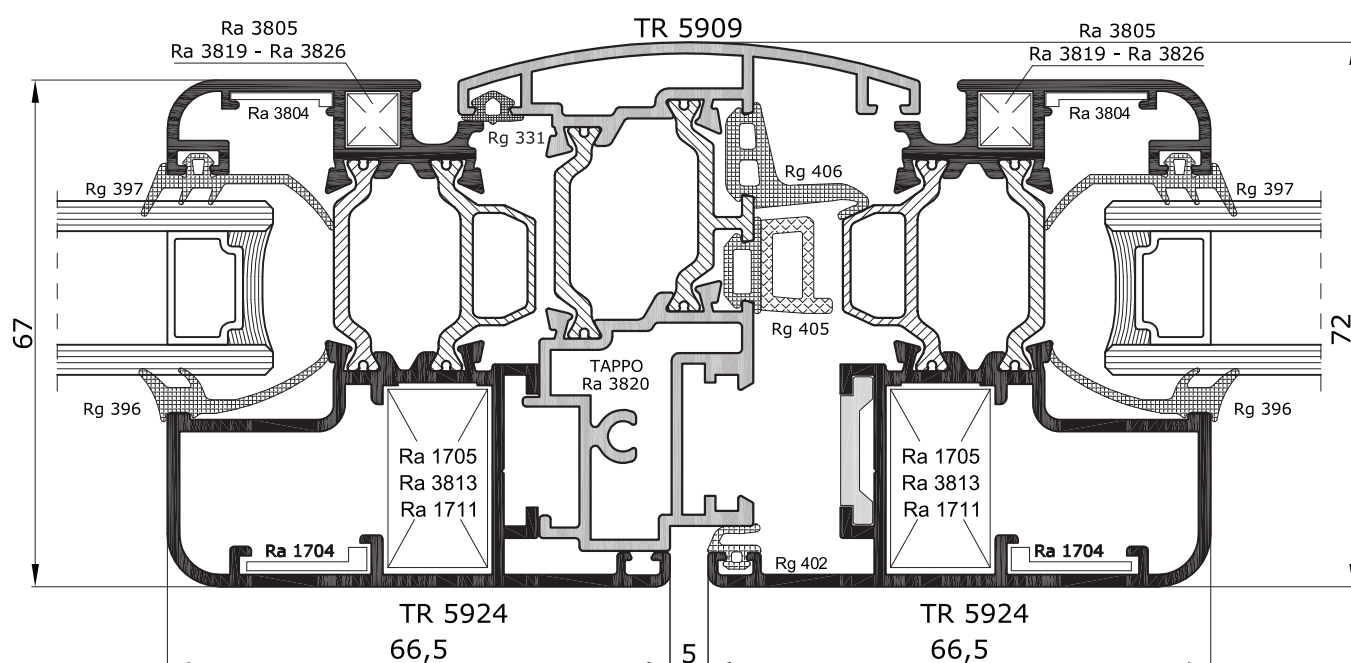
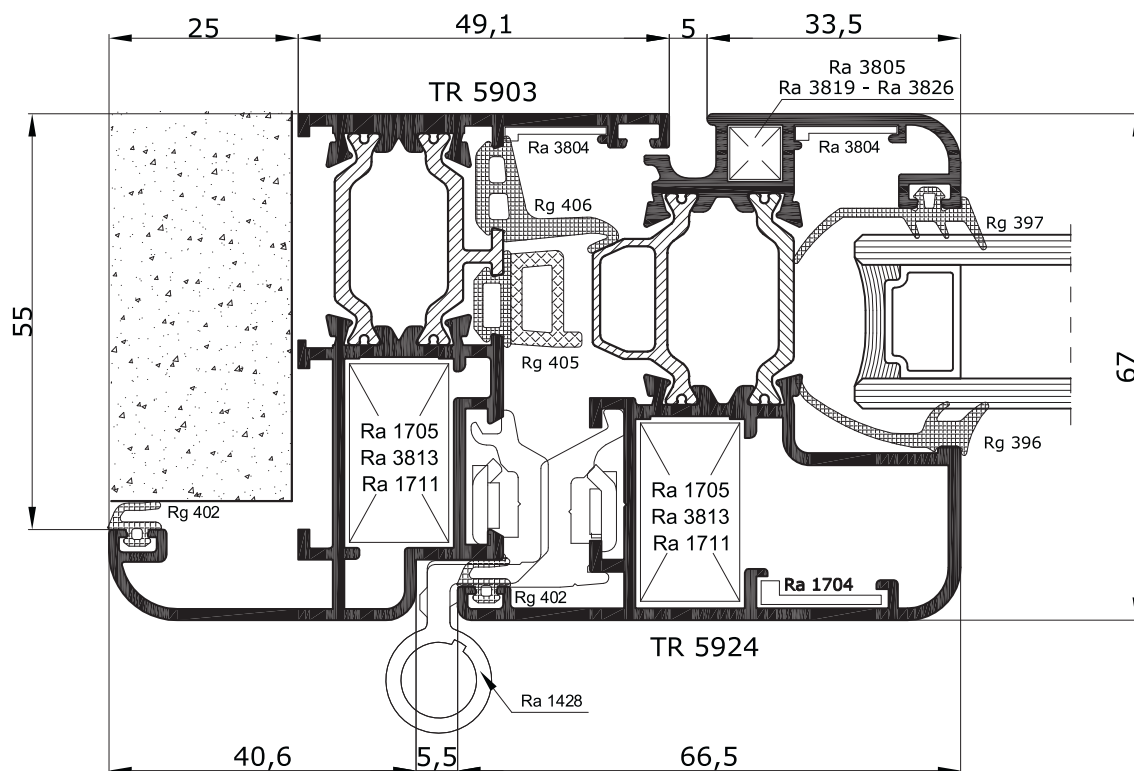
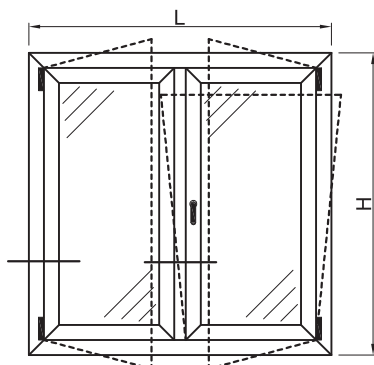
tierre 590TH



Finestra o portabalcone a due ante

- anta vetro ad infilare -

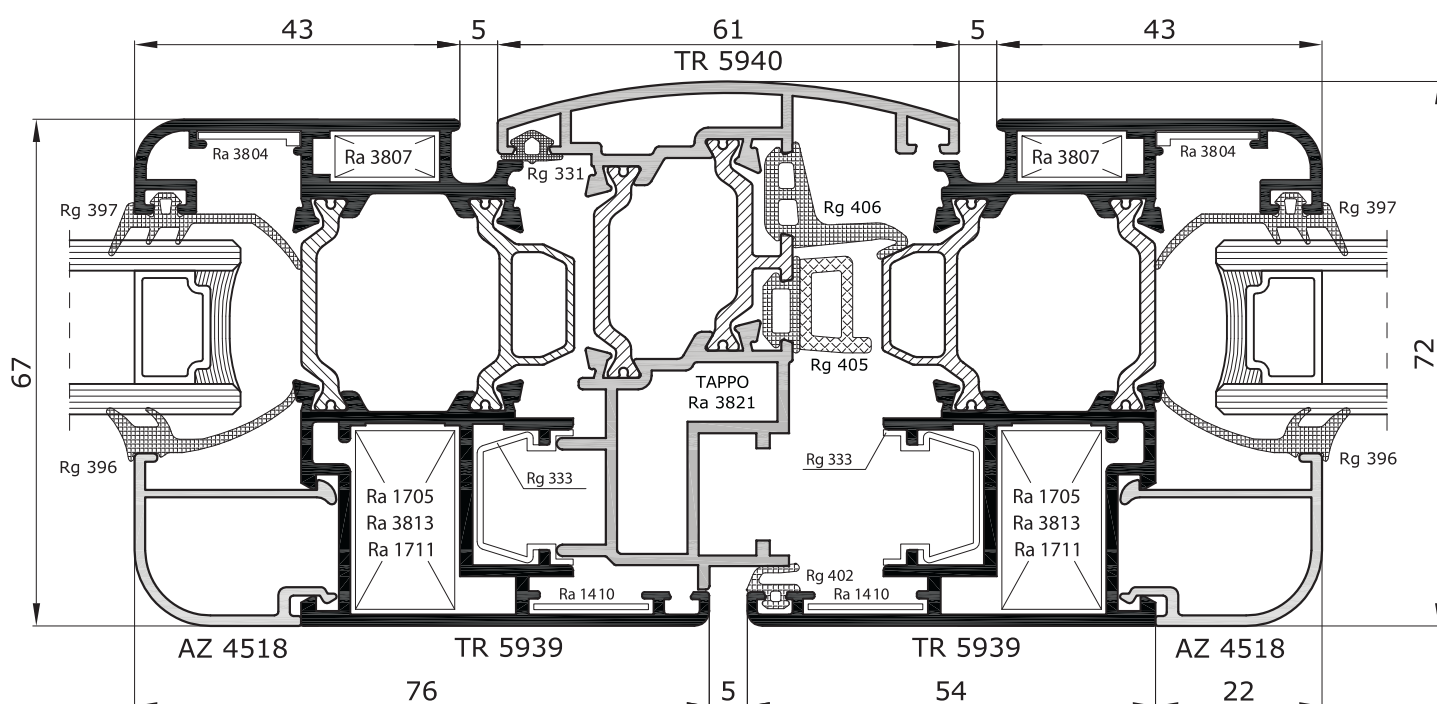
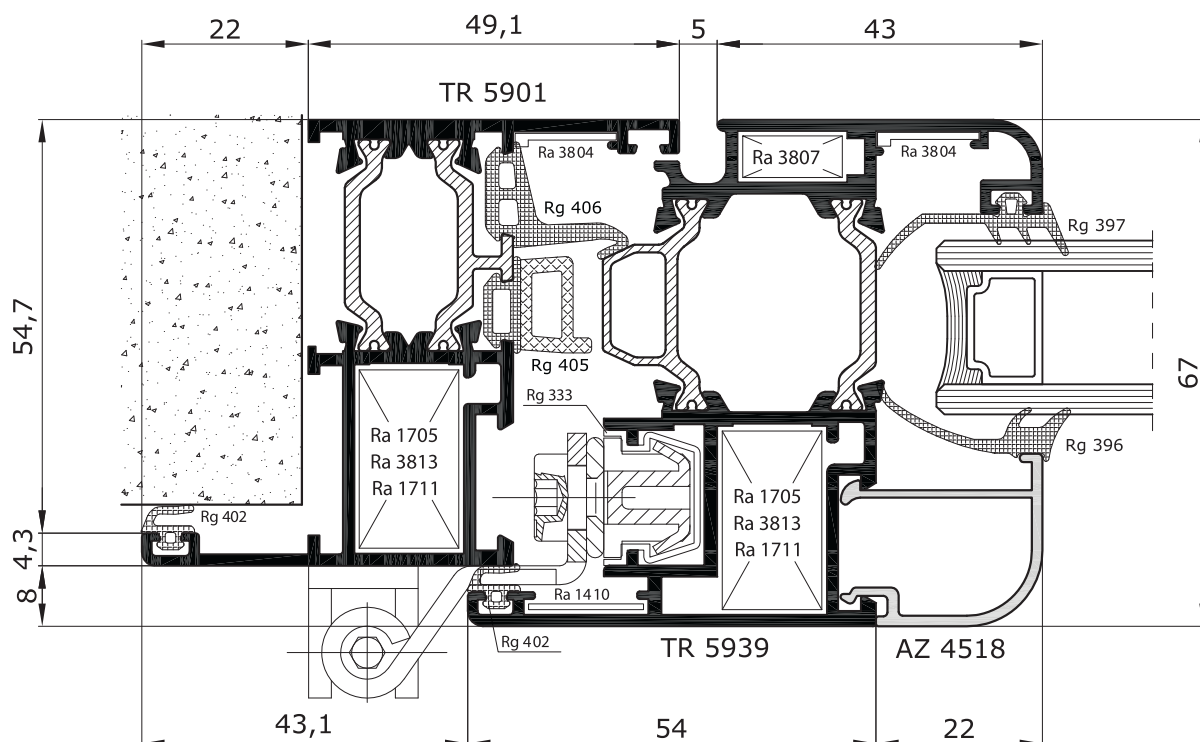
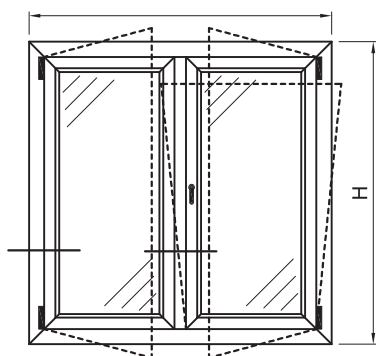
tierre 590TH



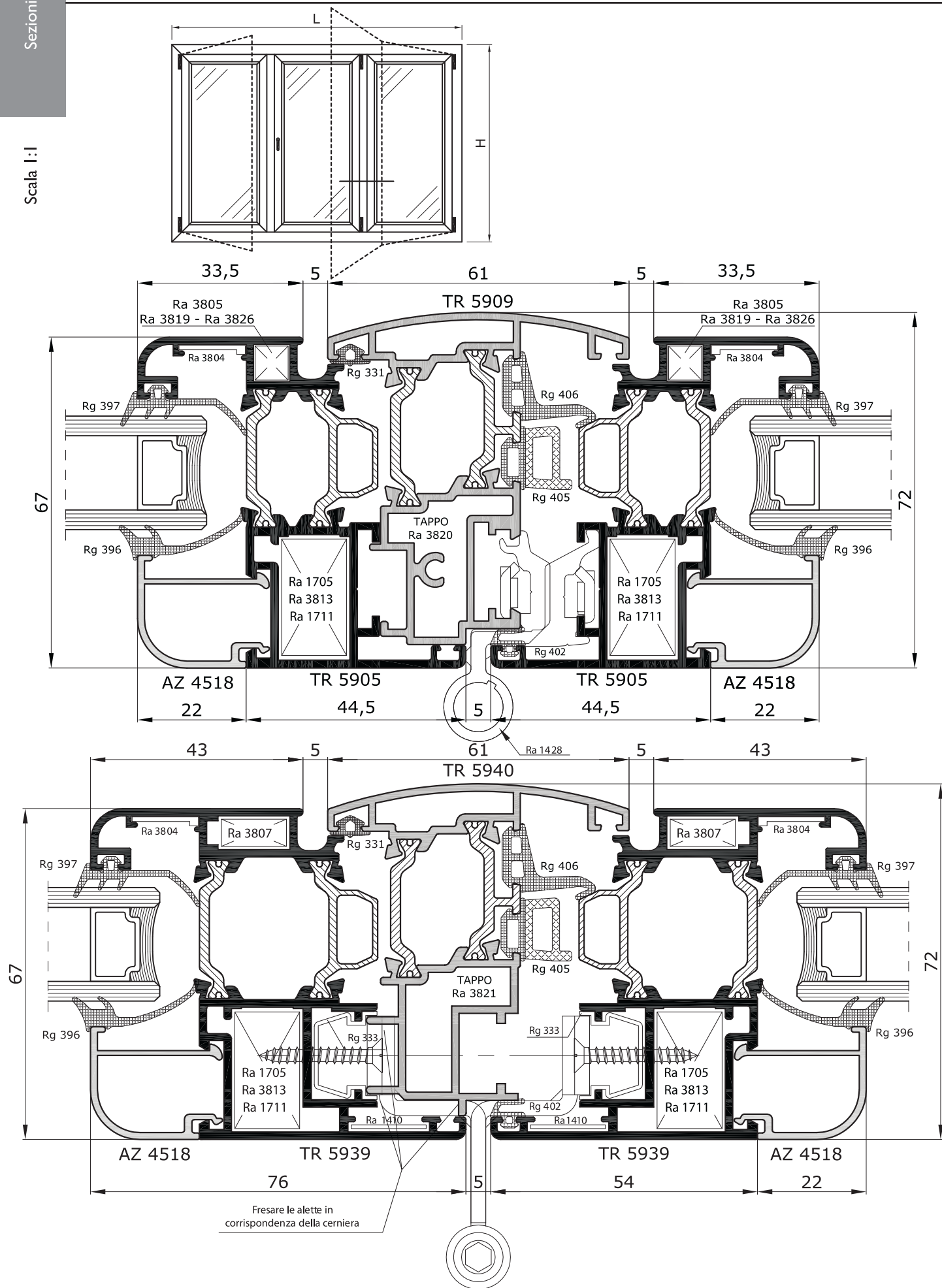
Finestra o portabalcone a due ante

- sistema con ferramenta a nastro -

tierre 590TH



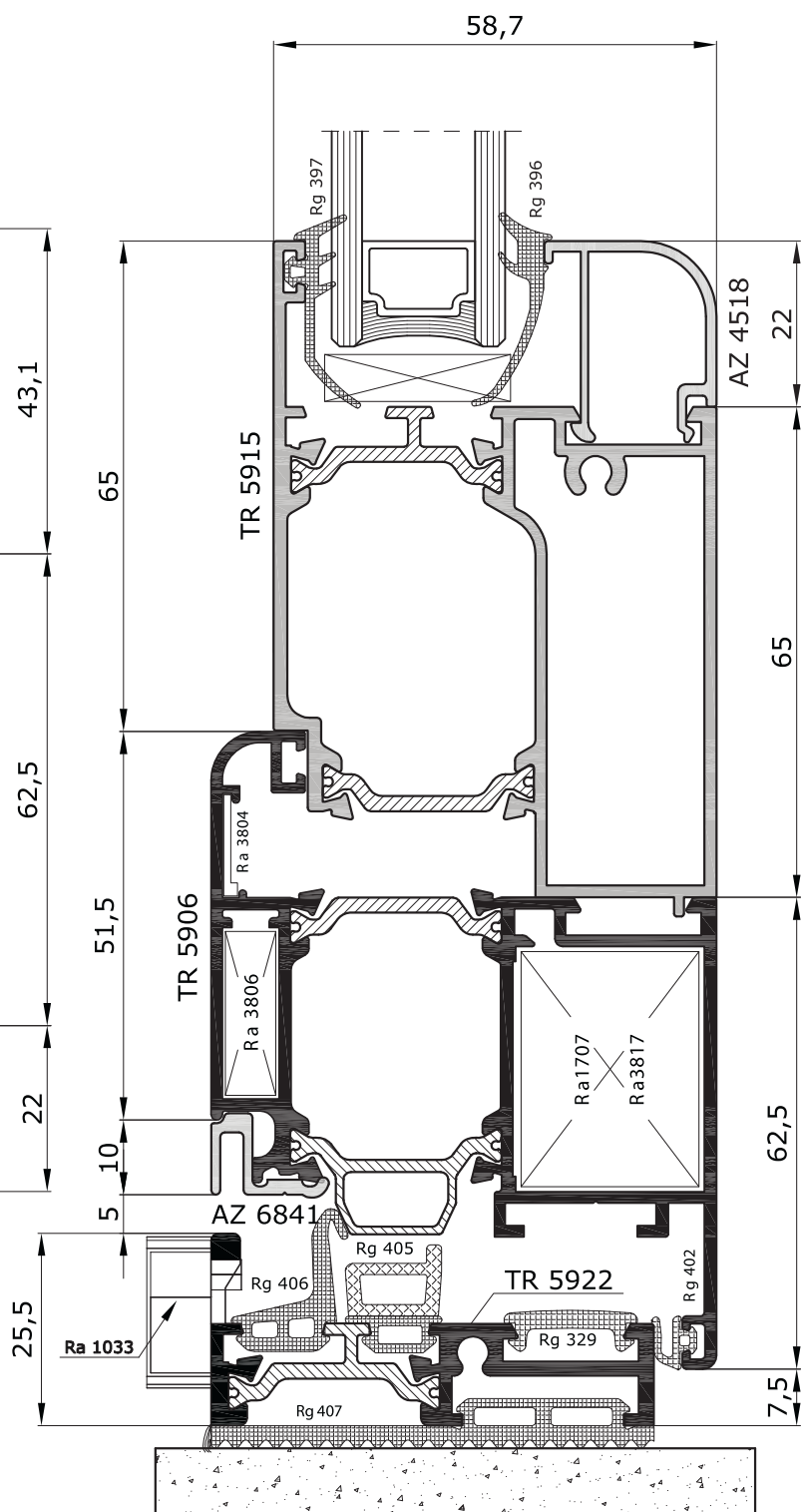
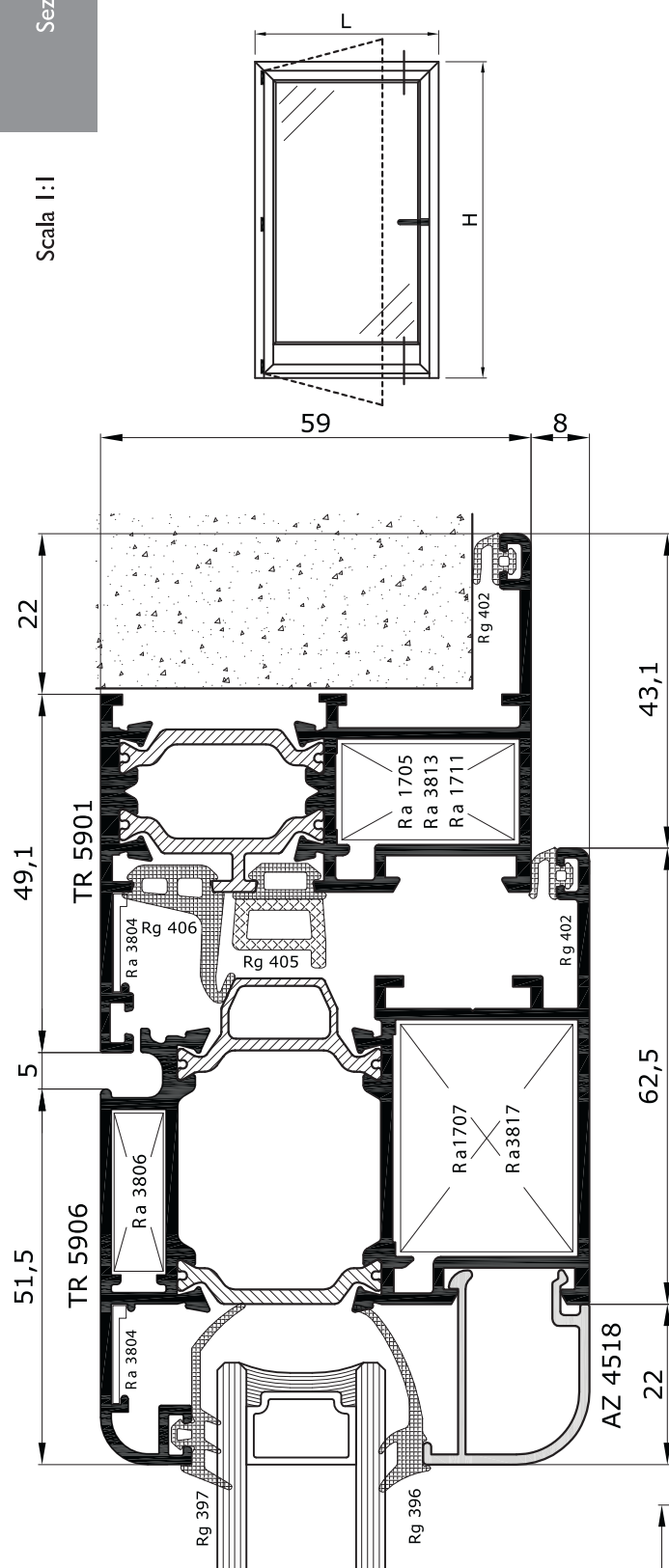
Scala 1:1



Portabalcone ad un'anta

- anta con fermavetro -

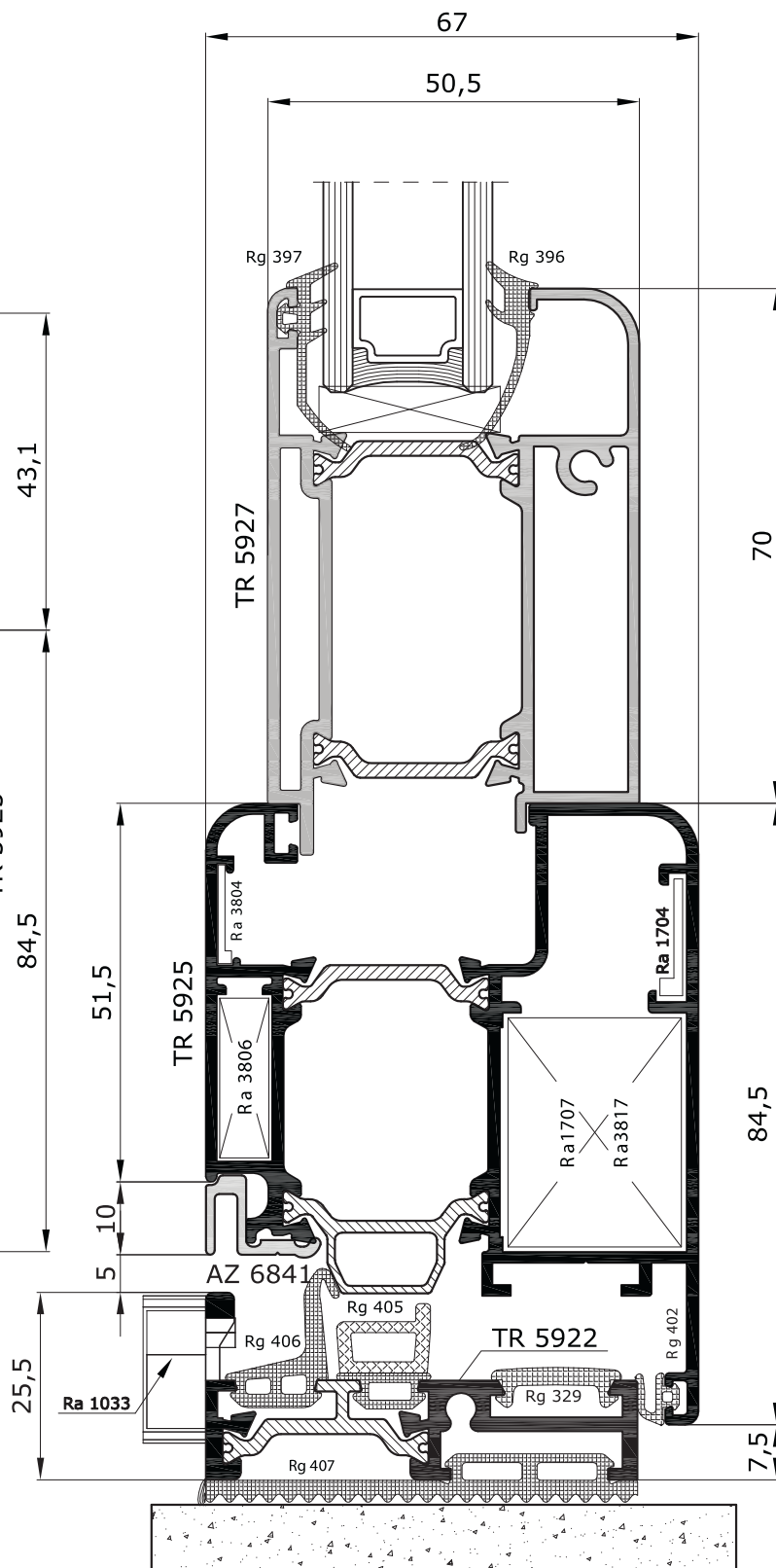
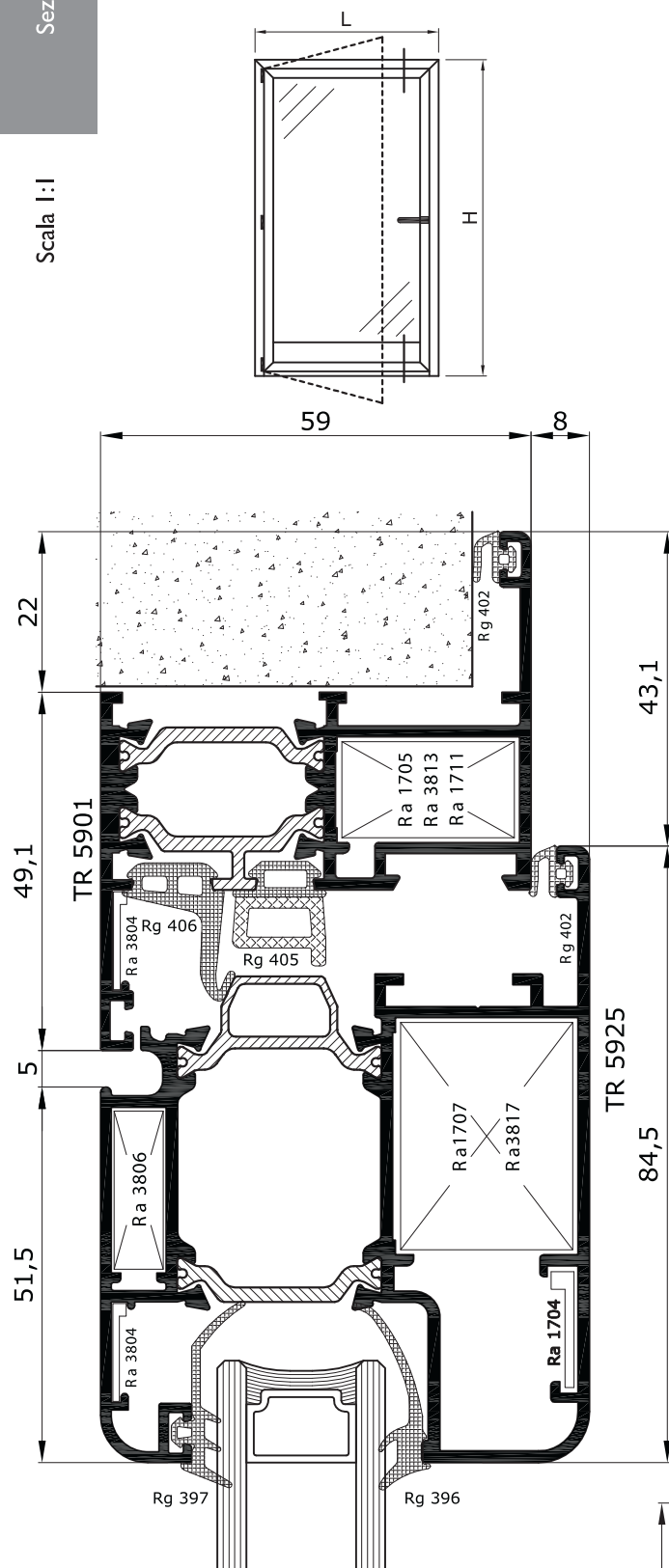
tierre 590TH



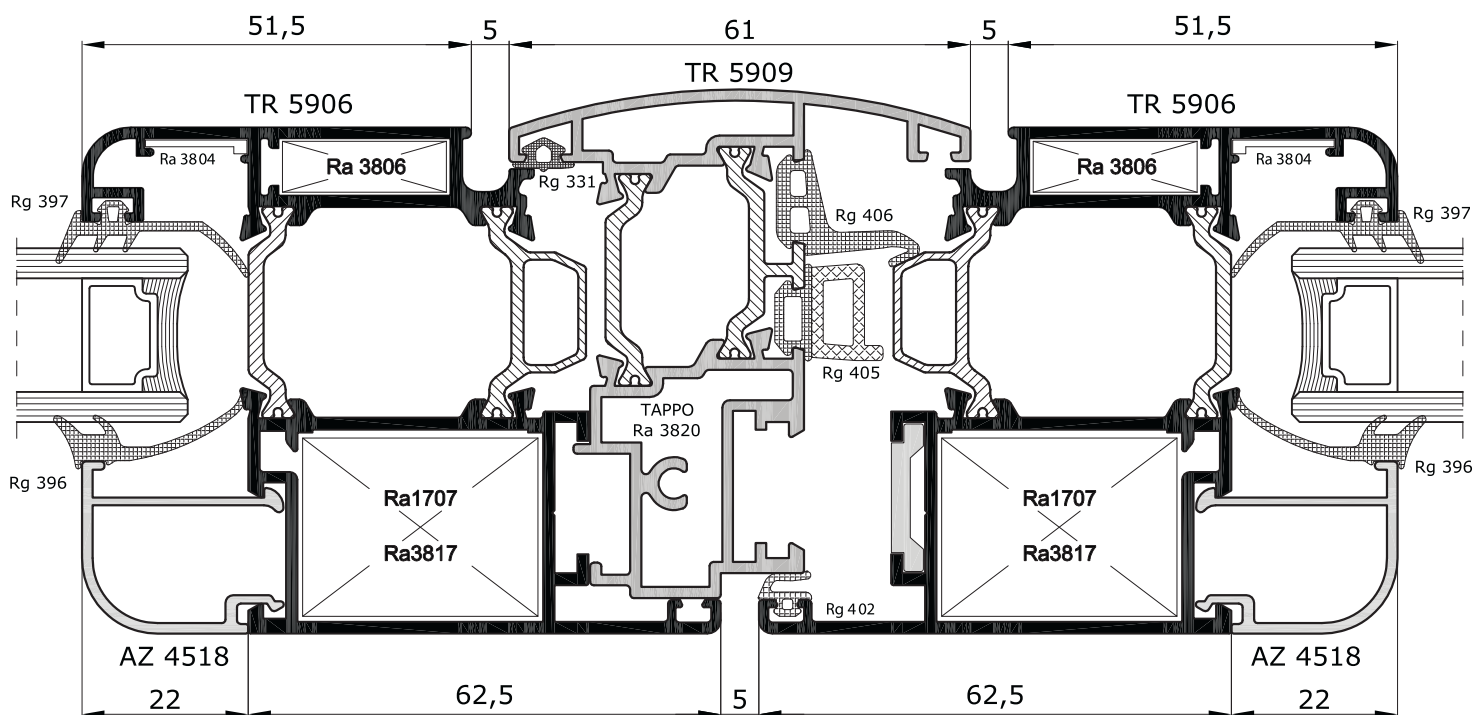
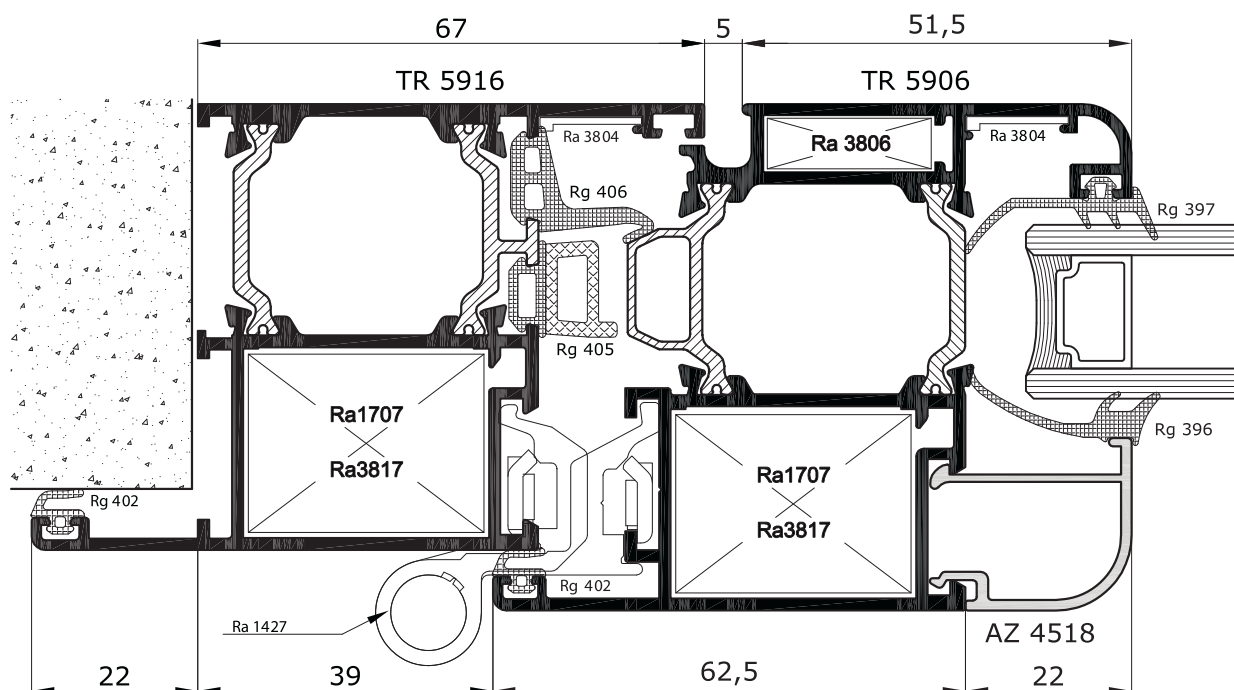
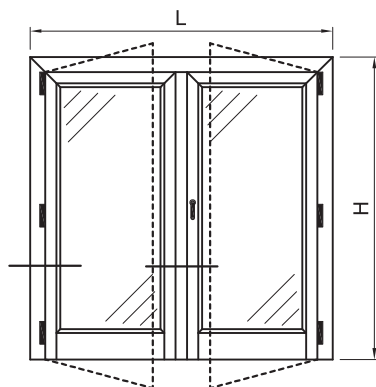
Portabalcone ad un'anta

- anta vetro a infilare -

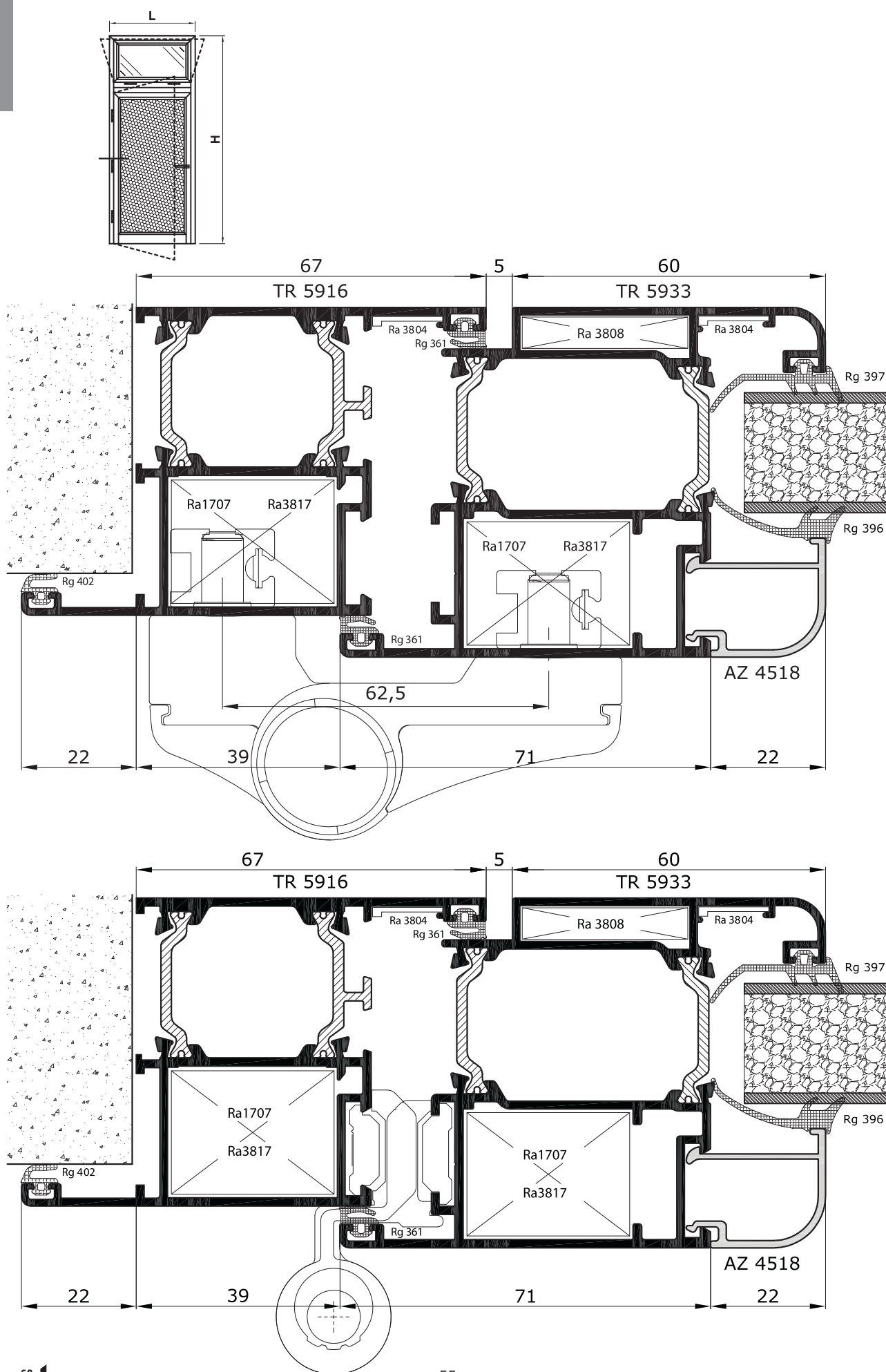
tierre 590TH



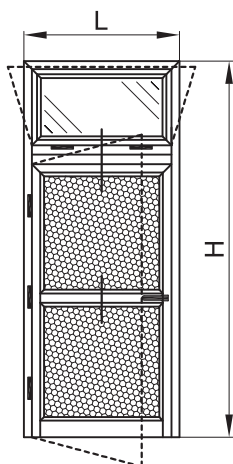
Scala 1:1



Scala 1:1



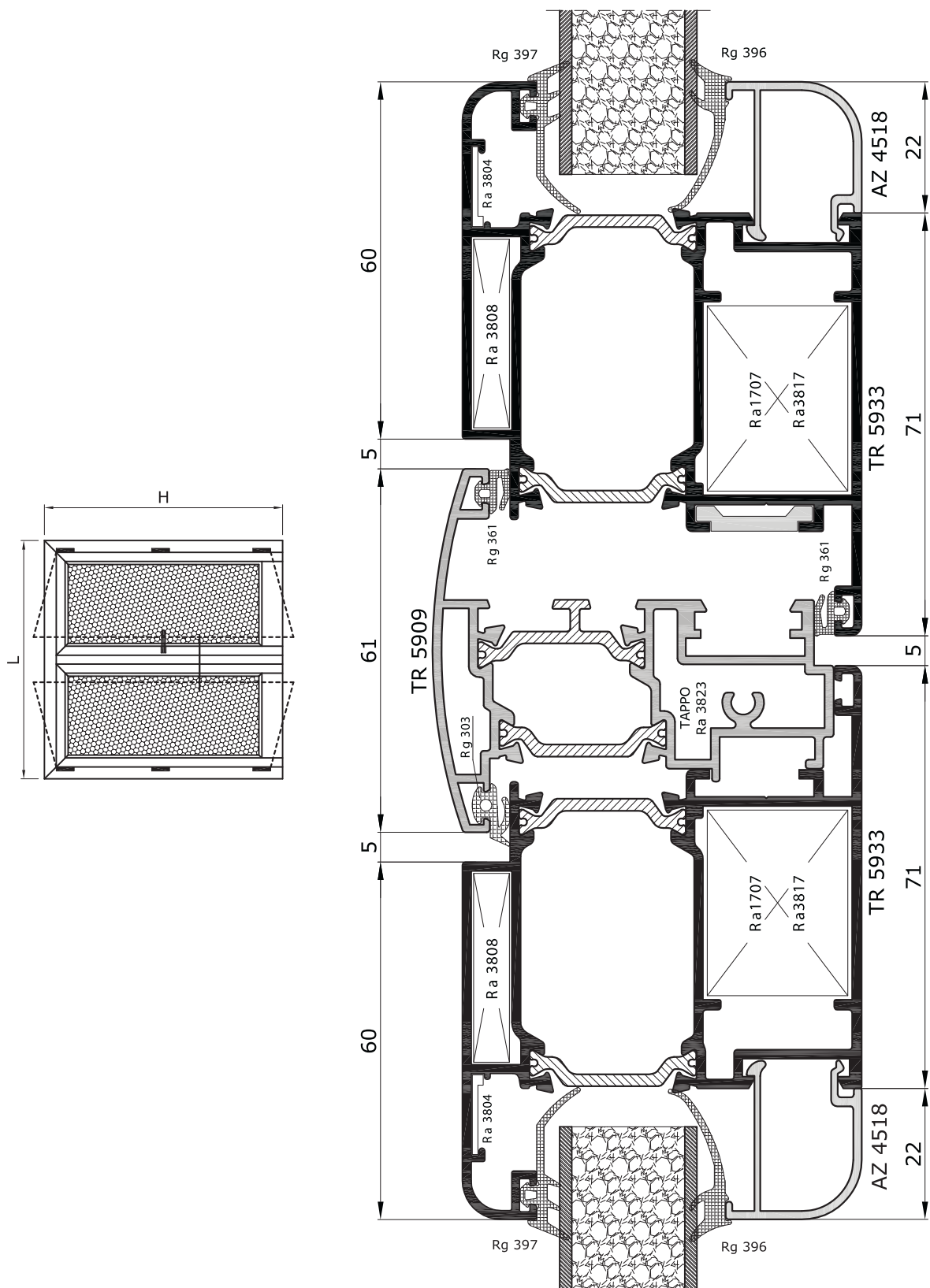
tierre 590TH



Portoncino a due ante a doppia battuta

- apertura interna -

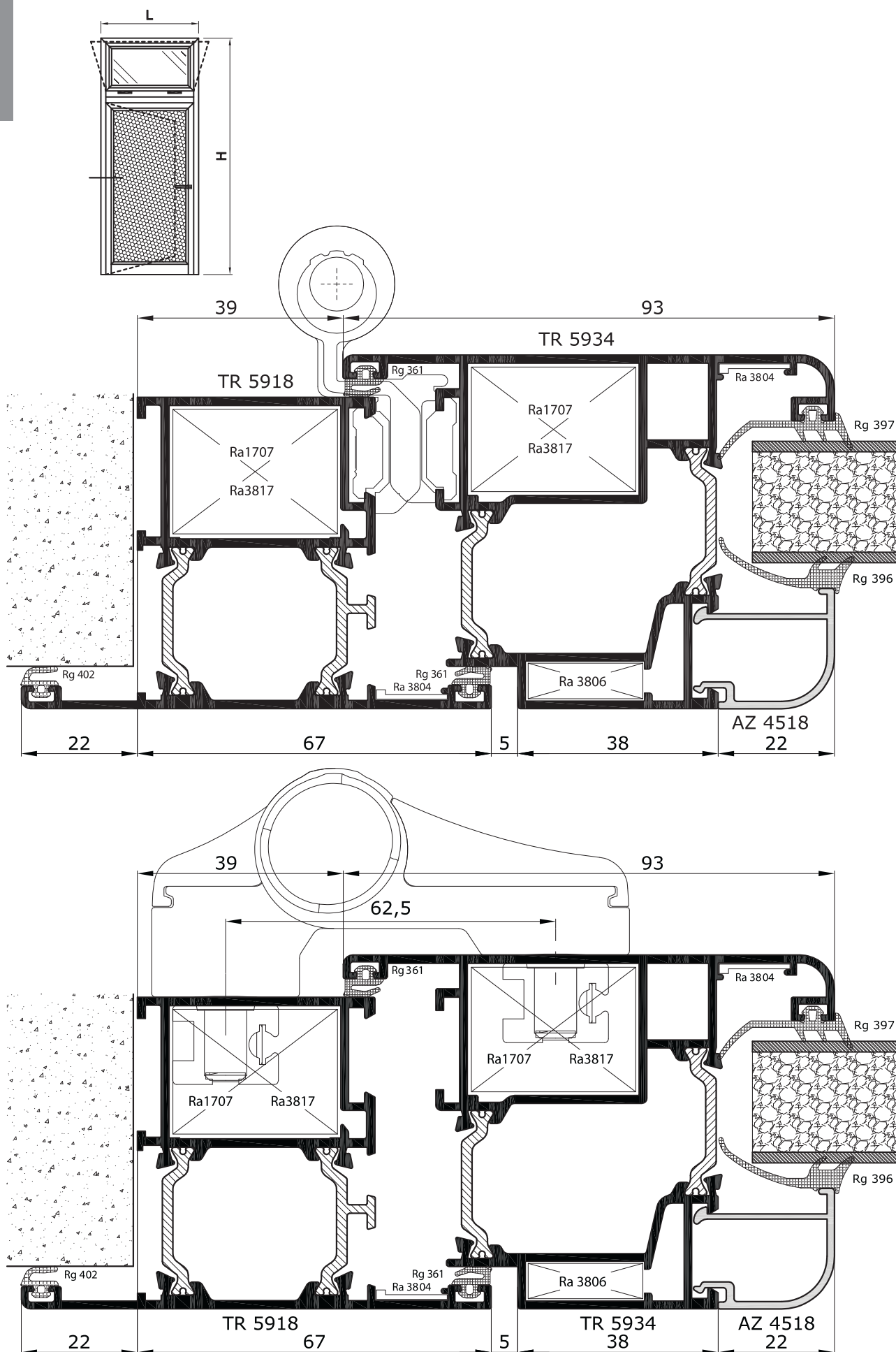
tierre 590TH



Portoncino a doppia battuta - apertura esterna -

tierre 590TH

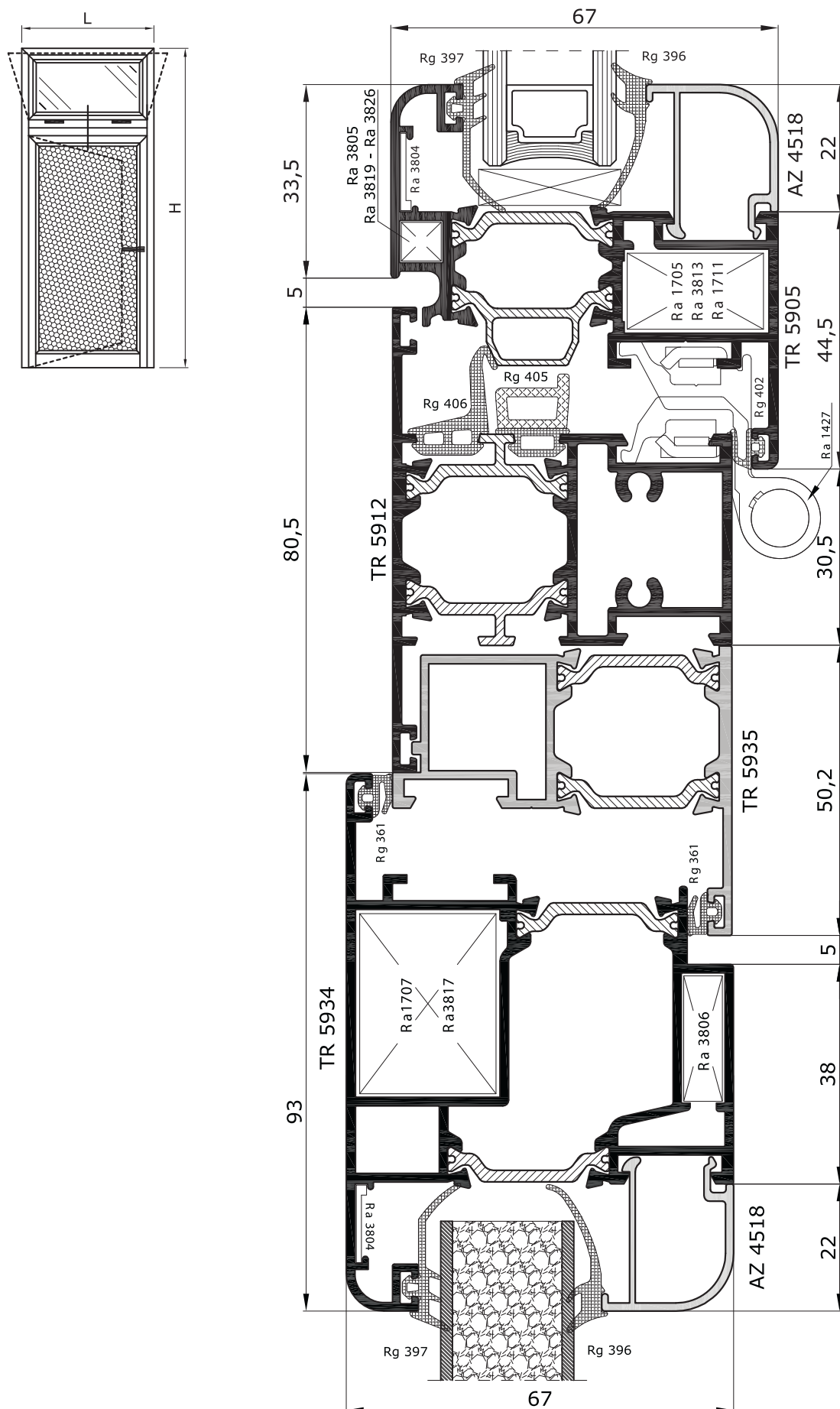
Scala 1:1



Portoncino a doppia battuta

- apertura esterna con vasistas superiore -

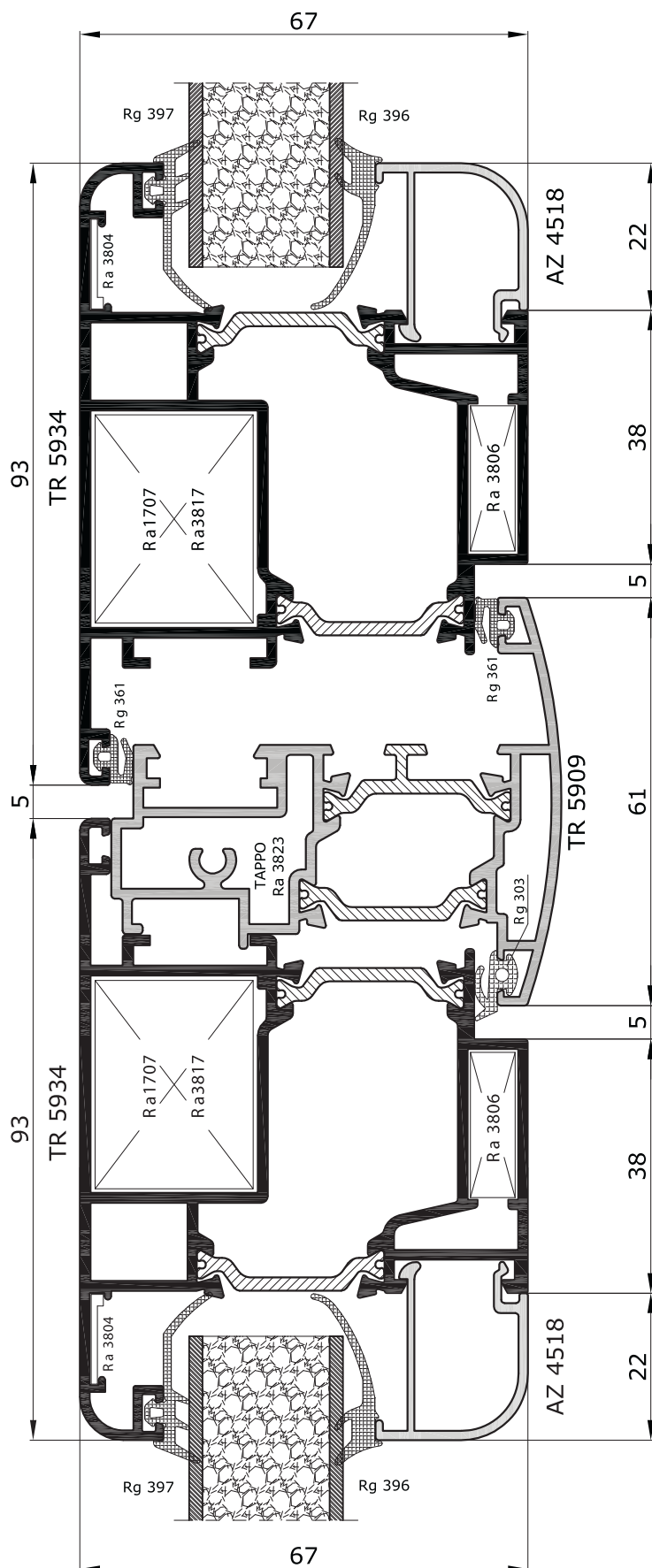
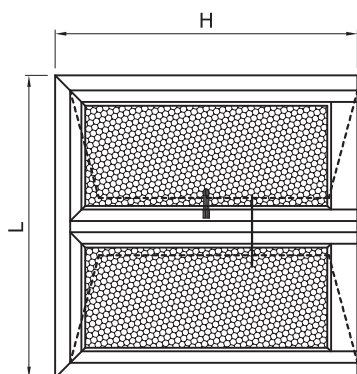
tierre 590TH



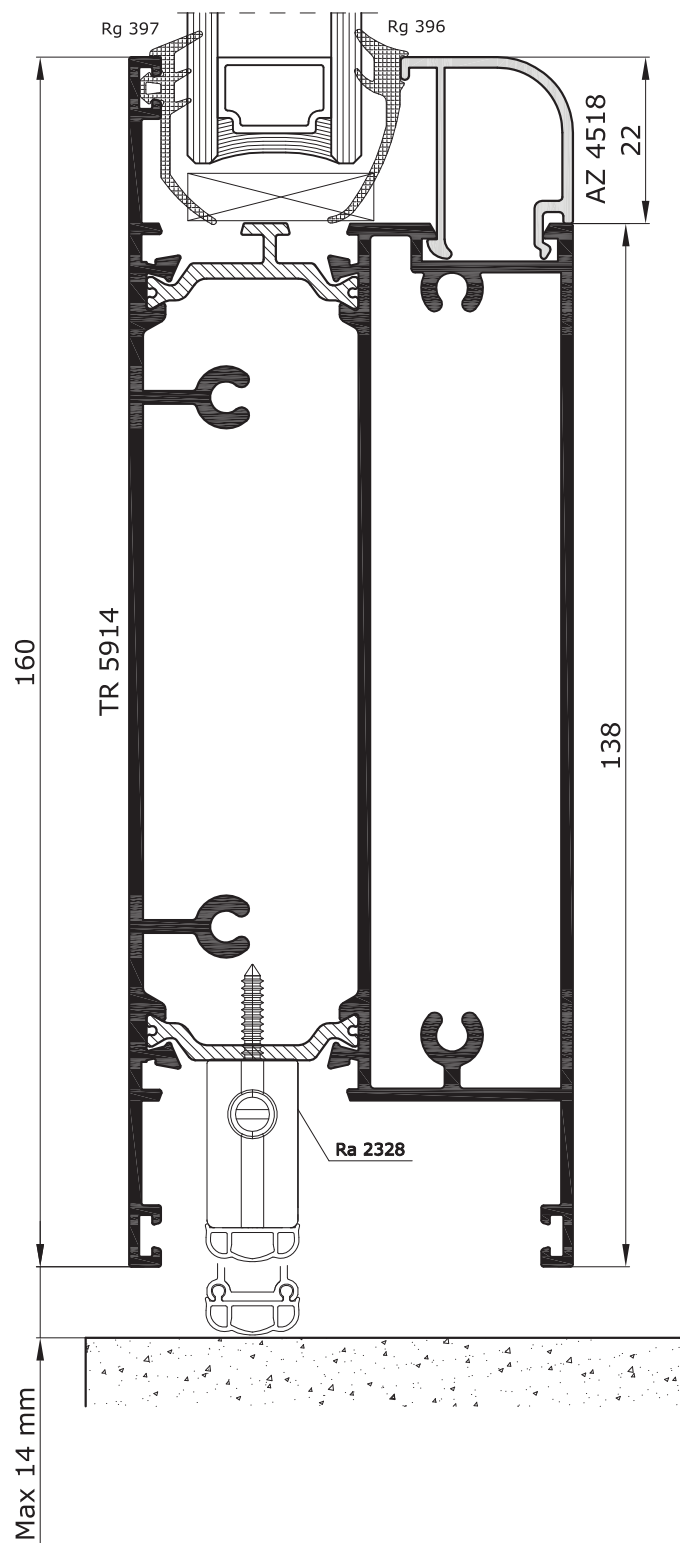
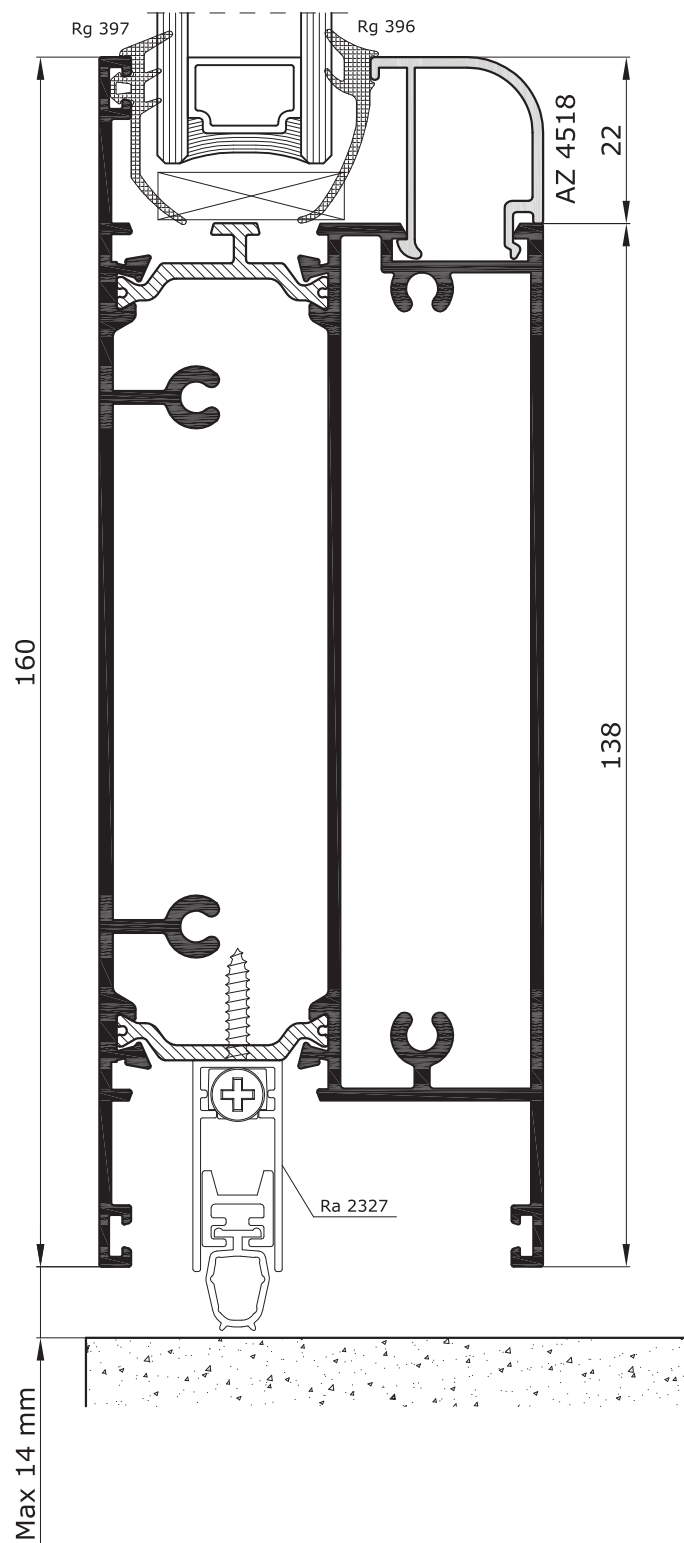
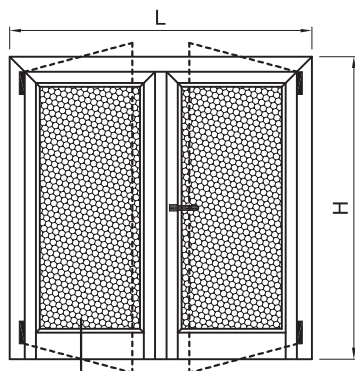
Portoncino a due ante a doppia battuta

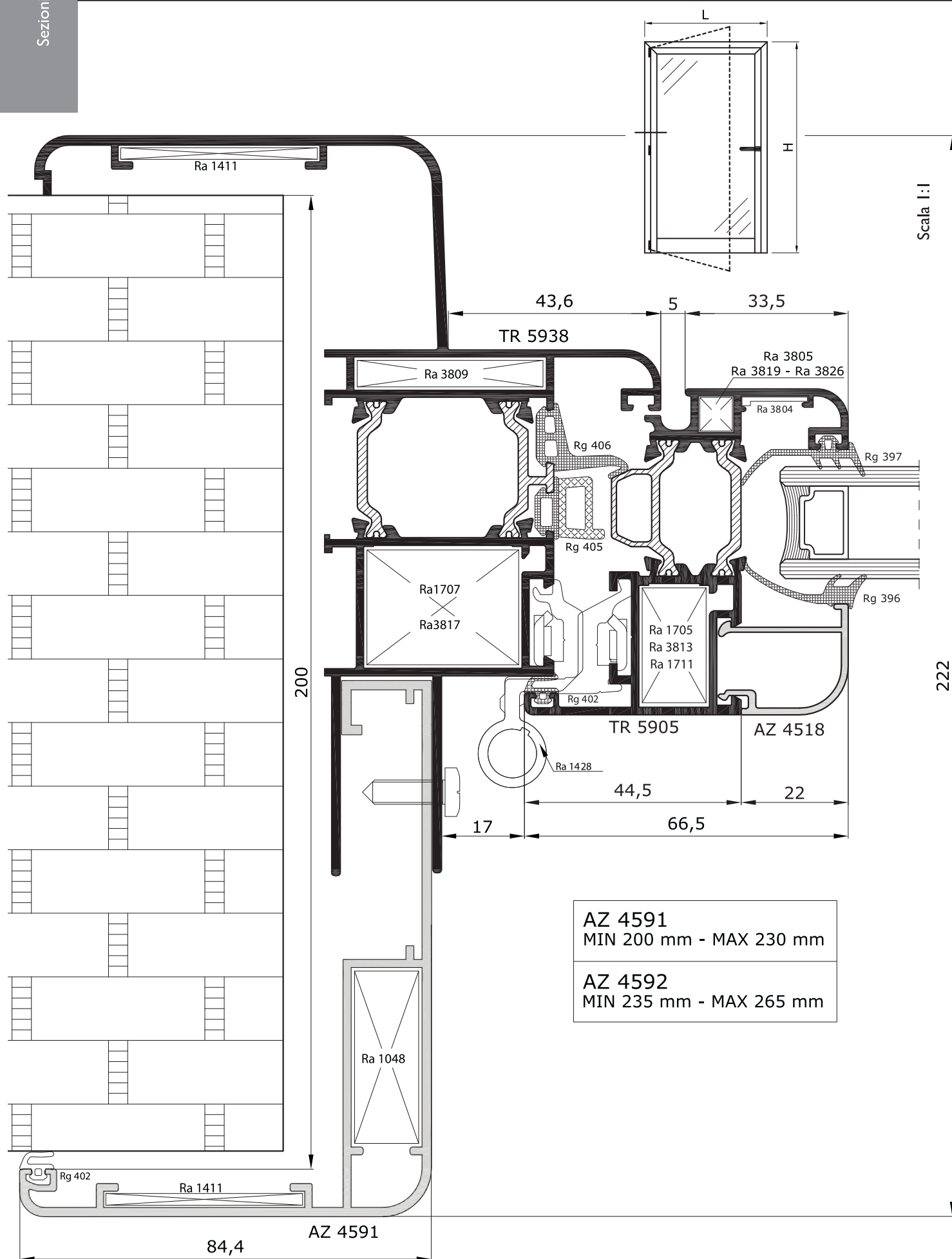
- apertura esterna -

tierre 590TH



Scala 1:1

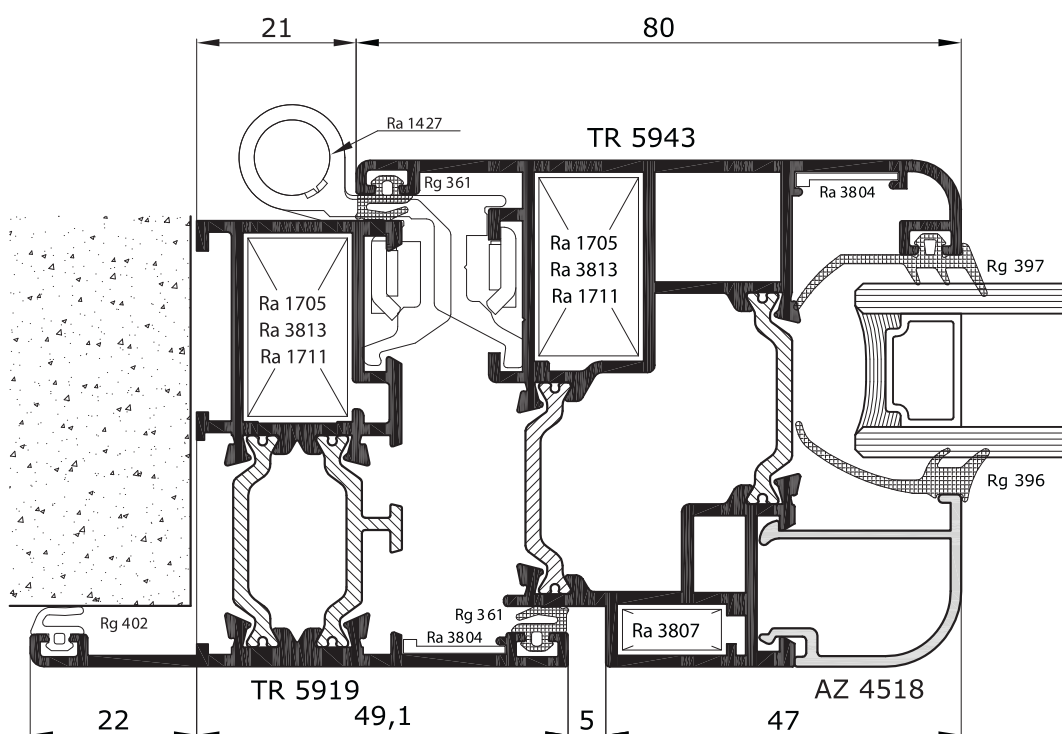
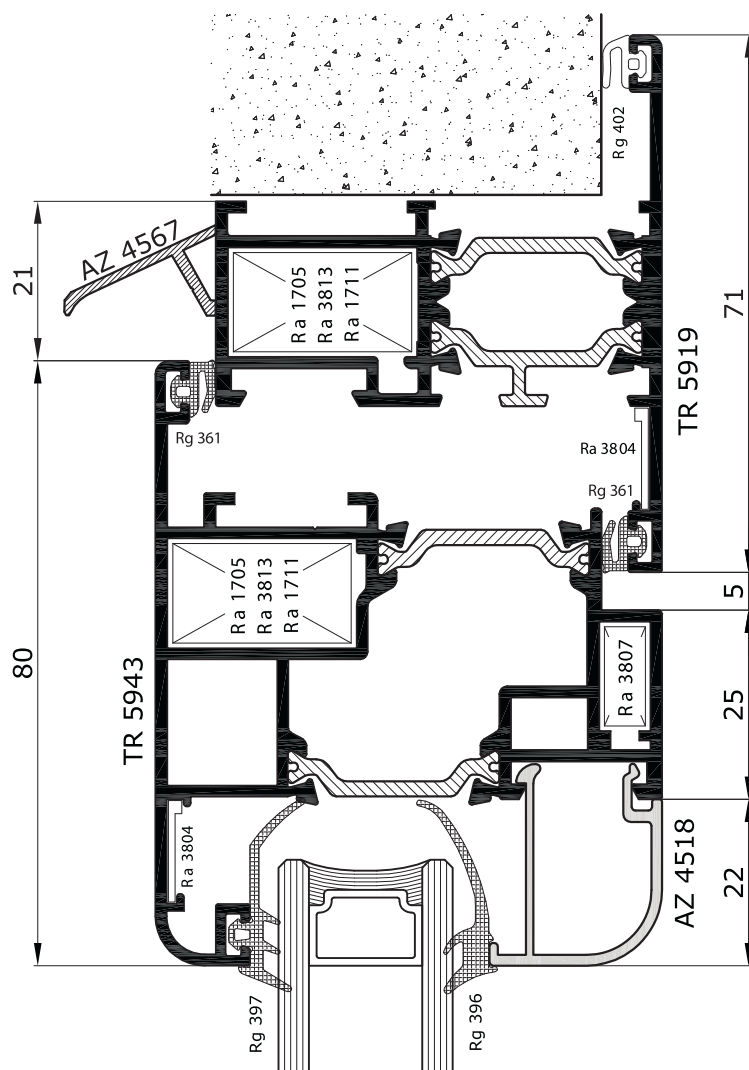
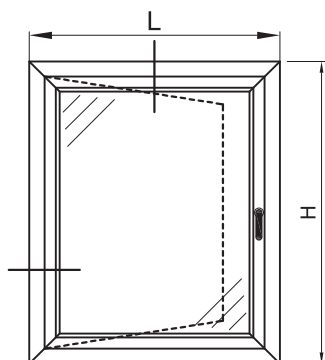




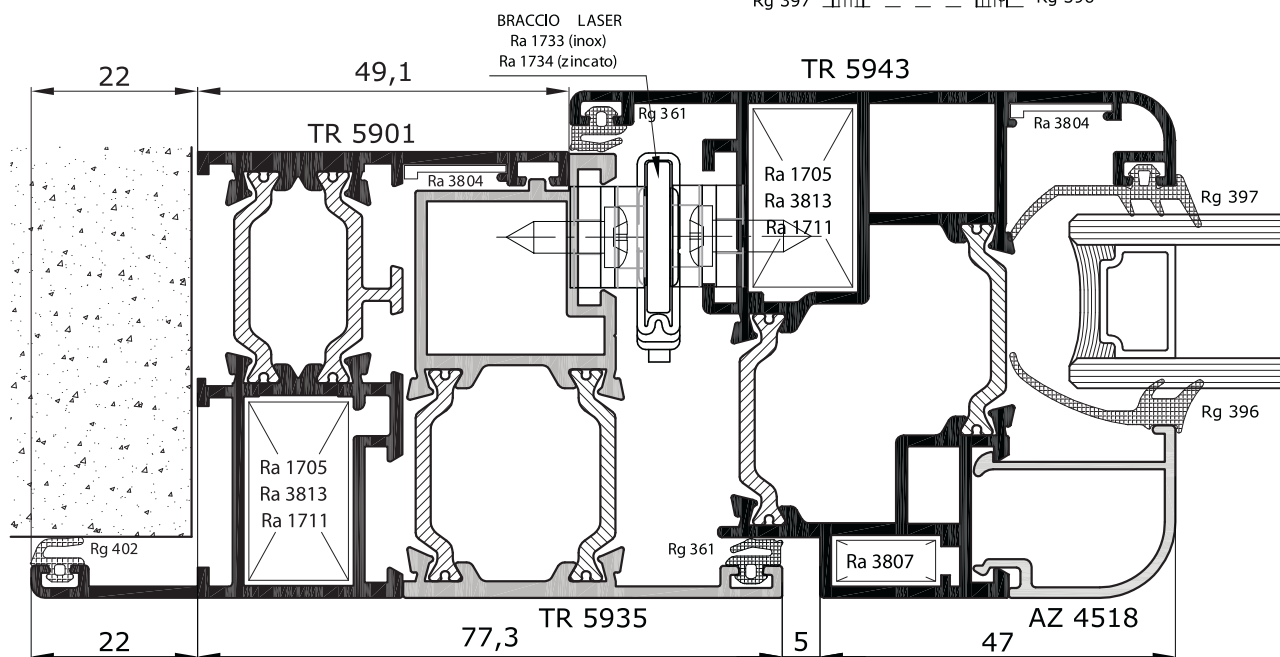
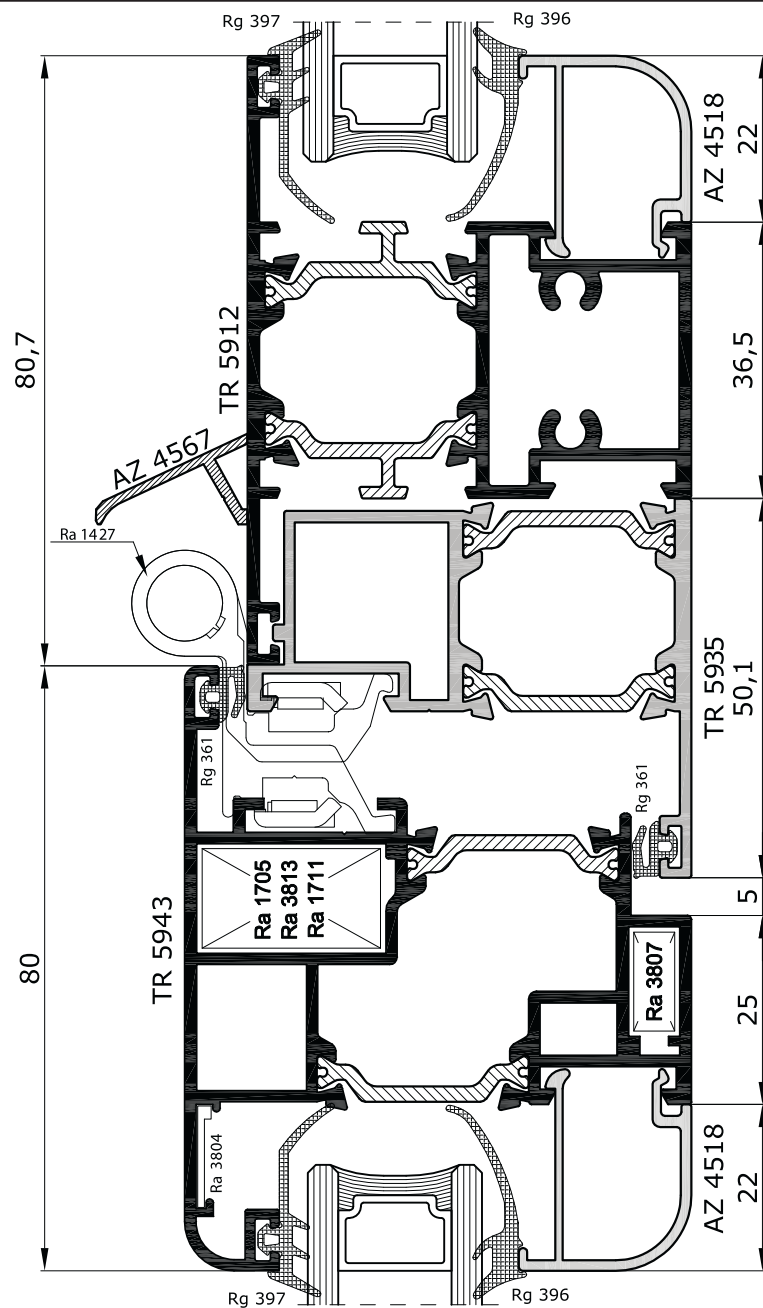
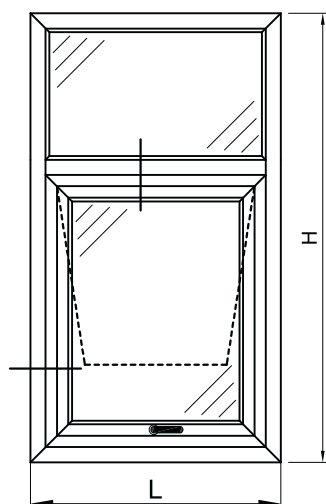
Finestra ad un'anta

- apertura esterna -

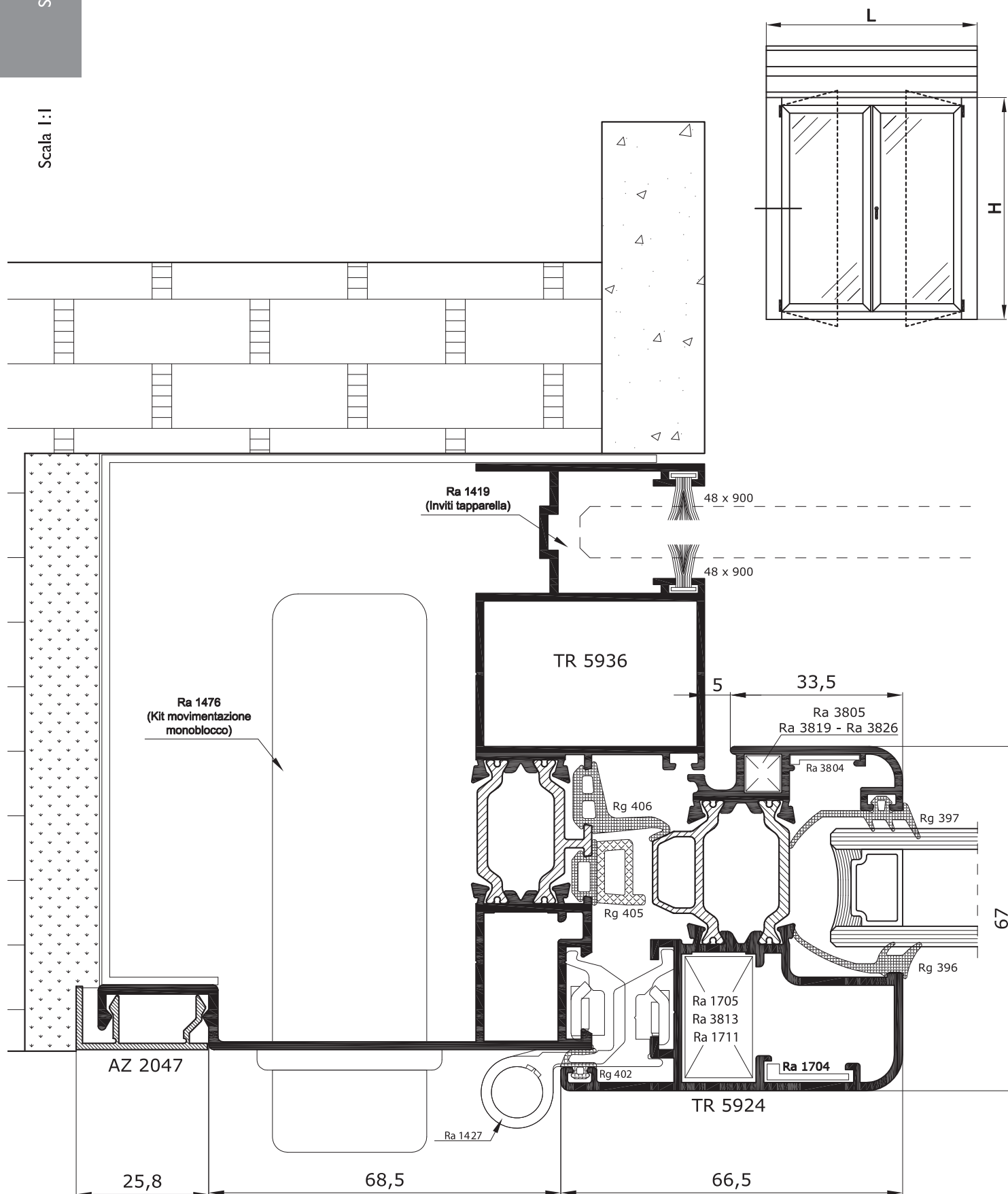
tierre 590TH

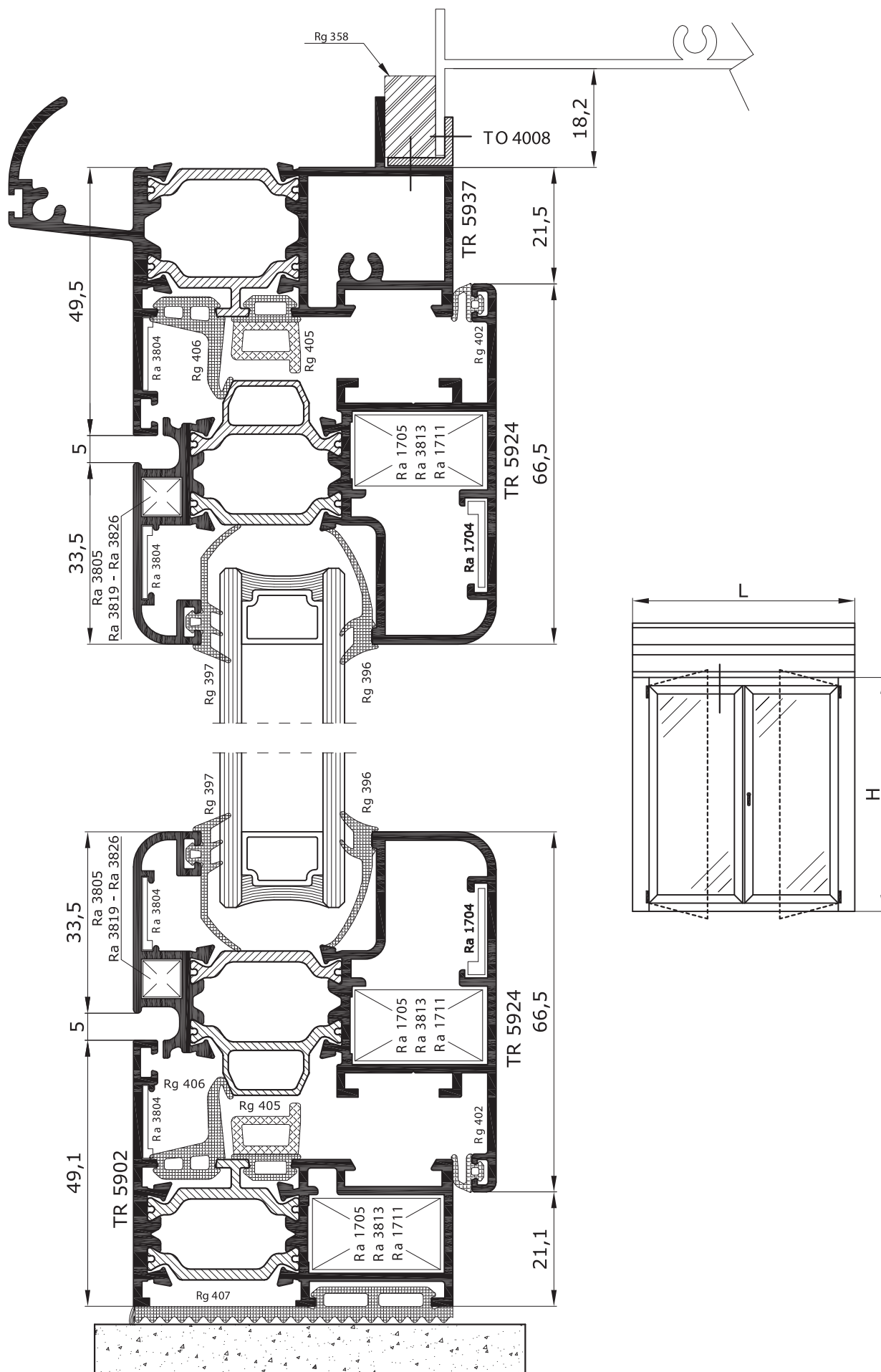


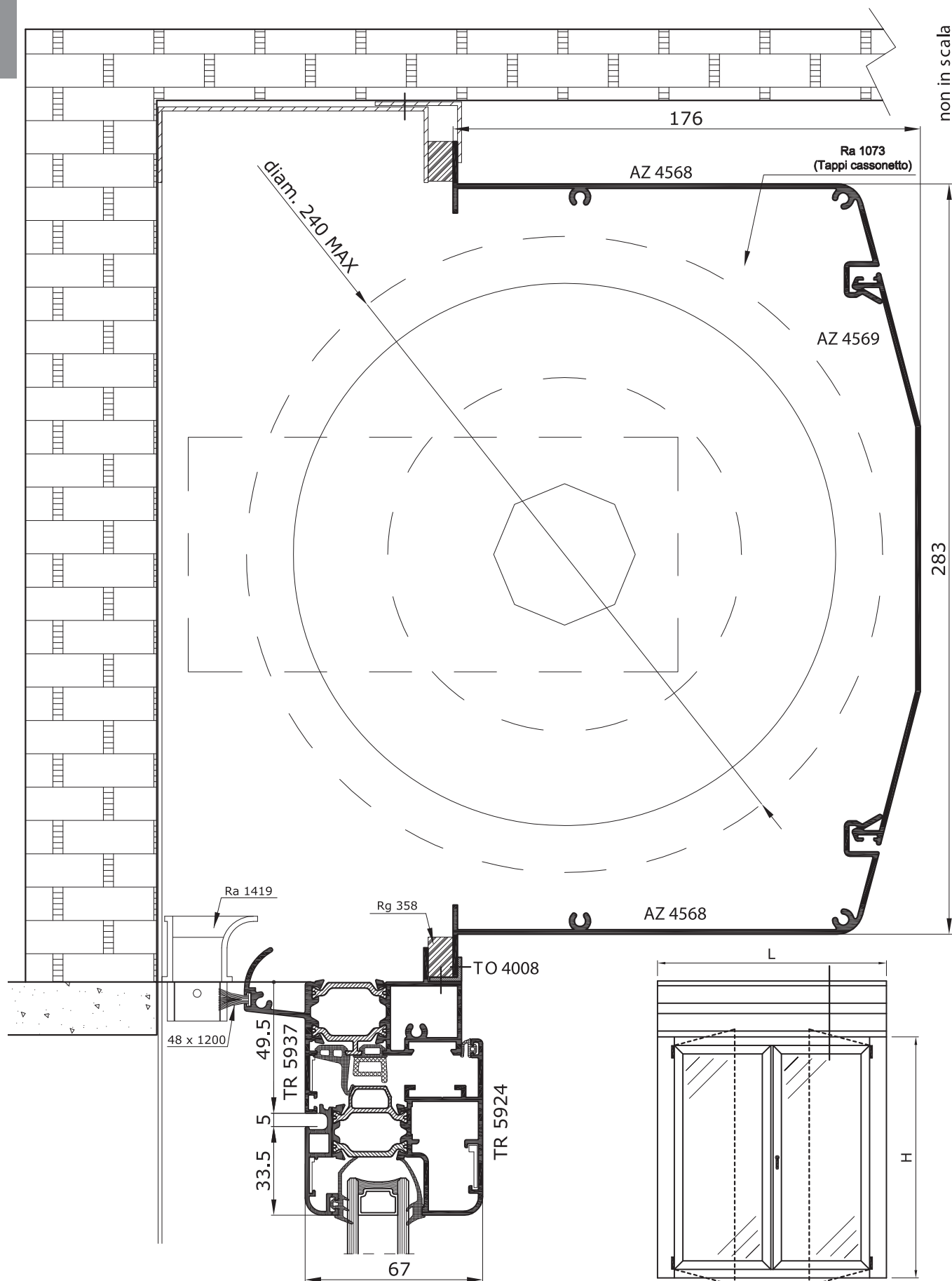
Finestra a sporgere con sopraluce fisso



Scala 1:1







[illegible]





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