

# HT

sistema de harmónio com corte térmico  
folding system with thermal break  
système repliable à rupture de pont thermique



Casa em Tábua | Viseu

## CATÁLOGO TÉCNICO

TECHNICAL CATALOG | CATALOGUE TECHNIQUE



SISTEMAS  
**EURO 2000**®  
PERFIS DE ALUMÍNIO E VIDROS PARA ARQUITECTURA

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**sistema de harmónio com corte térmico**  
folding system with thermal break  
système repliable à rupture de pont thermique

O sistema de harmónio HT apresenta grande capacidade térmica e bastante potencial para a aplicação em grandes vãos, nos quais o principal objetivo é obter o máximo de vista livre aquando da sua abertura.

Desenhado para tipologias entre 2 e 7 folhas, este sistema adapta-se perfeitamente a todo o tipo de exigências arquitectónicas apresentando elevada robustez e facilidade de manuseamento.

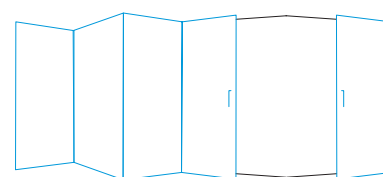
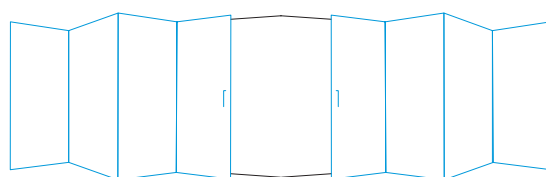
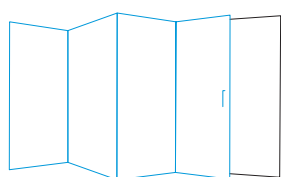
The HT folding system has great thermal capacity and a lot of potential for application in large spans, in which the main objective is to obtain the maximum free view when it is opened.

Designed for typologies between 2 and 7 sashes, this system adapts perfectly to all types of architectural requirements presenting high strength and ease of handling.

Le système repliable HT a une grande capacité thermique et un grand potentiel pour une application sur de grandes cadres, dans lequel l'objectif principal est d'obtenir le maximum de visibilité libre lorsqu'il est ouvert.

Conçu pour des typologies entre 2 et 7 vantaux, ce système s'adapte parfaitement à tous types d'exigences architecturales présentant une grande résistance et une maniabilité.

<b>APRESENTAÇÃO</b> PRESENTATION   PRÉSENTATION	reta   straight   droite
<b>DIMENSÕES</b> DIMENSIONS   DIMENSIONS	
<b>aros fixos</b>   fixed frames   cadre dormant	77mm
<b>aros móveis</b>   mobile frames   cadre ouvrant	77mm
<b>ENCHIMENTO</b> FILLING   REEMPLISSAGE	De 14 a 50mm From 14 to 50mm   De 14 à 50mm
<b>CORTES</b> CUTS   COUPES	45°   90°
<b>VEDAÇÃO</b> INSULATION   ÉTANCHÉITE	Juntas em EPDM EPDM joints   Joints en EPDM
<b>POLIAMIDA</b> POLYAMIDE	24mm   32mm
<b>UNIÕES</b> UNIONS   UNIONS	Esquadros de bloqueio 19mm   22mm Blocking brackets   Équerres de verrouillages
<b>ABERTURAS</b> OPENINGS   OUVERTURES	2 a   to   a 7 folhas   sashes   vantaux
<b>ACABAMENTOS</b> FINISHES   FINITIONS	Lacados   Anodizados   Bicolores Powder coated   Anodised   Bicolour Laqué   Anodisé   Bicolore



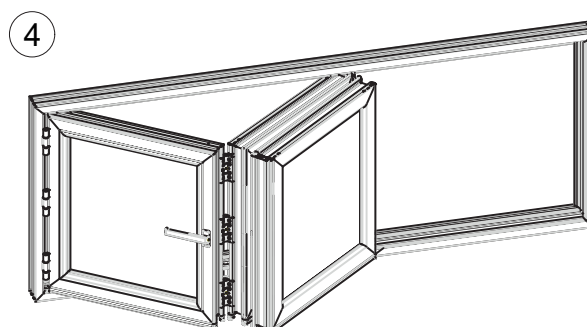
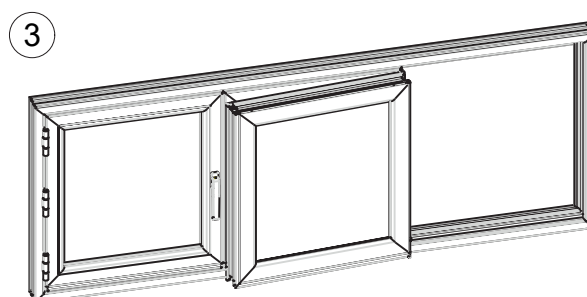
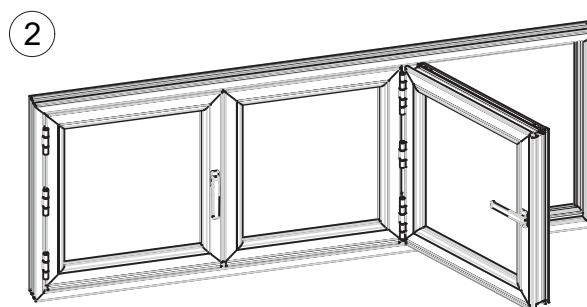
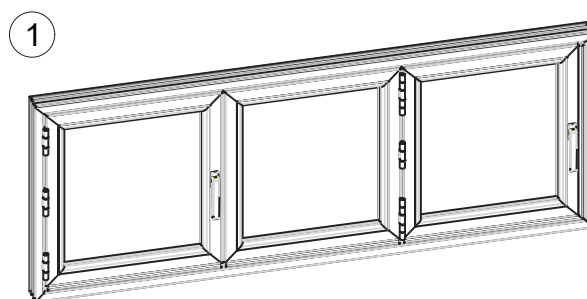
Todas as medidas são consideradas em mm, salvo as devidamente identificadas

All measurements are considered in mm, except those duly identified | Toutes les mesures sont considérées en mm saufs celles qui sont dûment identifiées

**CARACTERÍSTICAS MÍNIMAS/MÁXIMAS**  
MINIMUM/MAXIMUM CHARACTERISTICS  
CARACTERISTIQUES MINIMUM/MAXIMUM

	<b>Tipologias ímpares *</b> Odd typologies *   Typologies impaires *	<b>Tipologias pares</b> Even typologies   Typologies paires
	Folhas sem o acessório Ref. 212044 Sashes without accessory Ref. 212044 Vantaux sans accessoire Réf. 212044	Folhas com o acessório Ref. 212044 Sashes with accessory Ref. 212044 Vantaux avec accessoire Réf. 212044
<b>Largura mínima</b> Minimum length   Largeur minimale	600 mm	651 mm
<b>Largura máxima</b> Maximum length   Largeur maximale	1000 mm	1200 mm
<b>Altura máxima</b> Maximum height   Hauteur maximale	3000 mm	3500 mm
<b>Peso máximo</b> Maximum weight   Poids maximal	100 kg	120 kg

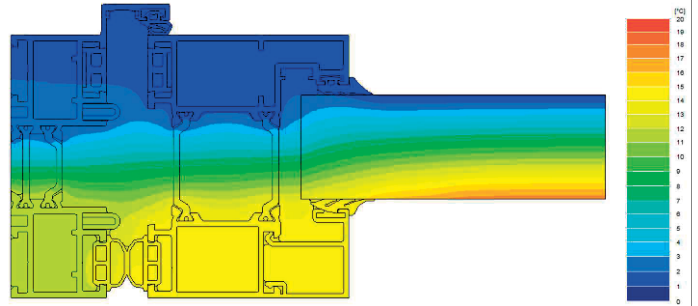
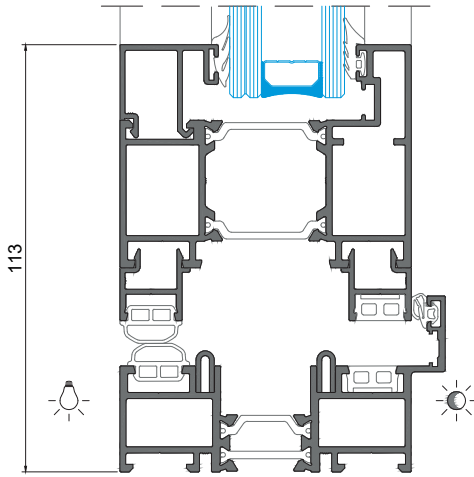
**\* É obrigatório cumprir a sequência de abertura indicada abaixo, para garantir o funcionamento adequado da janela:**  
It is mandatory to comply with the opening sequence indicated below, to ensure proper operation of the window:  
Il est obligatoire de respecter la séquence d'ouverture indiquée ci-dessous, assurer le bon fonctionnement de la fenêtre:



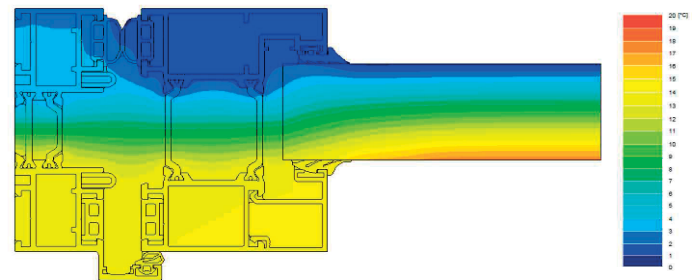
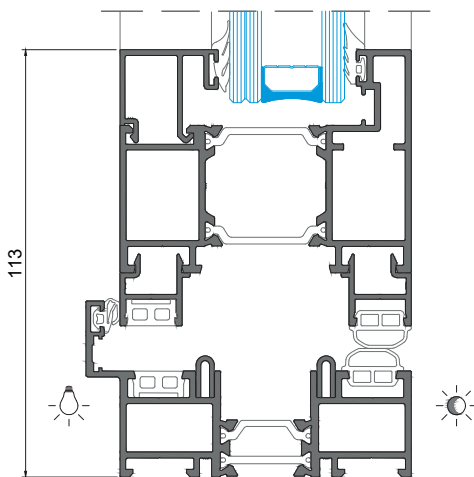
## DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

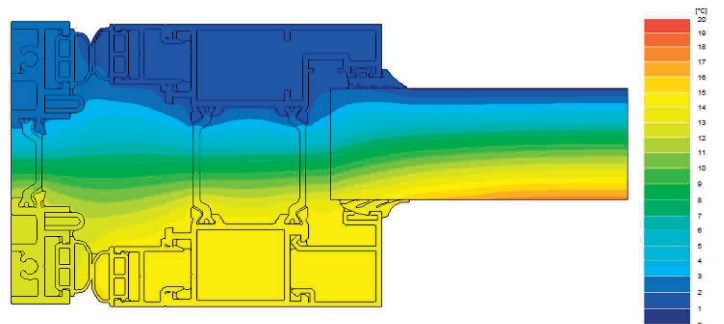
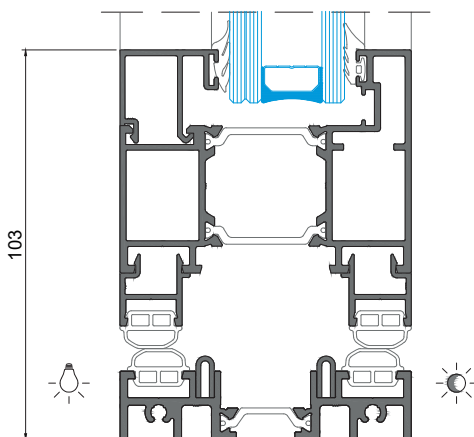
- Aro Inferior | Bottom Frame | Cadre Inférieur



Secção | Section | Section (3a) (7a) (11a) (15a) **Uf = 2,94 W/m<sup>2</sup>K**



Secção | Section | Section (3a) (7a) (11a) (15a) **Uf = 2,98 W/m<sup>2</sup>K**

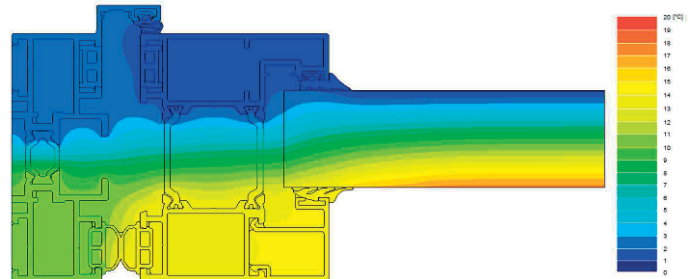
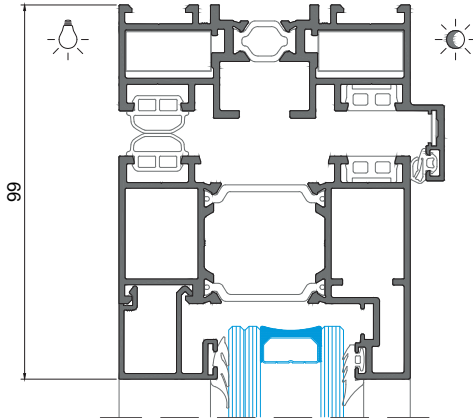


Secção | Section | Section (3b) (7b) (11b) (15b) **Uf = 2,70 W/m<sup>2</sup>K**

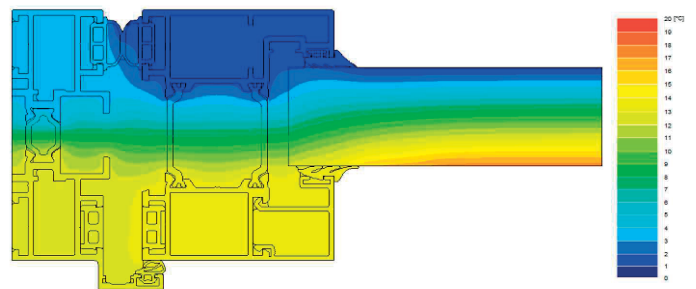
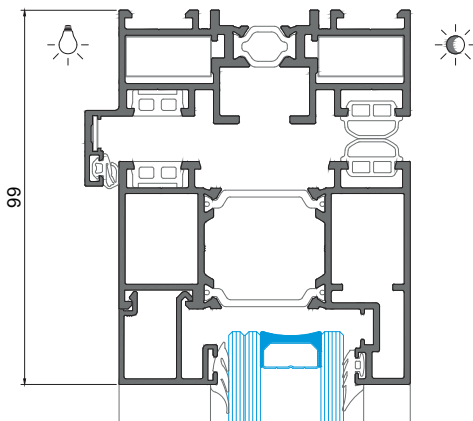
## DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

- Aro Superior | Top Frame | Cadre Supérieure

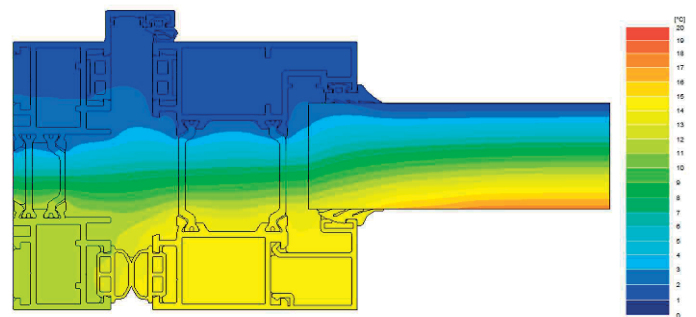
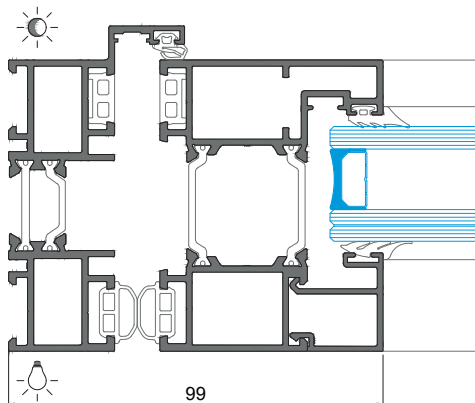


Secção | Section | Section (1) (5) (9) (13) (21) **Uf = 3,25 W/m<sup>2</sup>K**



Secção | Section | Section (1) (5) (9) (13) (21) **Uf = 3,32 W/m<sup>2</sup>K**

- Aro Lateral | Lateral Frame | Cadre Latéral

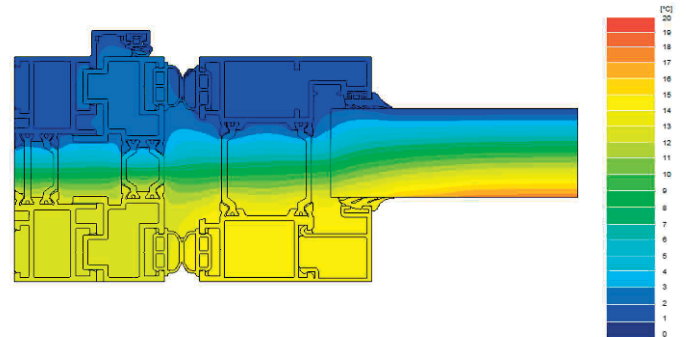
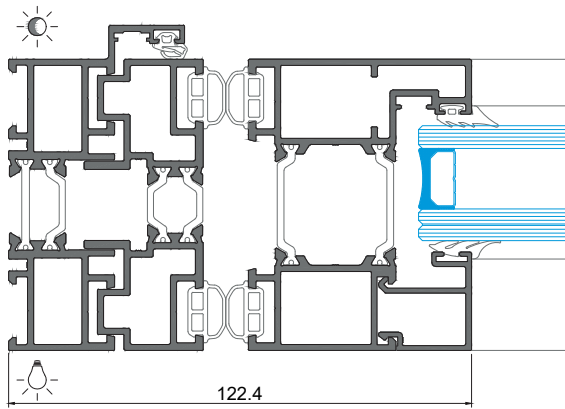


Secção | Section | Section (2a) **Uf = 2,97 W/m<sup>2</sup>K**

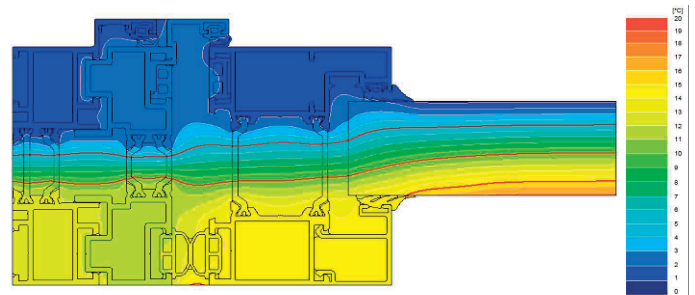
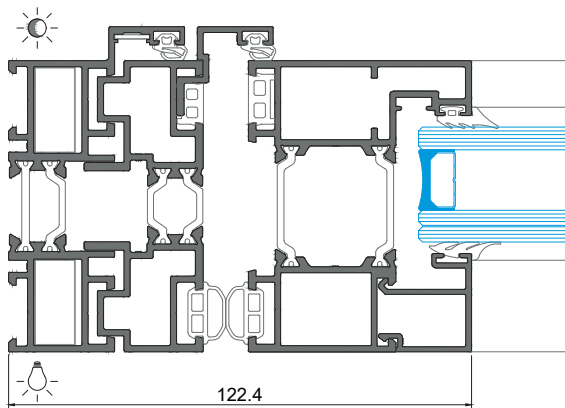
# DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

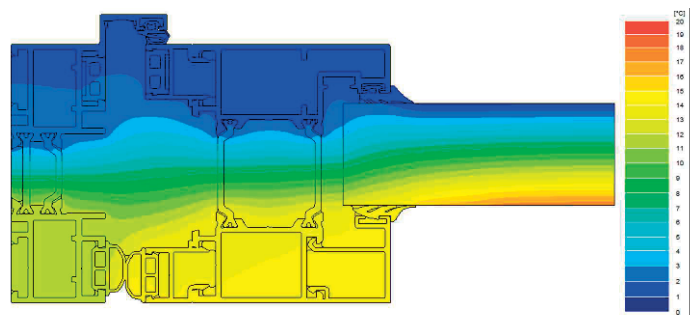
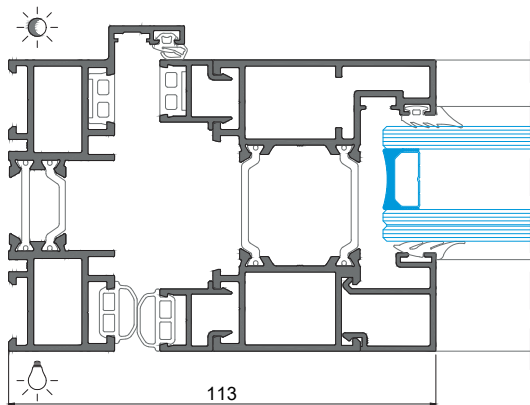
- Aro Lateral | Lateral Frame | Cadre Latéral



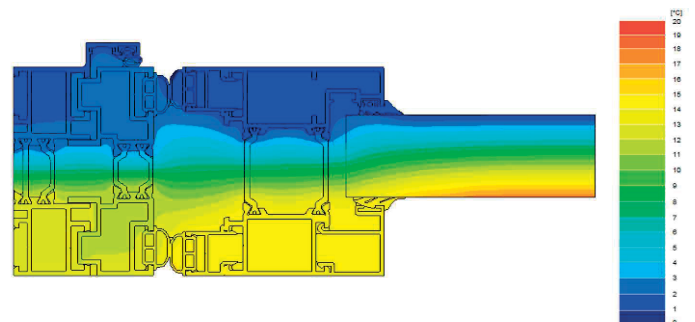
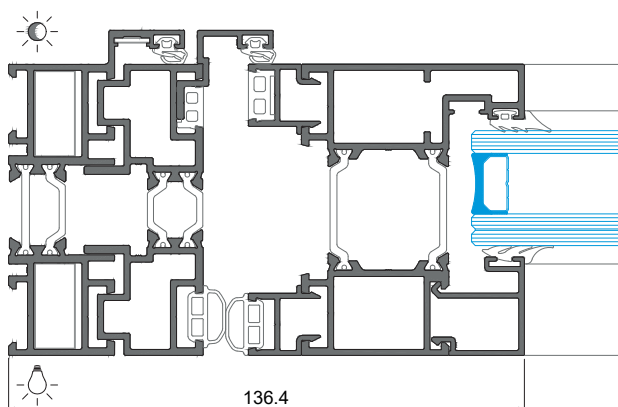
Secção | Section | Section (2b)  $U_f = 2,79 \text{ W/m}^2\text{K}$



Secção | Section | Section (10b)  $U_f = 2,90 \text{ W/m}^2\text{K}$



Secção | Section | Section (6a)  $U_f = 2,99 \text{ W/m}^2\text{K}$

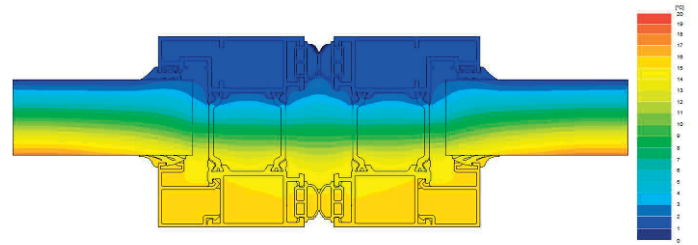
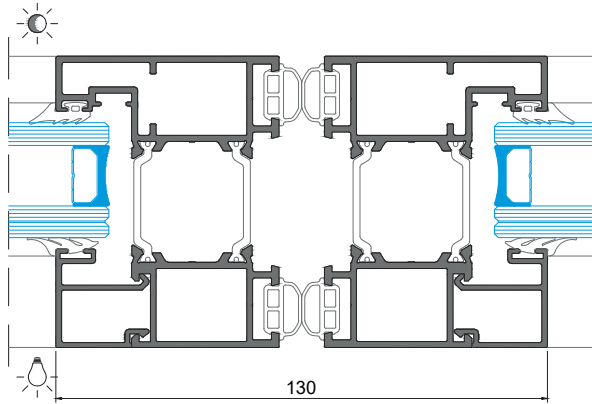


Secção | Section | Section (6b)  $U_f = 2,81 \text{ W/m}^2\text{K}$

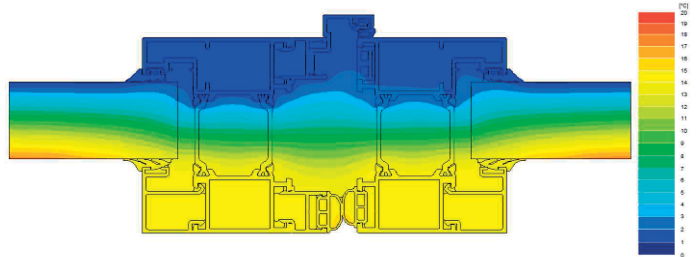
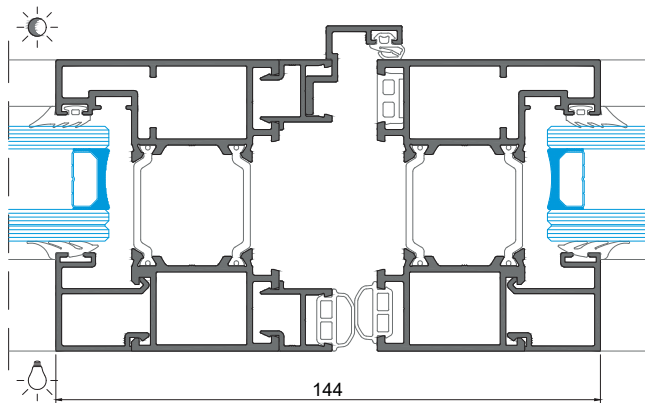
## DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

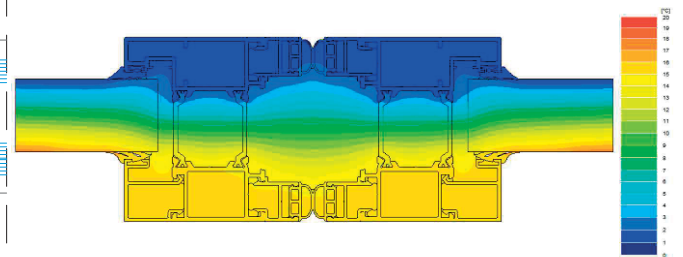
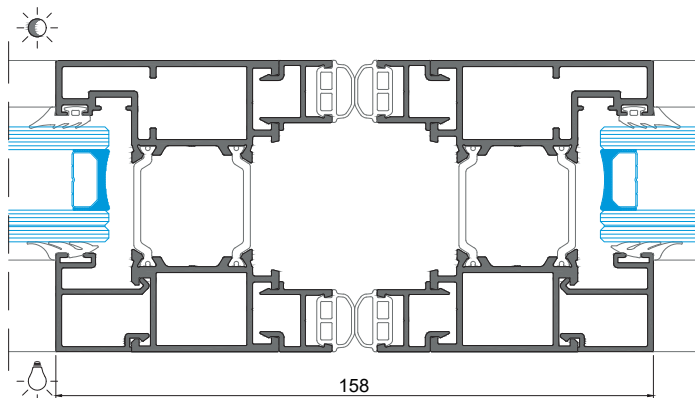
- Central | Central | Central



Secção | Section | Section 4 12  $U_f = 2,44 \text{ W/m}^2\text{K}$



Secção | Section | Section 8  $U_f = 2,69 \text{ W/m}^2\text{K}$



Secção | Section | Section 16  $U_f = 2,68 \text{ W/m}^2\text{K}$

## DESEMPENHO ACÚSTICO DO SISTEMA

system acoustic performance | performance acoustique du système

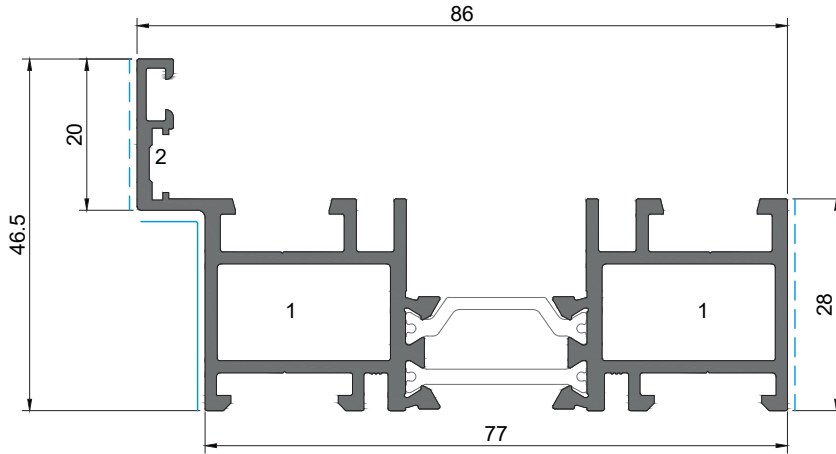
**Isolamento ACÚSTICO**  
ACOUSTIC Insulation | Isolation ACOUSTIQUE  
NP EN 14351-1:2008 - Anexo B

$R_w = 40 \text{ dB}$   
 $R_w \text{ (IGU)} = 38 \text{ dB}$ , área | area  $\leq 2,70\text{m}^2$

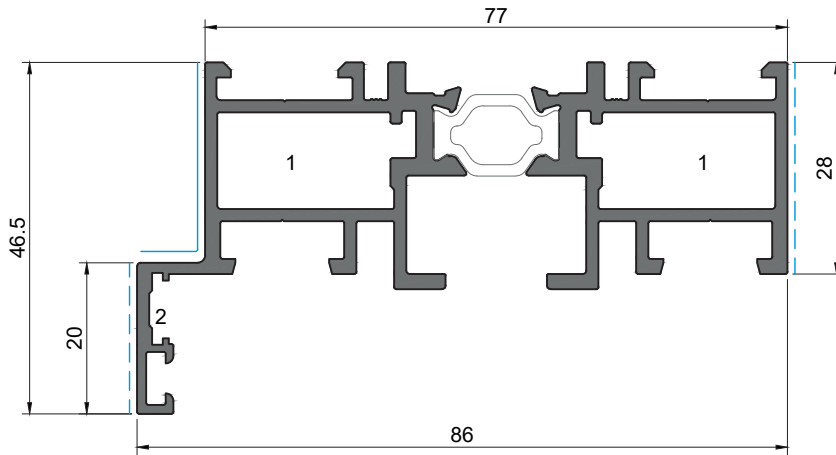




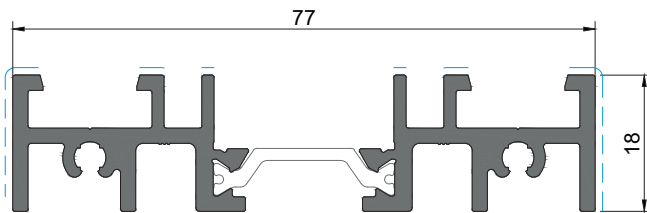
**LISTAGEM DE PERFIS**  
**PROFILES LIST | LISTE DES PROFILÉS**



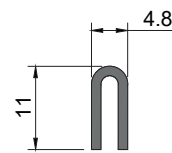
**HT 01**  
Aro fixo  
Fixed Frame | Dormant



**HT 21**  
Aro fixo superior  
Top fixed frame | Dormant supérieur



**HT 49**  
Soleira  
Sill | Seuil



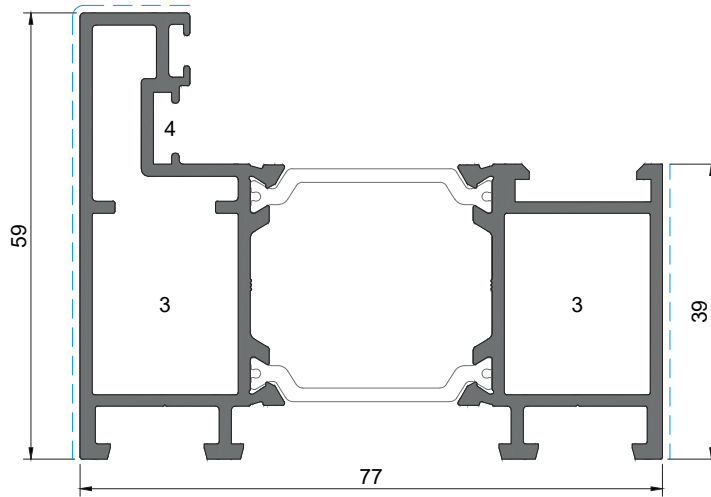
**HT 801**  
Guia inox  
Stainless steel guide | Guide en acier inoxydable

Perfil com 3,25m  
Profile with 3,25m | Profilé avec 3,25m

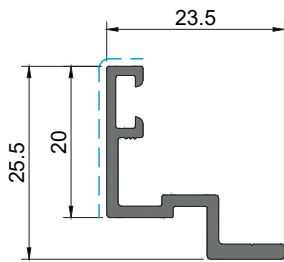
Treatmento de superficie | Surface treatment | Traitement de surface  
PB | PM | EF | EM PB | EF | EM  
Para mais informações, consultar Catálogo de Cores Anodizadas  
For further information, consult the Anodised Colours Catalogue | Pour plus d'informations, veuillez consulter le Catalogue des Couleurs Anodisées

1 - ESQUADRO | BLOCKING BRACKET | EQUÉRRE HT N°1  
3 - ESQUADRO | BLOCKING BRACKET | EQUÉRRE HT N°2

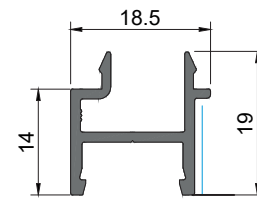
2 - CANTO DE ALINHAMENTO OS | ALIGNMENT ANGLE | COIN D'ALIGNEMENT  
4 - ESQUADRO DE ALINHAMENTO | ALIGNMENT BLOCKING BRACKET | EQUÉRRE D'ALIGNEMENT



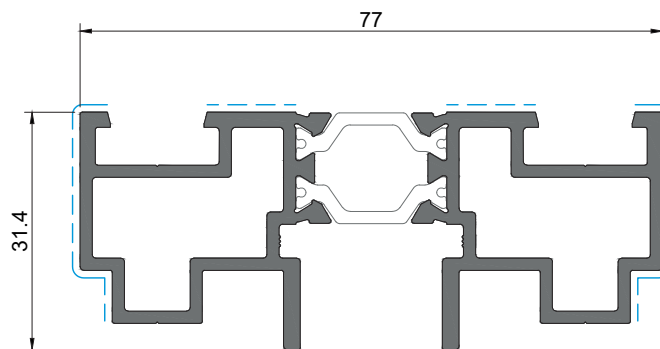
**HT 11**  
Aro móvel  
Mobile frame | Ouvrant



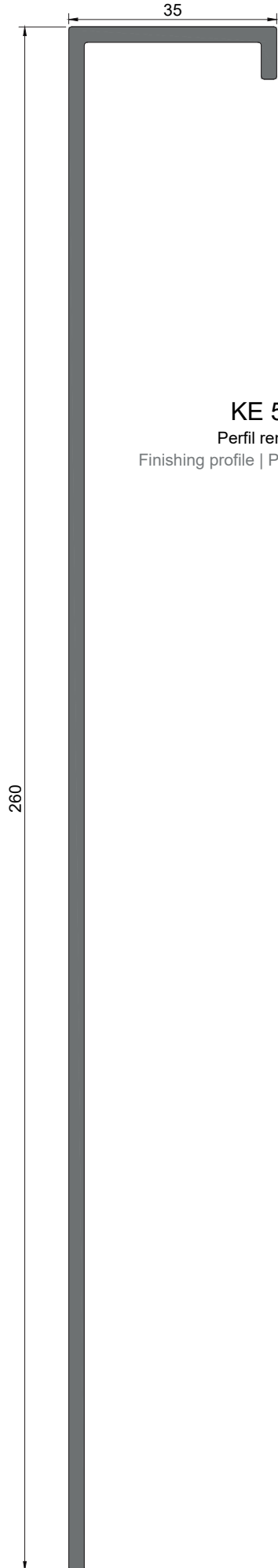
**HT 06**  
Perfil batente  
Jamb profile | Profilé battant



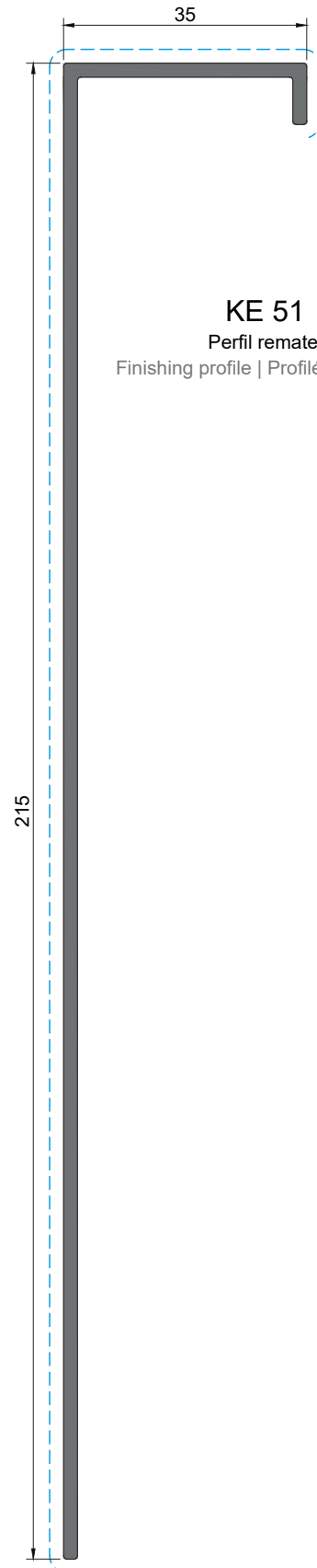
**HT 25**  
Perfil complementar móvel  
Mobile complementary profile | Profilé complémentaire ouvrant



**HT 82**  
Perfil lateral de ajuste  
Adjustable lateral profile | Profilé latéral réglable

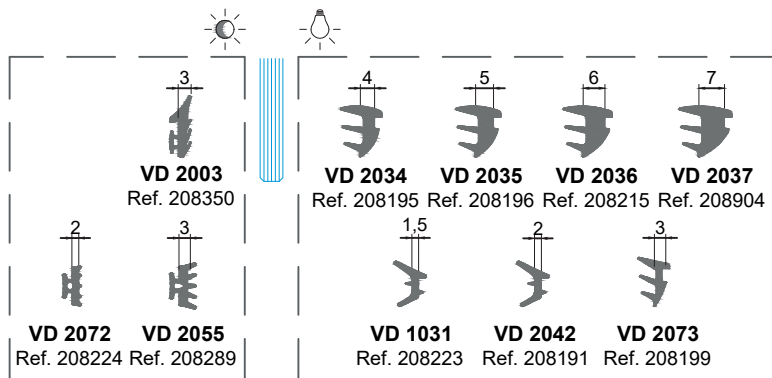


**KE 52**  
Perfil remate  
Finishing profile | Profilé de finition



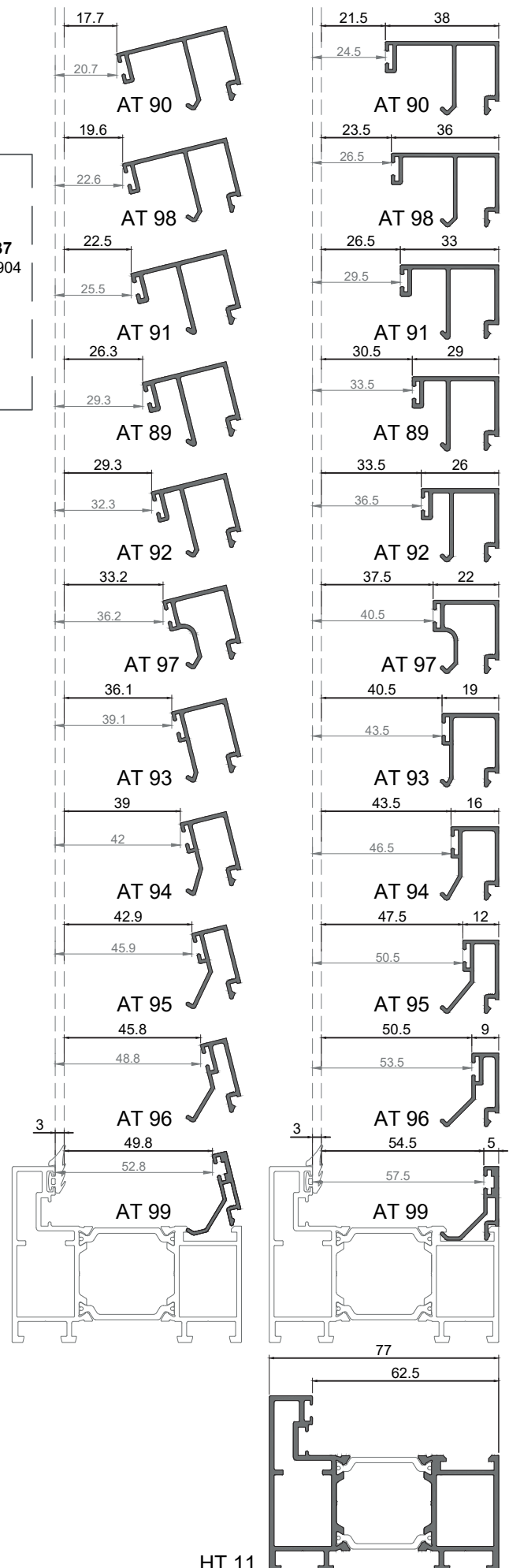
**KE 51**  
Perfil remate  
Finishing profile | Profilé de finition

**TABELA ORIENTATIVA DE BITES**  
GLAZING BEADS SCHEDULE  
TABLE DES PARCLOSSES



**Aconselha-se sempre a utilização do vedante VD 2003 pelo exterior.**  
It is always advisable to use VD 2003 gasket in the outer side.  
Il est toujours conseillé d'utiliser le join VD 2003 de l'extérieur.

VEDANTE EXTERIOR OUTER GASKET JOINT EXTERIEUR	ESPESSURA DO VIDRO GLASS THICKNESS ÉPAISSEUR DU VERRE	VEDANTE INTERIOR INNER GASKET JOINT INTERIEUR	BITES GLAZING BEADS PARCLOSSES
2003	14	2037	AT 90
2003	15	2036	AT 90
2003	16	2035	AT 90
2003	17	2034	AT 90
2003	18	2035	AT 98
2003	19	2034	AT 98
2003	20	2036	AT 91
2003	21	2035	AT 91
2003	22	2034	AT 91
2003	23	2037	AT 89
2003	24	2036	AT 89
2003	25	2035	AT 89
2003	26	2034	AT 89
2003	27	2036	AT 99
2003	28	2035	AT 92
2003	29	2034	AT 92
2003	30	2037	AT 97
2003	31	2036	AT 97
2003	32	2035	AT 97
2003	33	2034	AT 97
2003	34	2036	AT 93
2003	35	2035	AT 93
2003	36	2034	AT 93
2003	37	2036	AT 94
2003	38	2034	AT 94
2003	39	2034	AT 94
2003	40	2037	AT 95
2003	41	2036	AT 95
2003	42	2035	AT 95
2003	43	2034	AT 95
2003	44	2036	AT 96
2003	45	2035	AT 96
2003	46	2034	AT 96
2003	47	2037	AT 99
2003	48	2036	AT 99
2003	49	2035	AT 99
2003	50	2034	AT 99

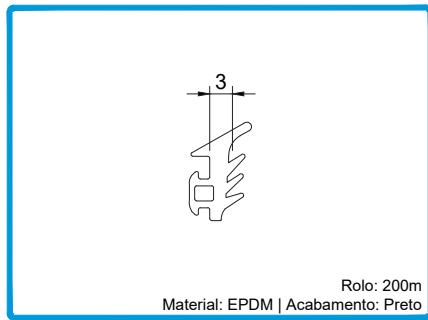


HT 11

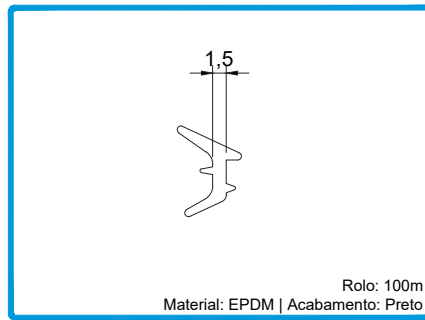


**LISTAGEM DE ACESSÓRIOS**  
**ACCESSORIES LIST | LIST D'ACCESSOIRES**

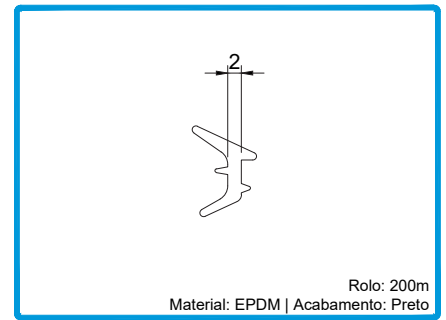
**VEDANTES**  
SEALS | JOINTS



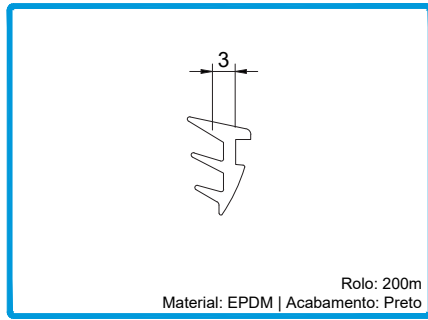
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208350** JUNTA DE VEDAÇÃO EXTERIOR 2003



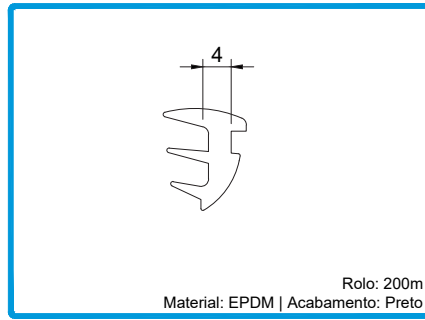
Rolo: 100m  
Material: EPDM | Acabamento: Preto  
**208223** JUNTA DE CUNHA 1031



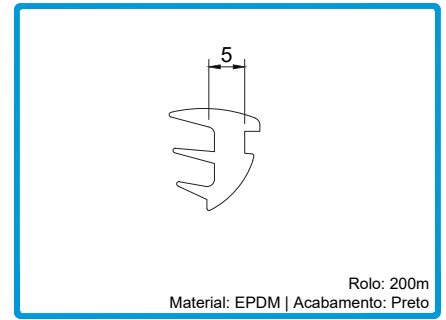
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208191** JUNTA DE CUNHA 2042



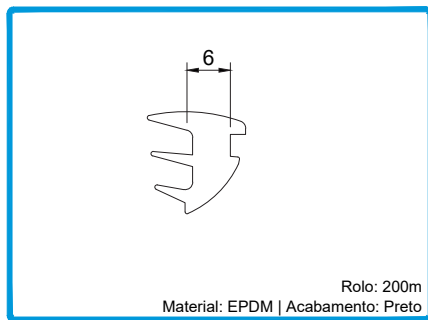
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208199** JUNTA DE CUNHA 2073



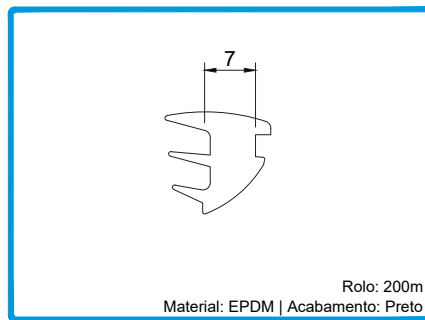
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208195** JUNTA DE CUNHA 2034



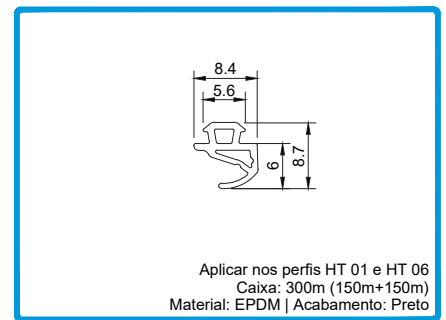
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208196** JUNTA DE CUNHA 2035



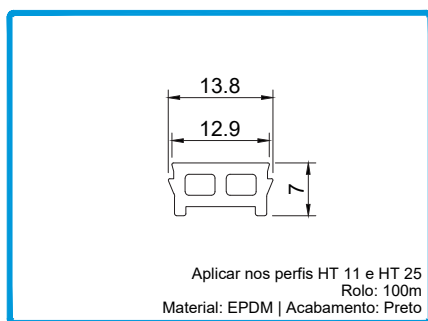
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208215** JUNTA DE CUNHA 2036



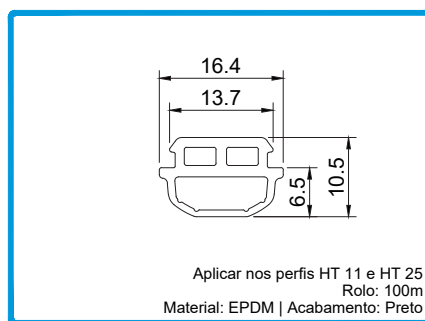
Rolo: 200m  
Material: EPDM | Acabamento: Preto  
**208904** JUNTA DE CUNHA 2037



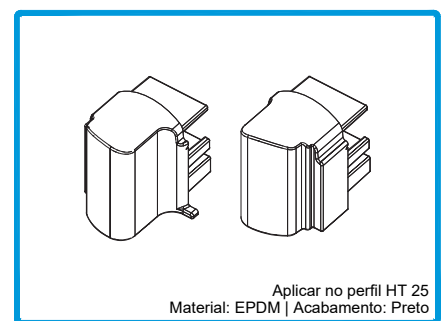
Aplicar nos perfis HT 01 e HT 06  
Caixa: 300m (150m+150m)  
Material: EPDM | Acabamento: Preto  
**208094** JUNTA VD 2128



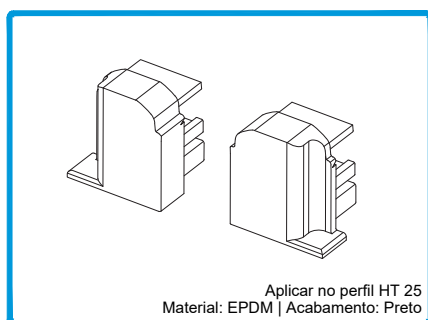
Aplicar nos perfis HT 11 e HT 25  
Rolo: 100m  
Material: EPDM | Acabamento: Preto  
**208092** JUNTA VD 2126



Aplicar nos perfis HT 11 e HT 25  
Rolo: 100m  
Material: EPDM | Acabamento: Preto  
**208093** JUNTA VD 2127



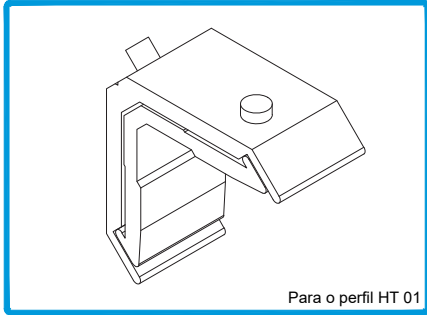
Aplicar no perfil HT 25  
Material: EPDM | Acabamento: Preto  
**212027** CONJ. TOPOS P/ VD 2127



Aplicar no perfil HT 25  
Material: EPDM | Acabamento: Preto  
**212045** CONJ. TOPOS P/ VD 2126

**ACESSÓRIOS PARA OS AROS**

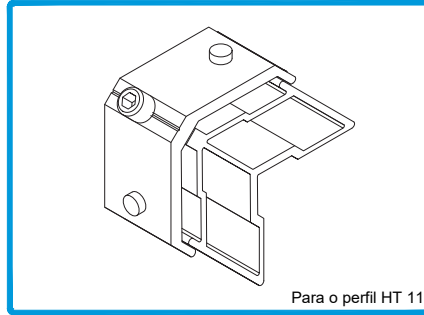
FRAME ACCESSORIES | ACCESSOIRES POUR LES CADRES



Para o perfil HT 01

**204016**

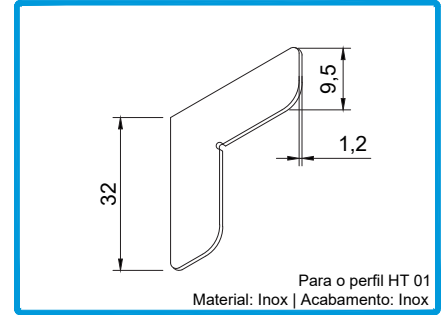
ESQUADRO HT N°1



Para o perfil HT 11

**204017**

ESQUADRO HT N°2

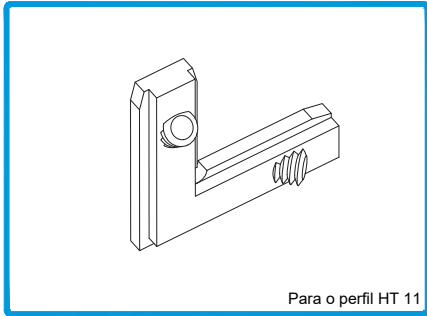


Para o perfil HT 01

Material: Inox | Acabamento: Inox

**213017**

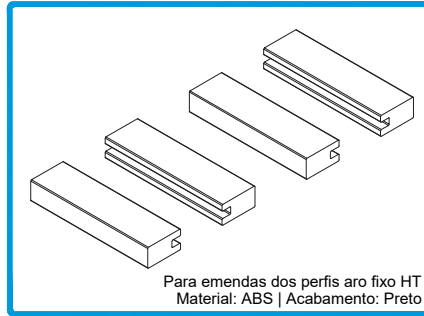
CANTO ALINHAMENTO OS



Para o perfil HT 11

**204131**

ESQUADRO DE ALINH. C/ APERTO



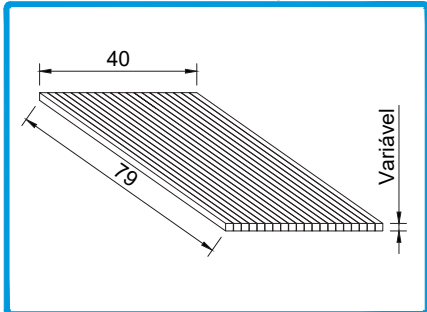
Para emendas dos perfis aro fixo HT  
Material: ABS | Acabamento: Preto

**212963**

CONJ. UNIÃO RETA HT

**ACESSÓRIOS PARA VIDRO**

GLASS ACCESSORIES | ACCESSOIRES POUR VERRE



**218113**

CALÇO PARA VIDRO 79x40x2

**218109**

CALÇO PARA VIDRO 79x40x3

**218111**

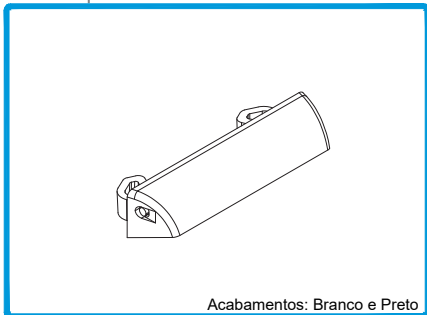
CALÇO PARA VIDRO 79x40x4

**218112**

CALÇO PARA VIDRO 79x40x5

**GOTEIRAS**

DRIPS | GOUITIÈRES



Acabamentos: Branco e Preto

**210268**

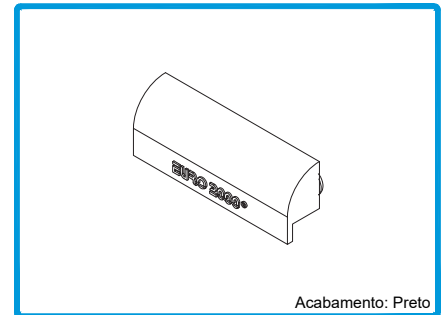
GOTEIRA C/ VÁLV. SVE



Acabamentos: Preto e Transparente

**210265**

GOTEIRA C/ VÁLV. BOLA



Acabamento: Preto

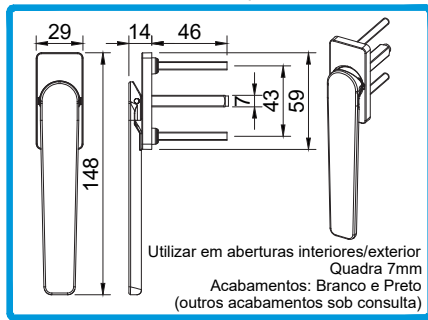
**210280**

GOTEIRA SOS C/VÁLVULA

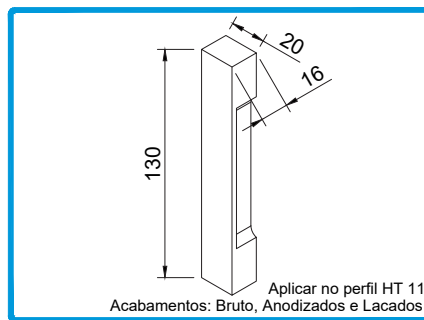


**SISTEMAS DE FECHO**

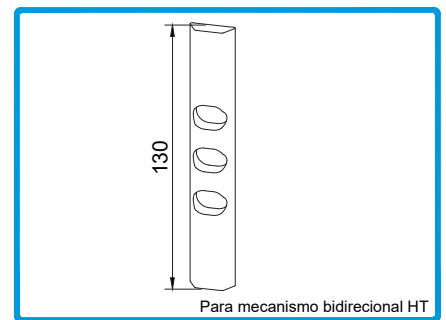
LOCKING SYSTEMS | SYSTÈMES DE FERMETURE



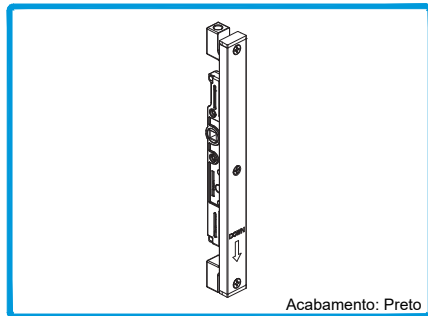
**291012** MANÍPULO ARTIC. 3106.30 HT



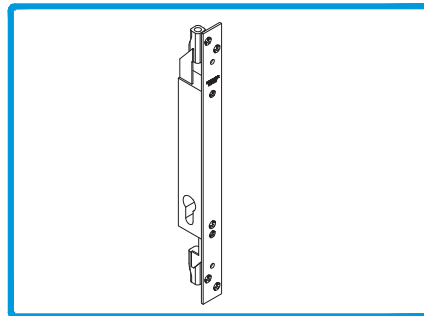
**200056** PUXADOR FIXO SLIM



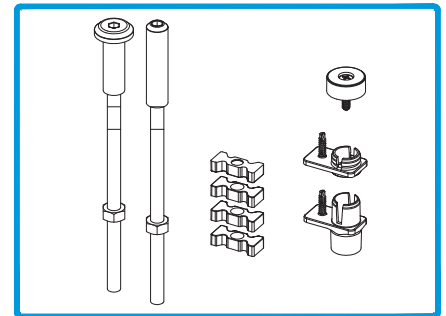
**218145** CALÇO P/ MECANISMO BIDIR. HT



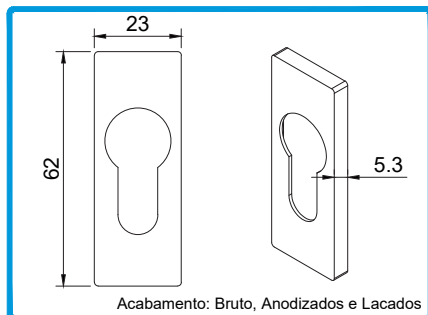
**228002** MECANISMO BIDIR. HT LAC 905



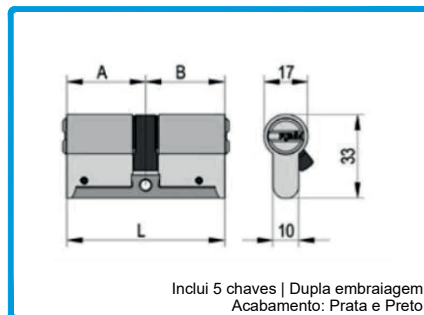
**228003** MECANISMO BIDIR. C/ CHAVE HT



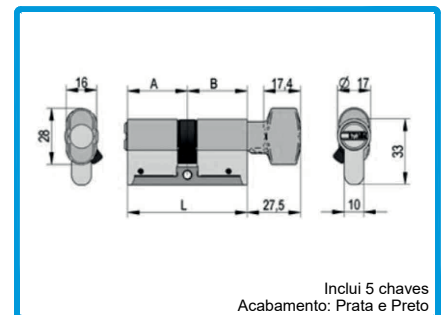
**212081** CONJ. VARÕES 2M+TERM. P/ MEC. HT



**220196** ESPELHO ALUMÍNIO 23MM P/ SEGREDO

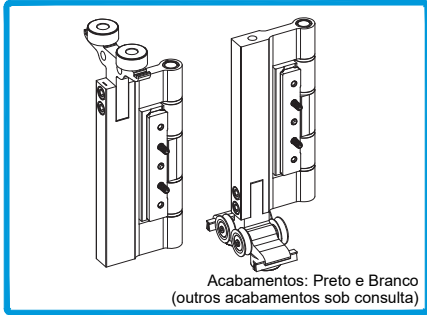


**207407** CILINDRO ALTA SEGURANÇA 45/45

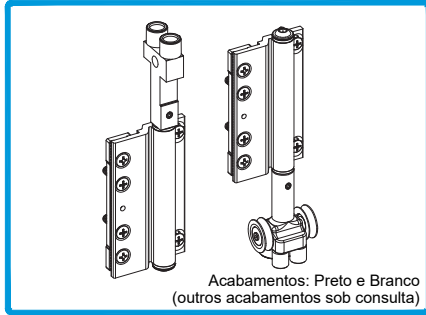


**207409** CILINDRO ALTA SEGURANÇA 45B/45

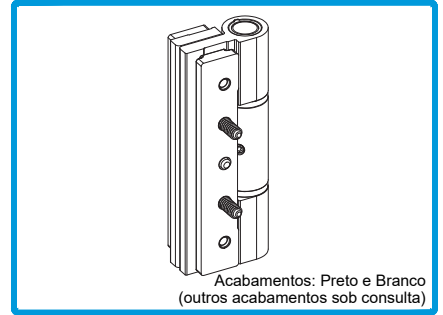
**ACESSÓRIOS HARMÓNIO**  
FOLDING ACCESSORIES | ACCESSOIRES POUR REPLIABLES



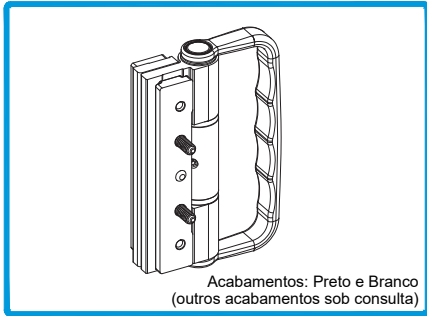
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)  
**212043** CONJ. DOBR+ROLAMENTO  
INF/SUP HT 8810.1



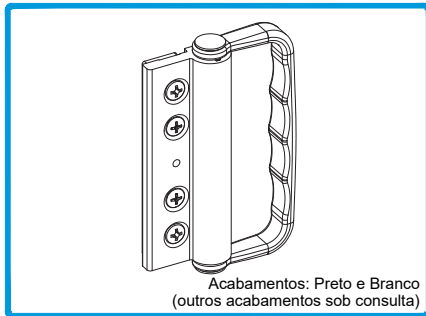
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)  
**212044** CONJ. DOBR+GUIA  
INF/SUP HT 8811.1



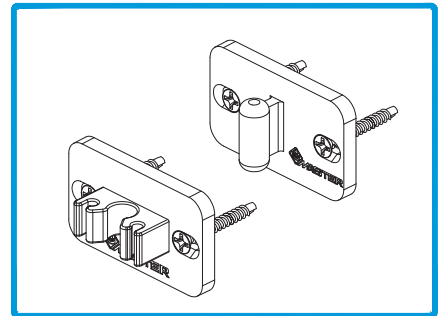
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)  
**202016** DOBRADIÇA 3 ABAS HT 8815.12



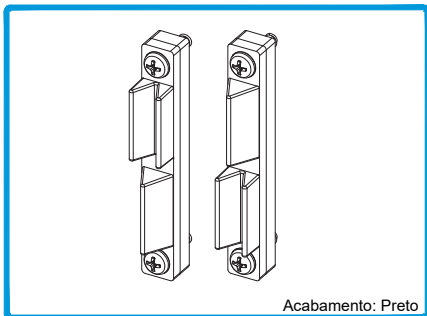
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)  
**202018** DOBR. 3 ABAS C/ PUX. HT 8816.14



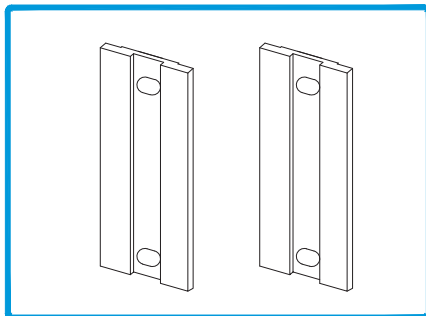
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)  
**202017** DOBRADIÇA C/ PUX. HT 8816.12



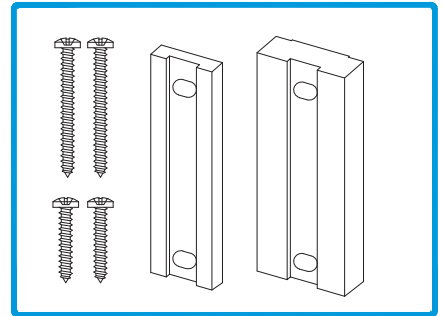
**212033** CONJ. BLOQUEIO HT



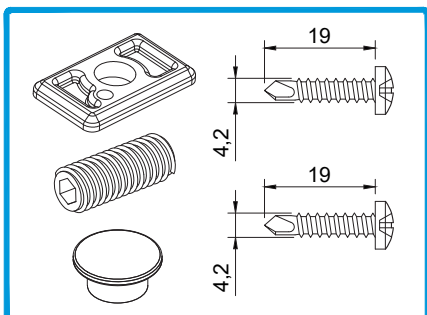
Acabamento: Preto  
**212031** CONJ. PONTO FECHO SUPLEM.  
HT 4227



**212144** CONJ. CALÇOS Nº1 P/ HT 4227



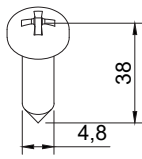
**212145** CONJ. CALÇOS Nº2 P/ HT 4227



**212964** CONJ. AJUSTE HT 82

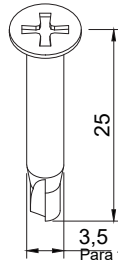
**DIVERSOS**

DIVERS | DIVERS



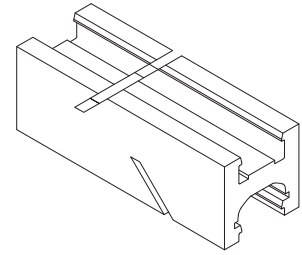
Para fixar os perfis HT 01 à soleira HT 49  
Material: Inox | Acabamento: Inox

**290262** PARAF. PAR 003 PK INOX PH 1 1/2x10 CQ



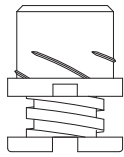
Para fixar o perfil HT 06  
Material: Inox | Acabamento: Inox

**290024** PARAF. DIN7504-P 3,5X25 INOX A2



Para os vedantes VD 2126 e VD 2127, do sistema HT  
Material: Poliamida | Acabamento: Preto

**211606** GABARITO CORTE VD 2126/2127 HT



**224205** NIVELADOR PEQUENO 600.01/8



Junta de vedação elástica, resistente aos UV. Impede a corrosão de penetrar pelas zonas cortadas

**208019** SELA JUNTAS 150gr. (Cinza)

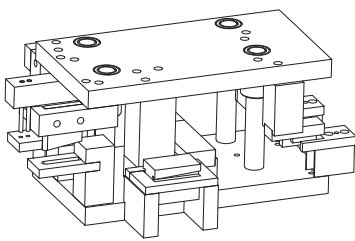


Limpeza de alumínio lacado ou anodizado. Para preparação de superfícies a serem unidas e limpeza final

**208704** PRODUTO LIMPEZA DE ALUMINIO (1L) Transparente

**FERRAMENTAS**

TOOLS | OUTILS



**408026** CORTANTE HT Nº1

DESIGNAÇÃO DESIGNATION NOMINATION	CÓDIGO CODE CODE	TIPOLOGIAS DE ABERTURA INTERIOR   INWARD OPENING TYPOLOGIES   TYPOLOGIES D'OUVERTURE VERS L'INTÉRIEUR																																			
		220		321		330		422		431		440		532		541		550		633		642		651		660		743		752		761		770			
		4a	4b	4a/8a	4a/8b	4a/8a	4a/8b	4a/4a	4a/4b	4a/4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a/8a	4a/18b	4a	4a/14b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a/8a	4a/8b	4a/8a	4a/8b	4a/8a	4a/8b
MANIPULO ARTIC. 3106.30 HT FOLDABLE SYSTEM HANDLE POIGNÉE POUR SYSTÈME REPLIABLE	291012	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	4	3		
MECANISMO BIDIR. HT HT BIDIRECTIONAL MECHANISM MÉCANISME BIDIRECTIONNEL HT	228002	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	4	3		
CALÇO P/ MECANISMO BIDIR. HT HT BIDIR. MECHANISM SHIM CALE POUR MÉCANISME BIDIRECTIONNEL HT	218145	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	4	3		
MECANISMO BIDIR. C/ CHAVE HT HT BIDIRECTIONAL MECHANISM WITH KEY MÉCANISME BIDIRECTIONNEL AVEC CLÉ HT	228003	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1		
PUXADOR FIXO SLIM SLIM FIXED HANDLE POIGNÉE FIXE SLIM	200056	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1		
CILINDRO ALTA SEG. C/ BOTÃO 45B/45 CYLINDER CYLINDRE	207409	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1		
ESPELHO ALUMÍNIO 23MM P/ SEGREDO CYLINDER COVER COUVERTURE POUR CYLINDRE	220196	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2		
CONJ. VARÕES 2M+TERM. P/ MEC. HT RODS+TERMINALS FOR HT MECHANISM KIT TIGES+BORNES POUR MÉCANISME HT	212081	1		2		2		2		3		2		3		3		3		4		3		4		3		4		4		4		4			
CONJ. P/ AJUSTE HT 82 HT 82 ADJUSTABLE KIT KIT POUR LE RÉGLAGE HT 82	212964	6 <sup>(a)</sup> 8 <sup>(b)</sup> 12 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>					
DOBRADIÇA C/ PUX. HT 8816.12 PULLING HINGE PAUMELLE AVEC POIGNÉE	202017	1		2		2		2		2		2		3		3		3		3		3		3		3		4		4		4		4		4	
DOBR. 3 ABAS HT 8815.12 * 3 FLAPS HINGE PAUMELLE DE 3 LAMES	202016	6 <sup>(a)</sup> 10 <sup>(c)</sup>	9 <sup>(a)</sup> 15 <sup>(b)</sup> 21 <sup>(c)</sup>	7 <sup>(a)</sup> 13 <sup>(b)</sup> 19 <sup>(c)</sup>	12 <sup>(a)</sup> 20 <sup>(b)</sup> 28 <sup>(c)</sup>	10 <sup>(a)</sup> 18 <sup>(b)</sup> 26 <sup>(c)</sup>	10 <sup>(a)</sup> 18 <sup>(b)</sup> 26 <sup>(c)</sup>	13 <sup>(a)</sup> 23 <sup>(b)</sup> 33 <sup>(c)</sup>	13 <sup>(a)</sup> 23 <sup>(b)</sup> 33 <sup>(c)</sup>	11 <sup>(a)</sup> 21 <sup>(b)</sup> 31 <sup>(c)</sup>	14 <sup>(a)</sup> 26 <sup>(b)</sup> 38 <sup>(c)</sup>	16 <sup>(a)</sup> 28 <sup>(b)</sup> 40 <sup>(c)</sup>	14 <sup>(a)</sup> 26 <sup>(b)</sup> 38 <sup>(c)</sup>	14 <sup>(a)</sup> 26 <sup>(b)</sup> 38 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>	17 <sup>(a)</sup> 31 <sup>(b)</sup> 45 <sup>(c)</sup>					
DOBR. 3 ABAS C/ PUX. HT 8816.14 3 FLAPS PULLING HINGE PAUMELLE DE 3 LAMES AVEC POIGNÉE	202018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CONJ. DOBR.+ROLAM. INF/SUP HT 8810.1 BOTTOM/TOP ROLLER+HINGE KIT KIT PAUMELLE+ROULEMENT INF/SUP	212043	-	-	1		-		1		1		1		1		2		2		2		1		2		2		2		2		2		2		3	
CONJ. DOBR.+GUIA INF/SUP HT 8811.1 BOTTOM/TOP HINGE+GUIDE KIT KIT DE PAUMELLE+GUIDE INF/SUP	212044	1		1		-		2		-		1		1		-		-		2		-		1		1		1		1		1		1		-	
CONJ. PONTO FECHO SUPLEM. 4227 HT ADDITIONAL CLOSING POINT KIT KIT DE POINT DE FERMETURE SUPPLÉM.	212031	1 **	1 **	2 **	2 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **	
CONJ. CALÇOS Nº1 P/ HT 4227 NO. 1 SHIM KIT FOR HT 4227 KIT DE CALES Nº 1 POUR HT 4227	212144	1 **	1 **	2 **	2 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **	6 **
CONJ. TOPOS P/ VD 2127 2127 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2127	212027	4	6	5	9	7	8	10	10	10	11	13	11	12	14	14	14	14	14	14	14	11	12	14	14	14	14	14	14	14	14	14	14	14	14	13	13
CONJ. TOPOS P/ VD 2126 2126 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2126	212045	2	2	1	1	1	1	2	2	2	1	1	1	2	3	2	2	2	2	2	2	1	2	3	2	3	2	3	2	3	2	3	2	3	1	1	
ESQUADRO HT Nº1 BLOCKING BRACKET ÉQUERRE	204016	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***
ESQUADRO HT Nº2 BLOCKING BRACKET ÉQUERRE	204017	16	24	24	32	32	32	40	40	40	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
CANTO ALINHAMENTO OS ANGLE ANGLE	213017	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***
ESQUADRO DE ALINHAM. C/ APERTO ANGLE ANGLE	204131	8	12	12	16	16	16	20	20	20	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
CONJ. BLOQUEIO HT HT LOCKING KIT KIT DE VERROUILLAGE HT	212033	1 **	1 **	2 **	2 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **
Consultar lista para outros acessórios Consult list for other accessories Consulter la liste pour les autres accessoires	-	Variável   Variable   Variable																																			

\* Adicionar 1 Dobradiça Central (com ou sem puxador) se peso da folha > 90Kg. | Add 1 Central Hinge (with or without handle) if sash weight > 90Kg. | Ajouter 1 Charnière Centrale (avec ou sans poignée) si poids de la vantail > 90Kg.  
 (a) H ≤ 2200mm (b) 2200mm < H ≤ 3000mm (acrésimo de 2 dobradiças/foha | addition of 2 hinges/sash | ajout de 2 paumelles/vantail) (c) 3000mm < H < 3500mm (acrésimo de 2 dobradiças/foha | addition of 2 hinges/sash | ajout de 2 paumelles/vantail)  
 \*\* Duplicar a quantidade se a altura da folha > 2200mm. | Double the quantity if sash height > 2200mm. | Doubler la quantité si la hauteur de la vantail > 2200mm.  
 \*\*\* Considerar metade da quantidade e adicionar parafusos no caso de se utilizar o perfil soleira HT 49. | Consider half quantity and add screws if using the HT 49 sill profile. | Considérer la moitié du nombre et ajouter des vis si utilisé le profilé seuil HT 49.

OPÇÃO DE FECHO 1  
CLOSING OPTION 1 | OPTION DE FERMETURE 1

OPÇÃO DE FECHO 2  
CLOSING OPTION 2 | OPTION DE FERMETURE 2

APENAS EM VÃOS COM HT 82  
ONLY IN FRAMES WITH HT 82 | UNIQUEMENT DANS LES CADRES AVEC HT 82

DESIGNAÇÃO DESIGNATION NOMINATION	CÓDIGO CODE CODE	TIPOLOGIAS DE ABERTURA EXTERIOR   OUTWARD OPENING TYPOLOGIES   TYPOLOGIES D'OUVERTURE VERS L'EXTÉRIEUR																																		
		220		321		330		422		431		440		532		541		550		633		642		651		660		743		752		761		770		
		4a	4b	4a/8a	4a/8b	4a/8a	4a/8b	4a/4a	4a/4b	4a/4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a/8a	4a/18b	4a	4a/14b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a/8a	4a/8b	4a/8a	4a/8b	4a/8a
MANIPULO ARTIC. 3106.30 HT FOLDABLE SYSTEM HANDLE POIGNÉE POUR SYSTÈME REPLIABLE	291012	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	
MECANISMO BIDIR. HT HT BIDIRECTIONAL MECHANISM MÉCANISME BIDIRECTIONNEL HT	228002	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	
CALÇO P/ MECANISMO BIDIR. HT HT BIDIR. MECHANISM SHIM CALE POUR MÉCANISME BIDIRECTIONNEL HT	218145	1	-	2	1	2	1	2	1	3	2	2	1	3	2	3	2	3	2	4	3	3	2	4	2	3	2	4	3	4	3	4	3	4	3	
MECANISMO BIDIR. C/ CHAVE HT HT BIDIRECTIONAL MECHANISM WITH KEY MÉCANISME BIDIRECTIONNEL AVEC CLÉ HT	228003	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	
PUXADOR FIXO SLIM SLIM FIXED HANDLE POIGNÉE FIXE SLIM	200056	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	
CILINDRO ALTA SEG. C/ BOTÃO 45B/45 CYLINDER CYLINDRE	207409	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	
ESPELHO ALUMÍNIO 23MM P/ SEGREDO CYLINDER COVER COUVERTURE POUR CYLINDRE	220196	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	
CONJ. VARÕES 2M+TERM. P/ MEC. HT RODS+TERMINALS FOR HT MECHANISM KIT TIGES+BORNES POUR MÉCANISME HT	212081	1		2		2		2		3		2		3		3		3		4		3		4		3		4		4		4		4		
CONJ. P/ AJUSTE HT 82 HT 82 ADJUSTABLE KIT KIT POUR LE RÉGLAGE HT 82	212964	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>					
DOBRADIÇA C/ PUX. HT 8816.12 PULLING HINGE PAUMELLE AVEC POIGNÉE	202017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DOBR. 3 ABAS HT 8815.12 * 3 FLAPS HINGE PAUMELLE DE 3 LAMES	202016	5 <sup>(a)</sup> 9 <sup>(b)</sup> 13 <sup>(c)</sup>	8 <sup>(a)</sup> 14 <sup>(b)</sup> 20 <sup>(c)</sup>	6 <sup>(a)</sup> 12 <sup>(b)</sup> 18 <sup>(c)</sup>	10 <sup>(a)</sup> 18 <sup>(b)</sup> 26 <sup>(c)</sup>	9 <sup>(a)</sup> 17 <sup>(b)</sup> 25 <sup>(c)</sup>	8 <sup>(a)</sup> 16 <sup>(b)</sup> 24 <sup>(c)</sup>	11 <sup>(a)</sup> 21 <sup>(b)</sup> 31 <sup>(c)</sup>	11 <sup>(a)</sup> 21 <sup>(b)</sup> 31 <sup>(c)</sup>	9 <sup>(a)</sup> 19 <sup>(b)</sup> 29 <sup>(c)</sup>	12 <sup>(a)</sup> 24 <sup>(b)</sup> 36 <sup>(c)</sup>	13 <sup>(a)</sup> 25 <sup>(b)</sup> 37 <sup>(c)</sup>	12 <sup>(a)</sup> 24 <sup>(b)</sup> 36 <sup>(c)</sup>	11 <sup>(a)</sup> 23 <sup>(b)</sup> 35 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>	14 <sup>(a)</sup> 28 <sup>(b)</sup> 42 <sup>(c)</sup>						
DOBR. 3 ABAS C/ PUX. HT 8816.14 3 FLAPS PULLING HINGE PAUMELLE DE 3 LAMES AVEC POIGNÉE	202018	1		1		1		2		1		2		2		2		2		3		2		3		3		3		3		3		3		
CONJ. DOBR.+ROLAM. INF/SUP HT 8810.1 BOTTOM/TOP ROLLER+HINGE KIT KIT PAUMELLE+ROULEMENT INF/SUP	212043	-	-	-	1	-	-	1	-	1	-	1	-	1	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	3
CONJ. DOBR.+GUIA INF/SUP HT 8811.1 BOTTOM/TOP HINGE+GUIDE KIT KIT DE PAUMELLE+GUIDE INF/SUP	212044	1		1		-	2	-	-	1		1		1		1		-		-		2		-		1		1		1		1		1		-
CONJ. PONTO FECHO SUPLEM. 4227 HT ADDITIONAL CLOSING POINT KIT KIT DE POINT DE FERMETURE SUPPLÉM.	212031	1 **	1 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **	
CONJ. CALÇOS Nº1 P/ HT 4227 NO. 1 SHIM KIT FOR HT 4227 KIT DE CALES Nº 1 POUR HT 4227	212144	1 **	1 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **	
CONJ. TOPOS P/ VD 2127 2127 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2127	212027	4		6		5		9		7		8		10		10		10		11		13		11		12		14		14		14		14		13
CONJ. TOPOS P/ VD 2126 2126 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2126	212045	2		2		1		1		1		1		2		2		2		1		1		1		2		3		2		3		3		1
ESQUADRO HT Nº1 BLOCKING BRACKET ÉQUERRE	204016	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	8 ***	
ESQUADRO HT Nº2 BLOCKING BRACKET ÉQUERRE	204017	16		24		24		32		32		32		40		40		40		48		48		48		48		56		56		56		56		56
CANTO ALINHAMENTO OS ANGLE ANGLE	213017	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	4 ***	
ESQUADRO DE ALINHAM. C/ APERTO ANGLE ANGLE	204131	8		12		12		16		16		16		20		20		20		24		24		24		24		28		28		28		28		28
CONJ. BLOQUEIO HT HT LOCKING KIT KIT DE VEROUILLAGE HT	212033	1 **	1 **	2 **	2 **	2 **	2 **	3 **	3 **	3 **	3 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	4 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	5 **	6 **	6 **	
Consultar lista para outros acessórios Consult list for other accessories Consulter la liste pour les autres accessoires	-	Variável   Variable   Variable																																		

\* Adicionar 1 Dobradiça Central (com ou sem puxador) se peso da folha > 90Kg. | Add 1 Central Hinge (with or without handle) if sash weight > 90Kg. | Ajouter 1 Charnière Centrale (avec ou sans poignée) si poids de la vantail > 90Kg.  
 (a) H ≤ 2200mm (b) 2200mm < H ≤ 3000mm (acrésimo de 2 dobradiças/folha | addition of 2 hinges/sash | ajout de 2 paumelles/vantail) (c) 3000mm < H < 3500mm (acrésimo de 2 dobradiças/folha | addition of 2 hinges/sash | ajout de 2 paumelles/vantail)  
 \*\* Duplicar a quantidade se a altura da folha > 2200mm. | Double the quantity if sash height > 2200mm. | Doubler la quantité si la hauteur de la vantail > 2200mm.  
 \*\*\* Considerar metade da quantidade e adicionar parafusos no caso de se utilizar o perfil soleira HT 49. | Consider half quantity and add screws if using the HT 49 sill profile. | Considérer la moitié du nombre et ajouter des vis si utilisé le profilé seuil HT 49.

OPÇÃO DE FECHO 1  
CLOSING OPTION 1 | OPTION DE FERMETURE 1

OPÇÃO DE FECHO 2  
CLOSING OPTION 2 | OPTION DE FERMETURE 2

APENAS EM VÃOS COM HT 82  
ONLY IN FRAMES WITH HT 82 | UNIQUEMENT DANS LES CADRES AVEC HT 82

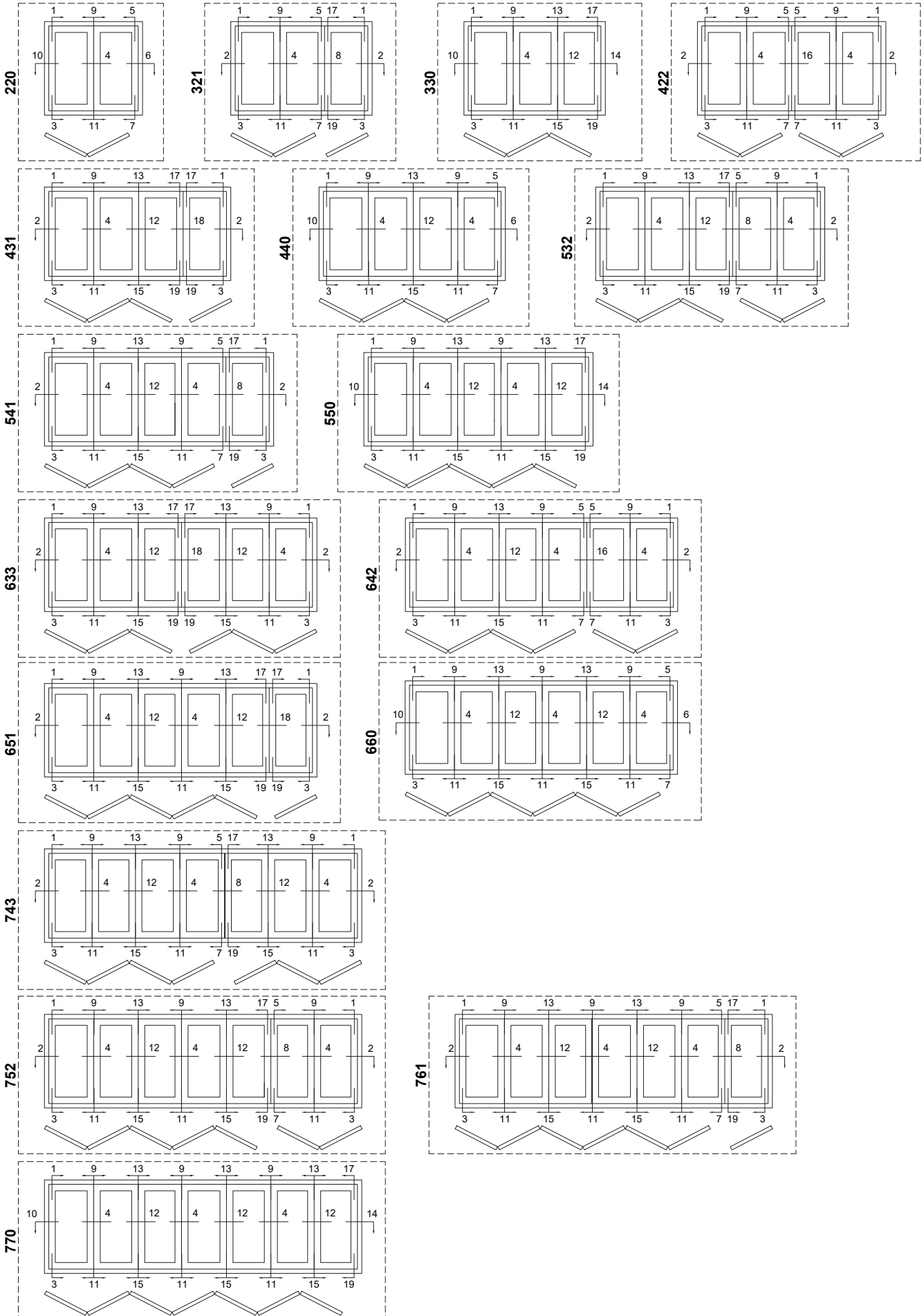
# IV

**TIPOLOGIAS E MAPA DE QUANTIDADES**  
**TYPOLOGIES AND QUANTITY MAPS | TYPOLOGIES ET CARTES DE QUANTITÉS**

**PORMENORES DE ACORDO COM AS TIPOLOGIAS**

DETAILS ACCORDING TO TYPOLOGIES

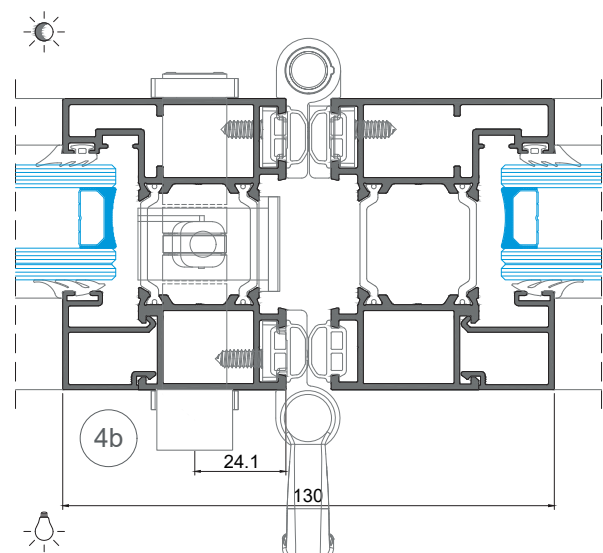
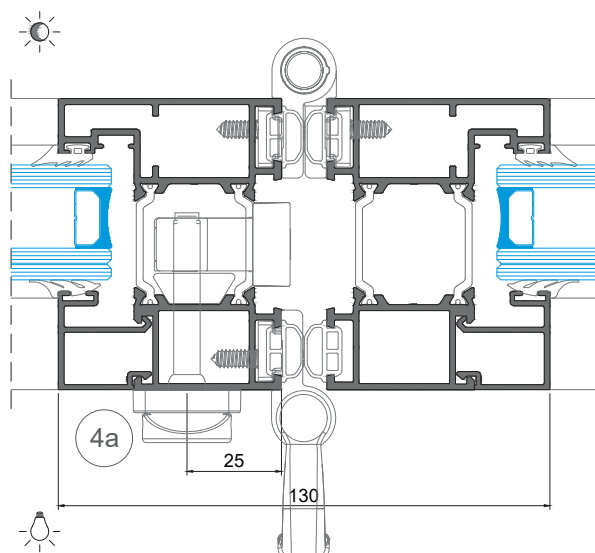
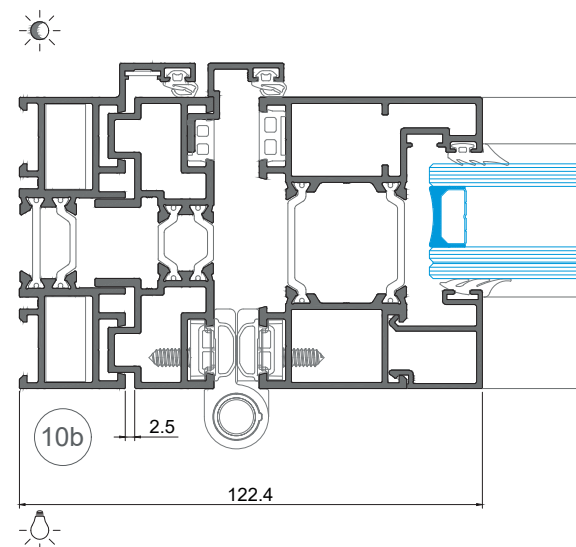
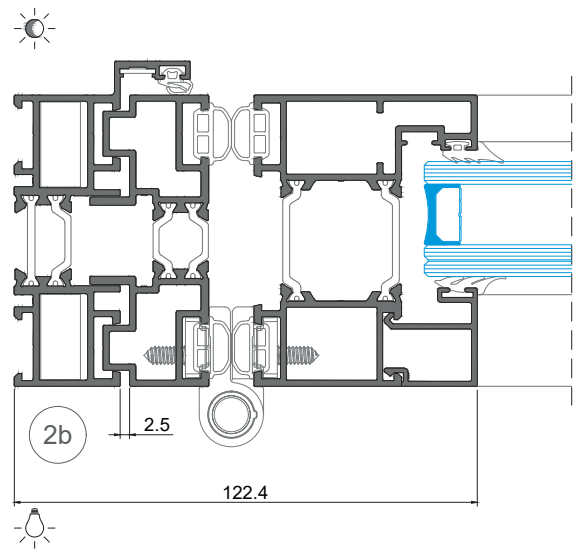
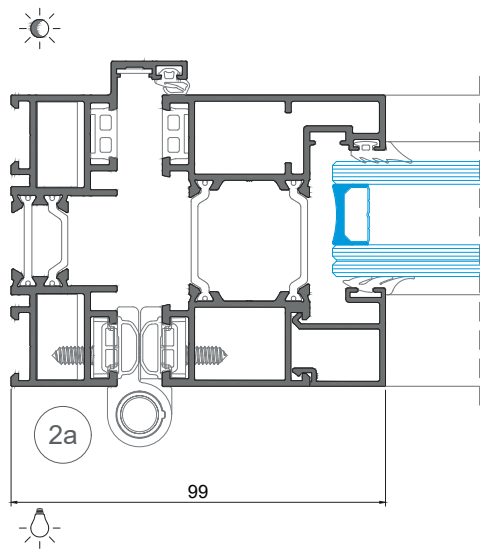
DÉTAILS SELON LES TYPOLOGIES



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

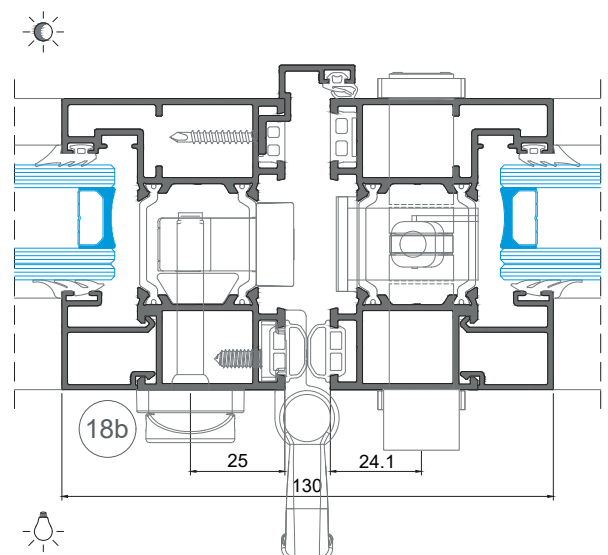
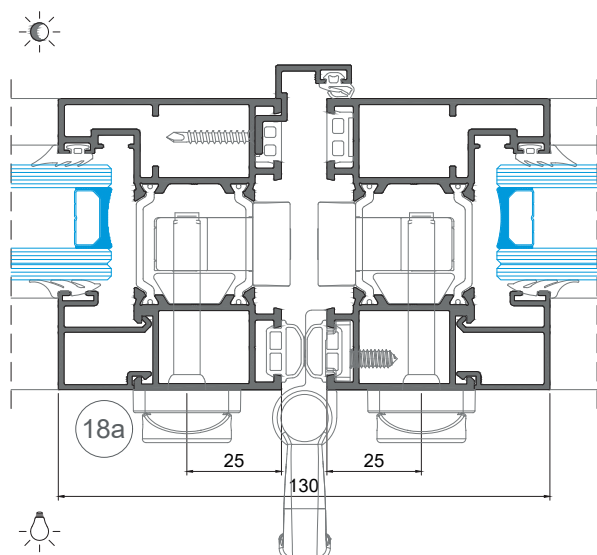
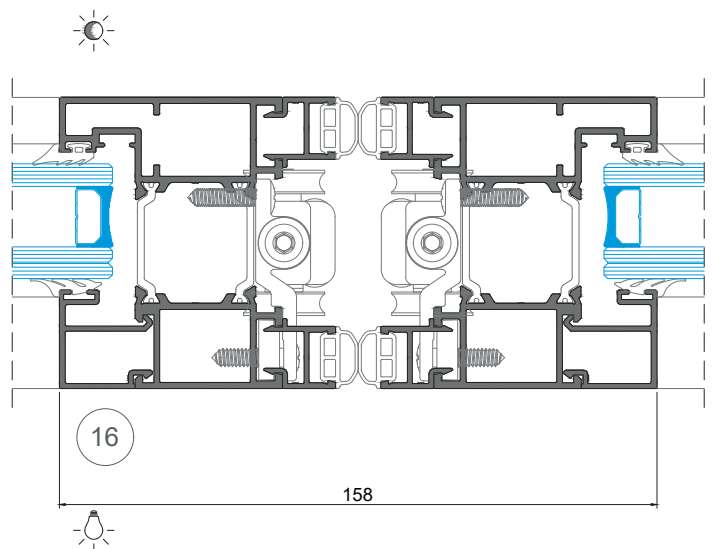
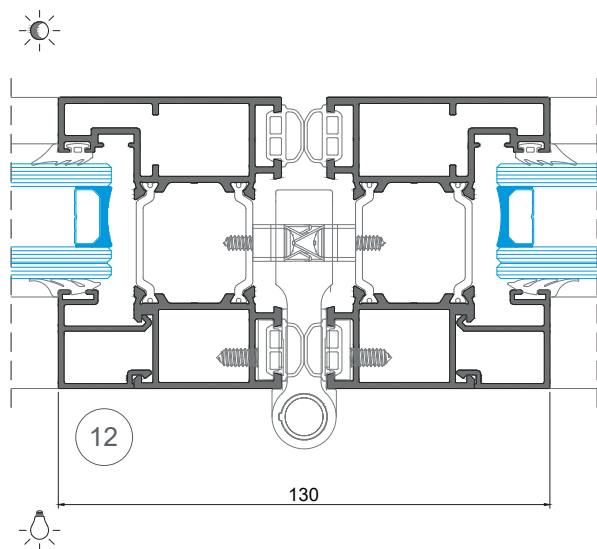
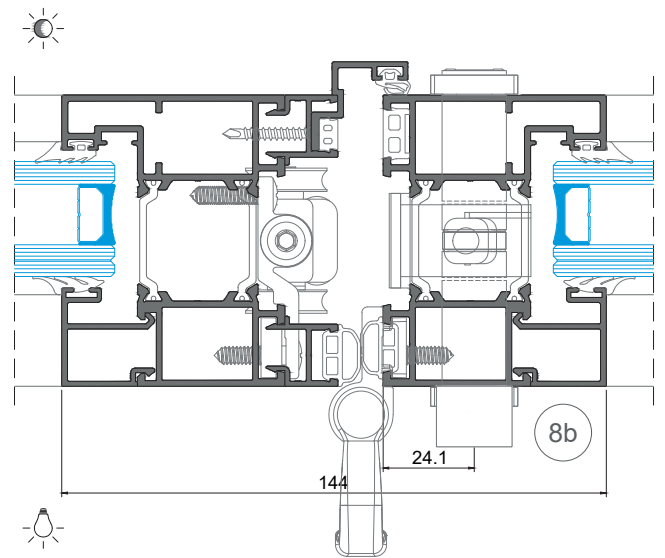
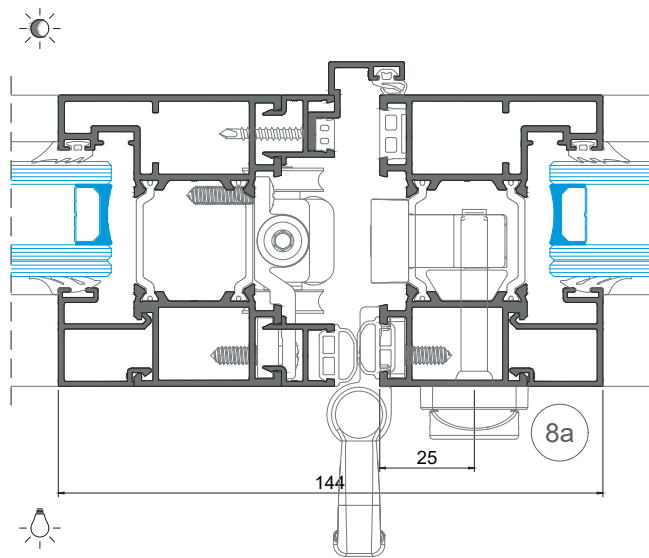




**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

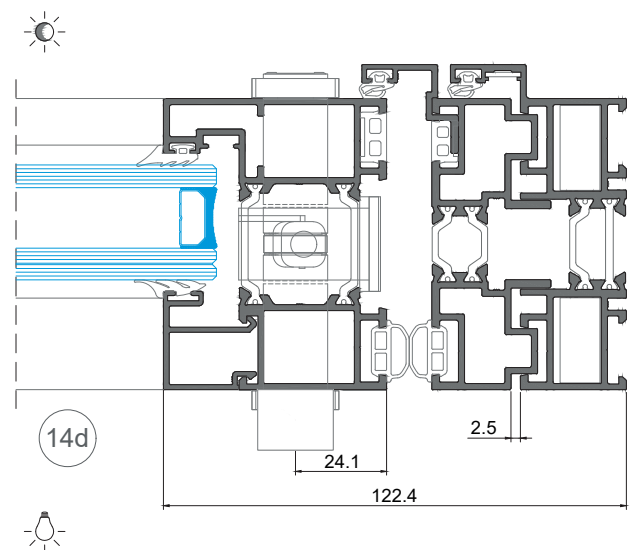
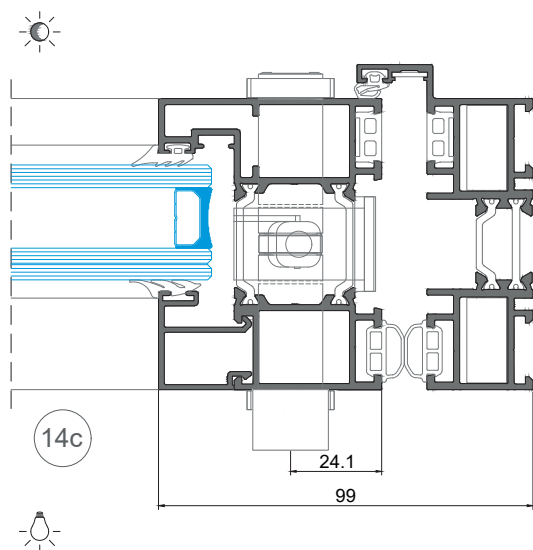
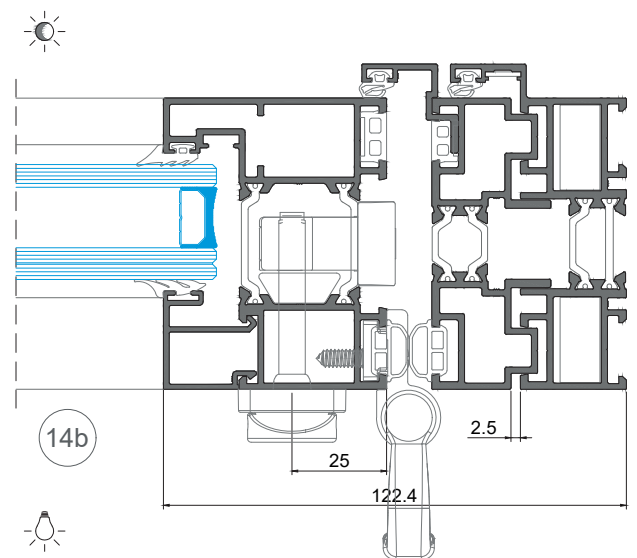
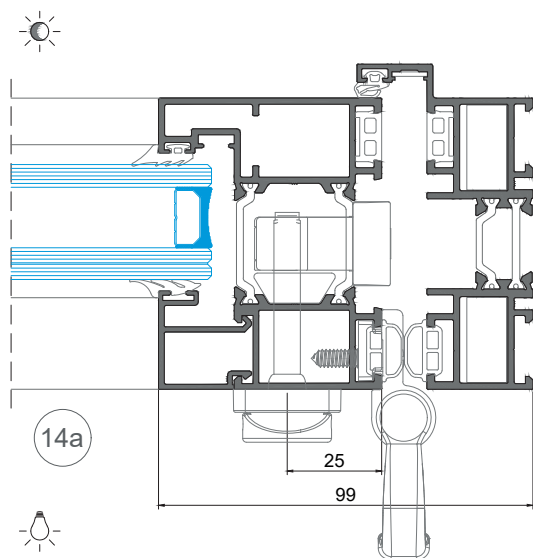
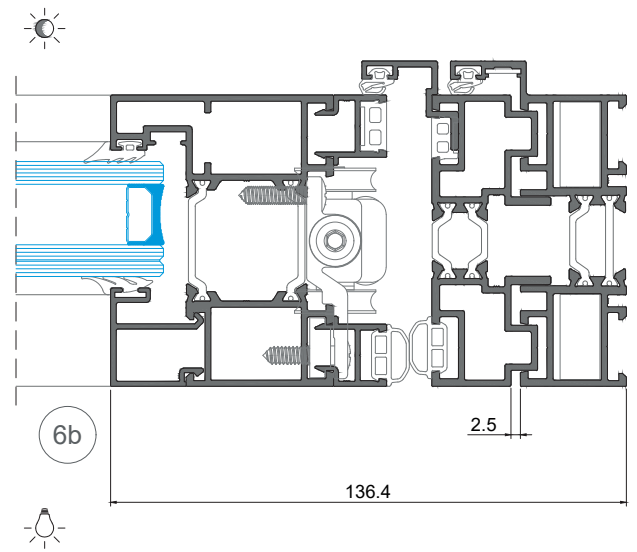
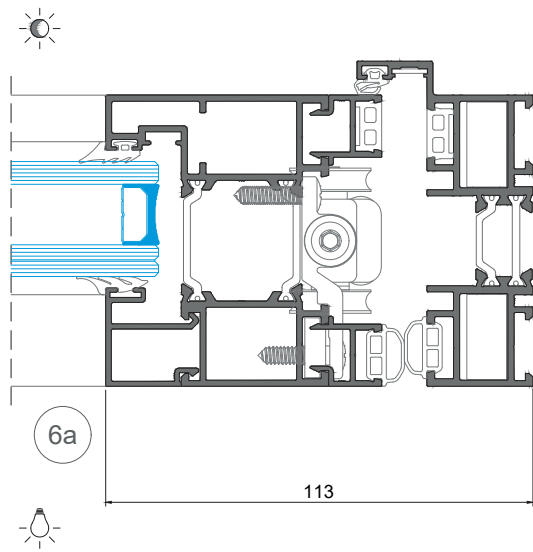
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

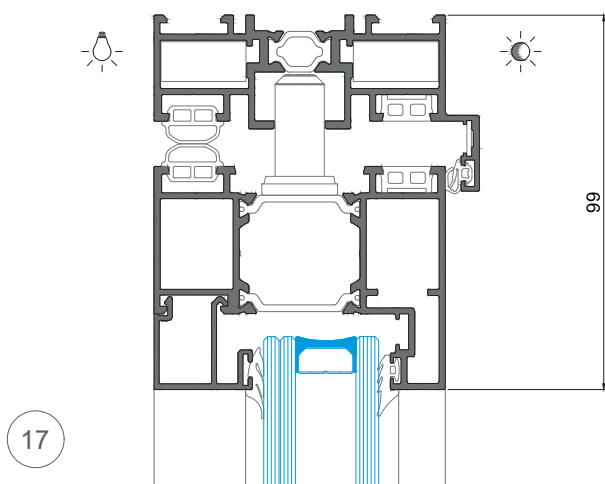
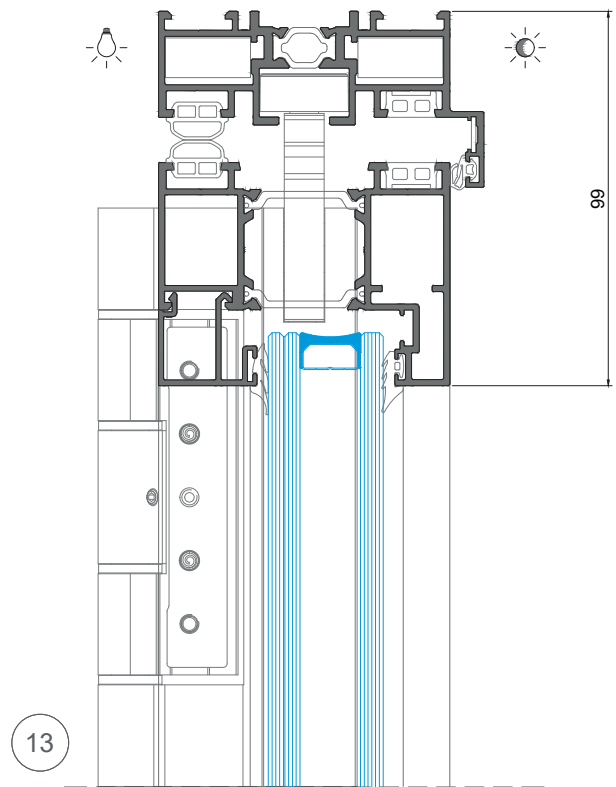
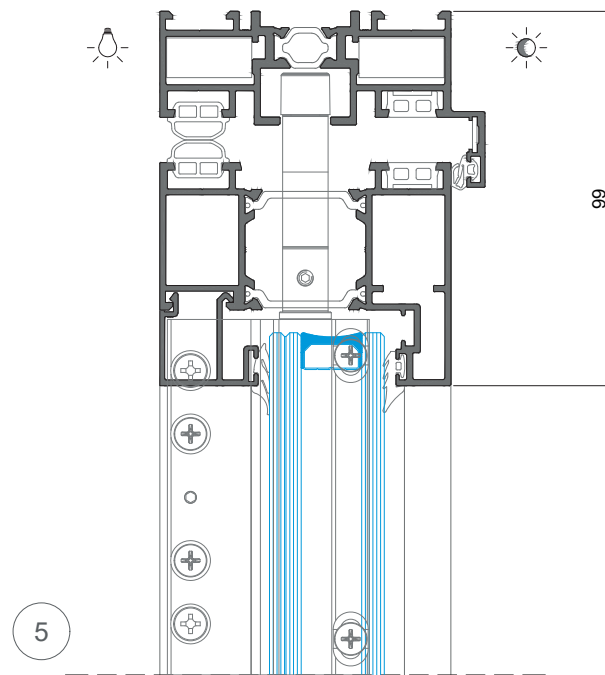
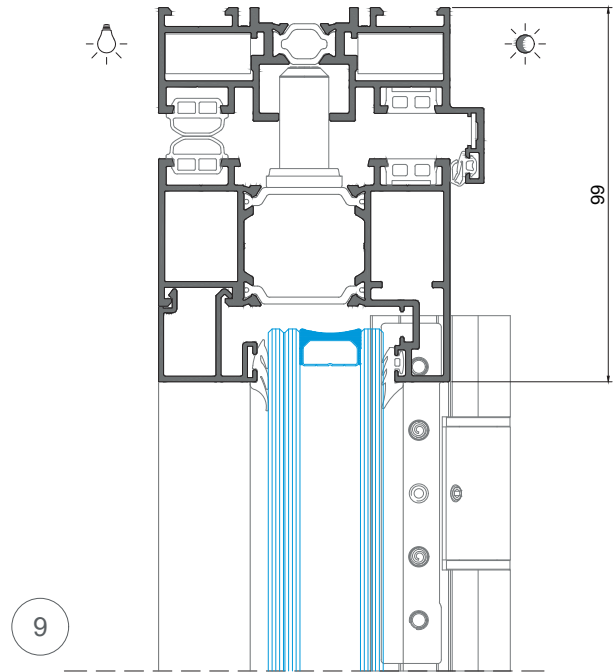
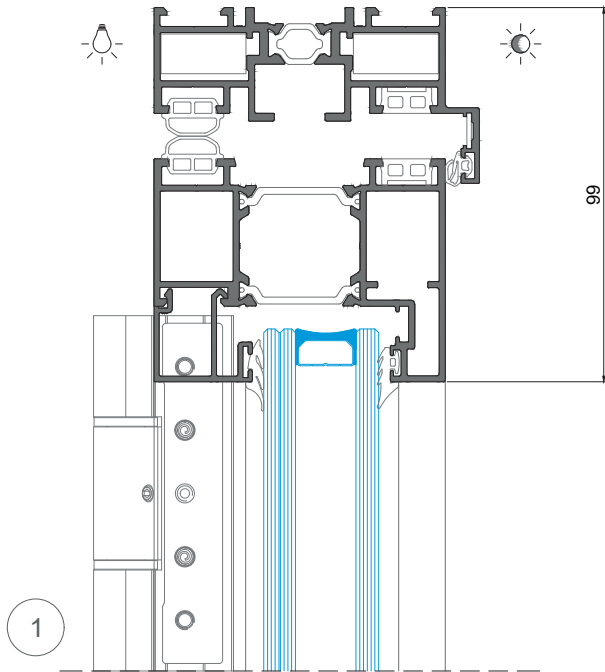
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

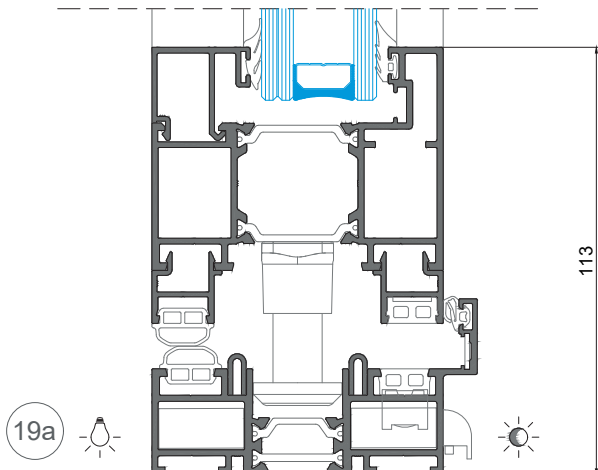
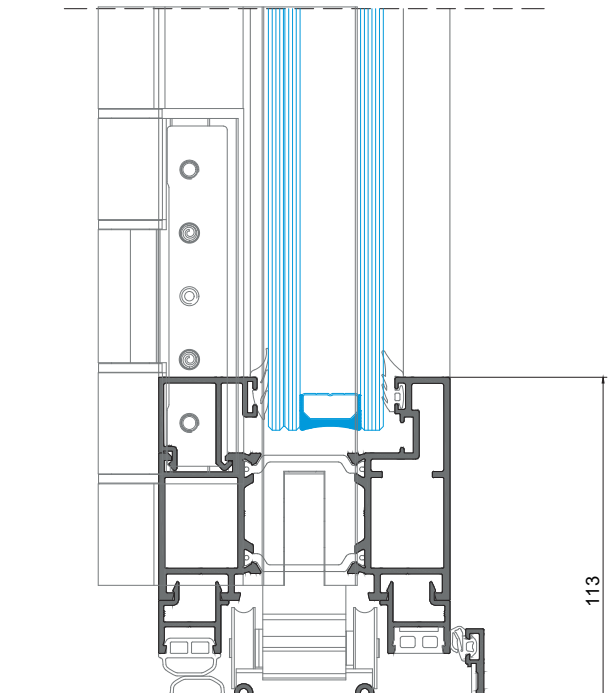
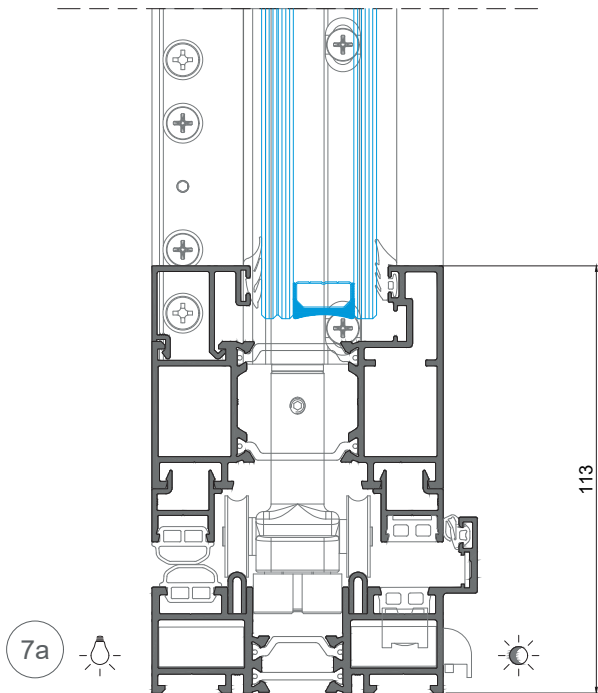
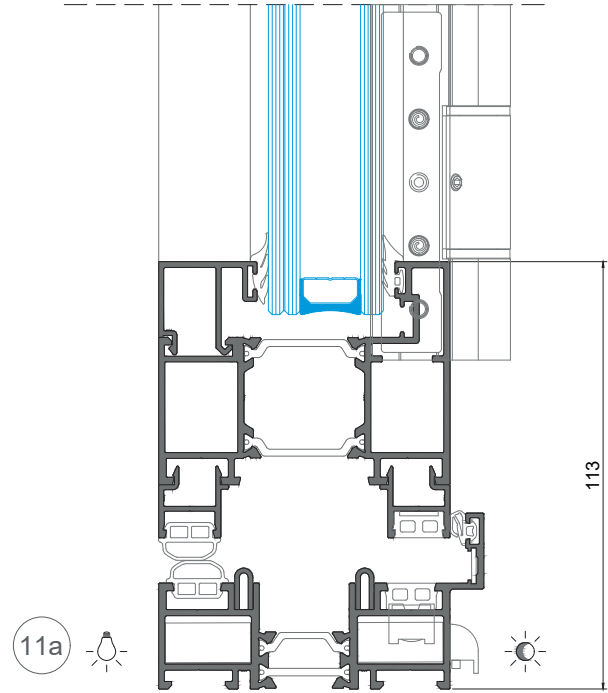
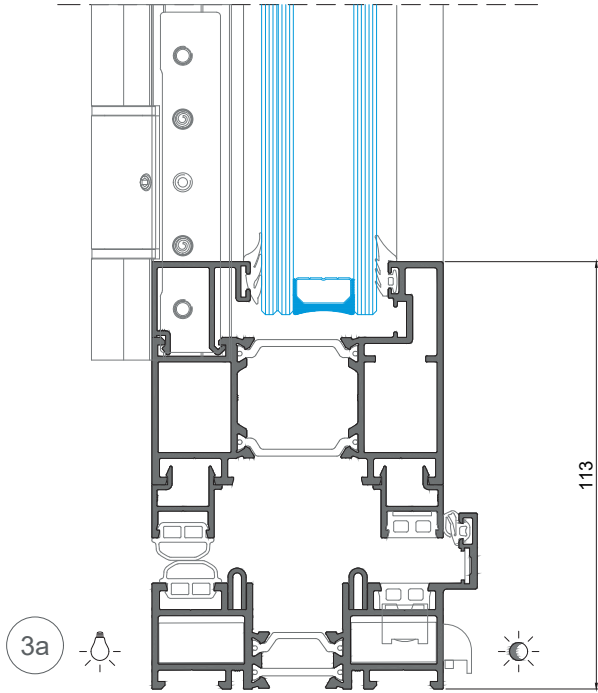
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

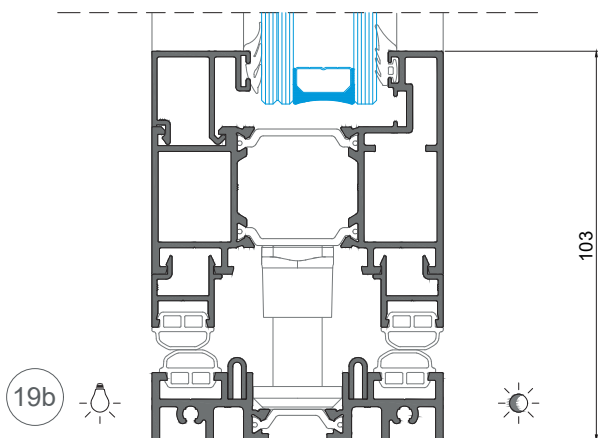
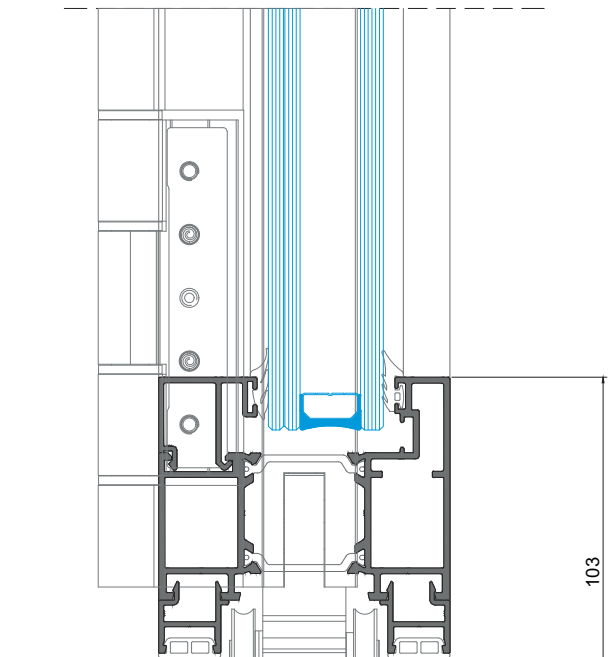
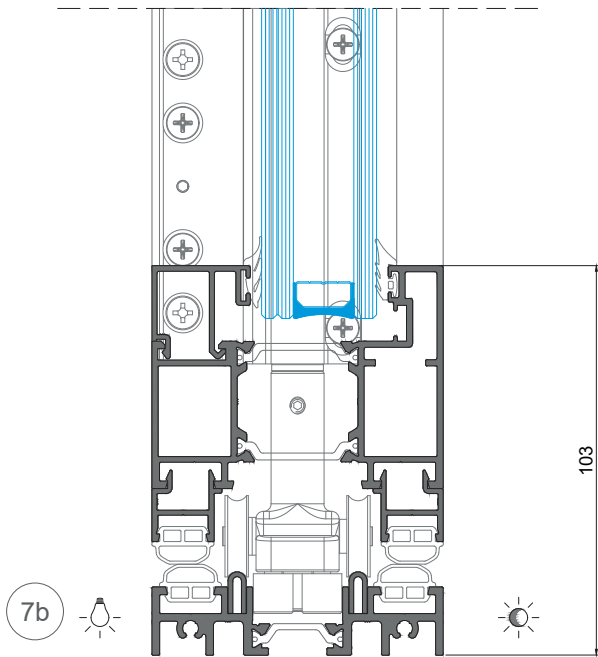
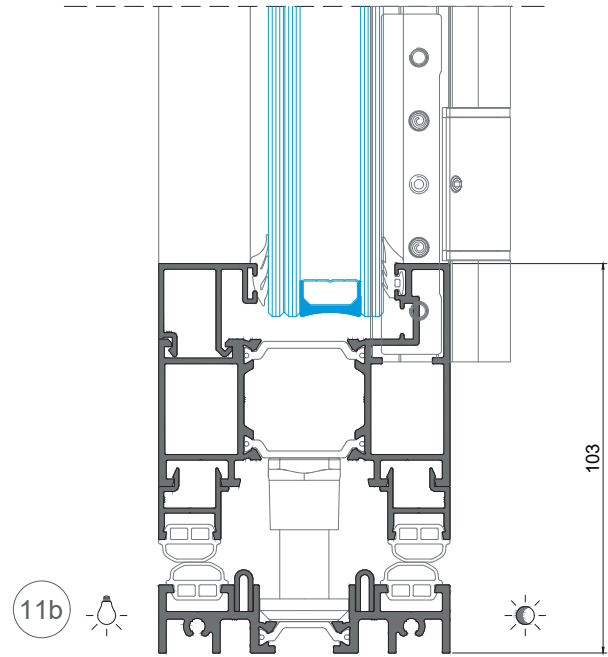
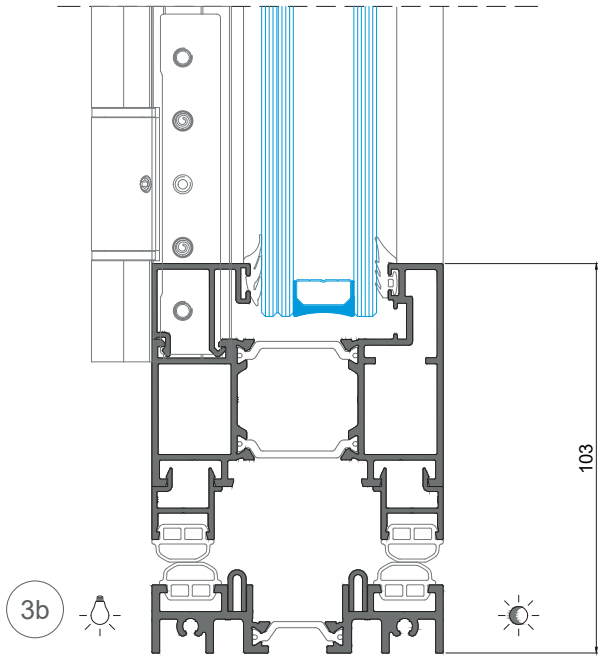
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

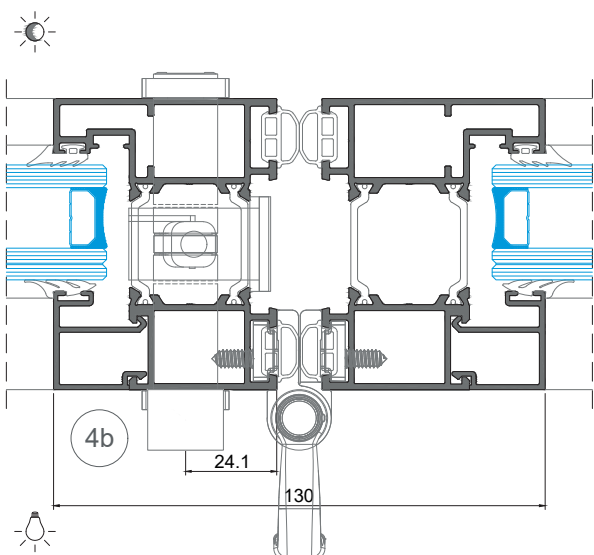
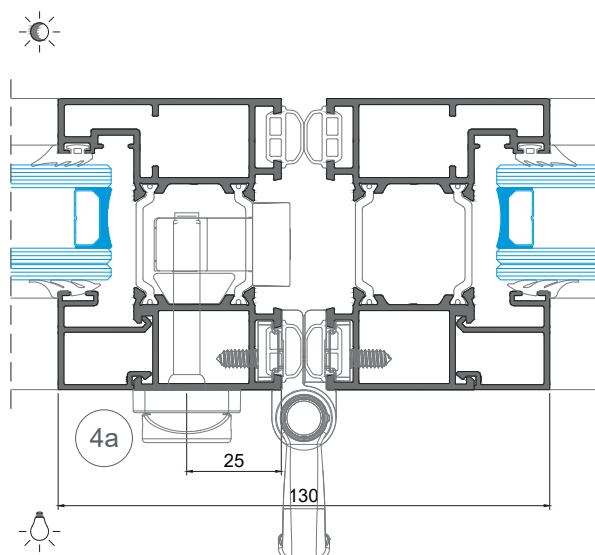
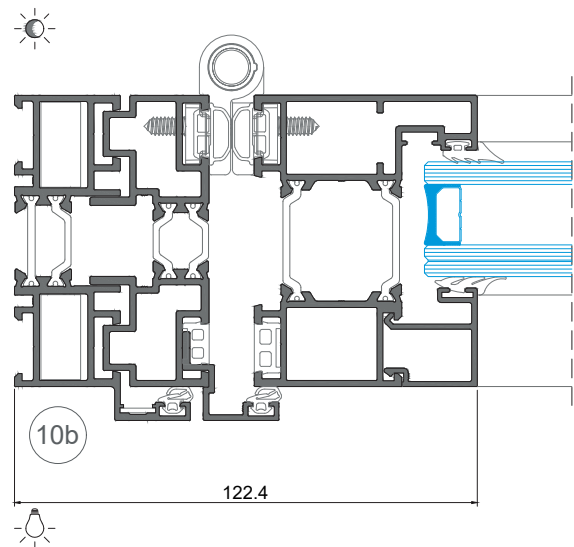
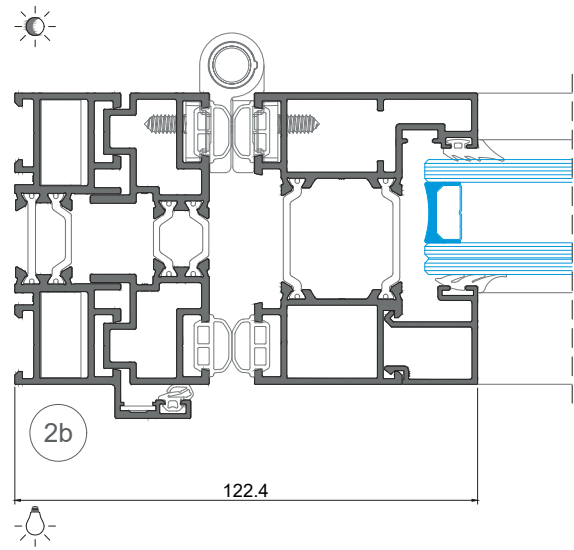
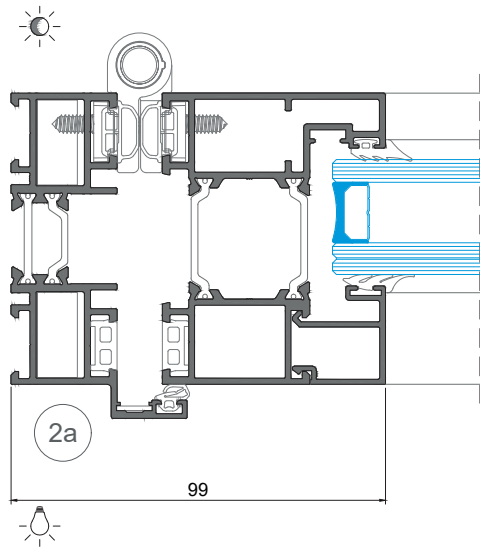
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING

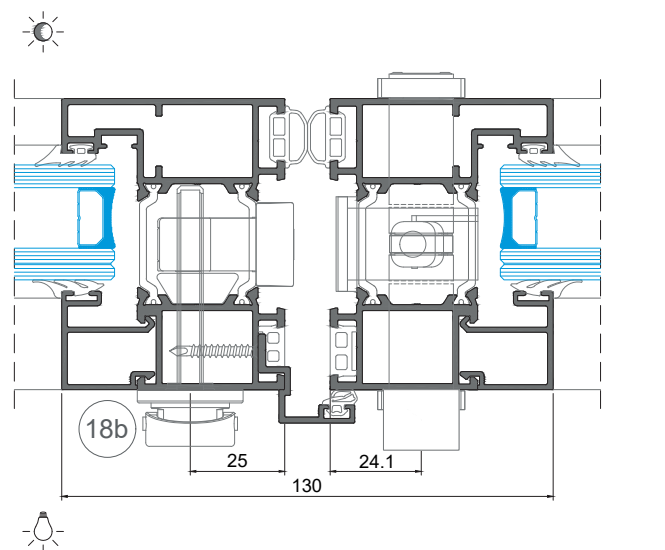
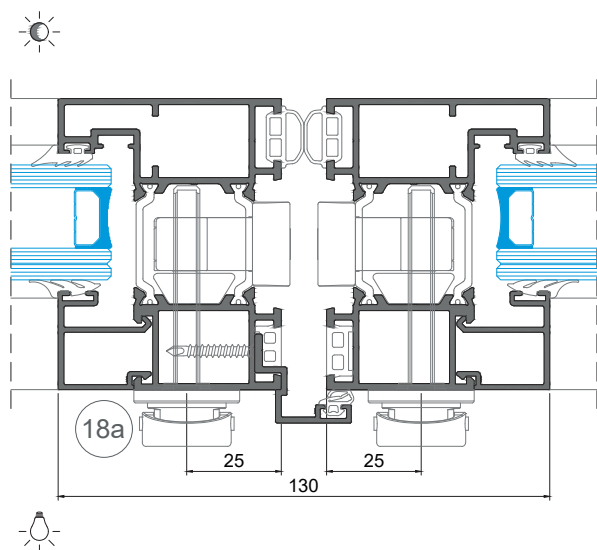
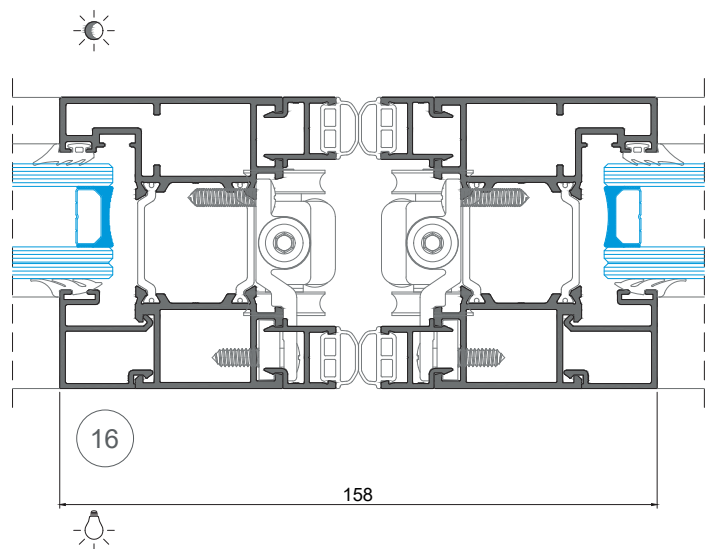
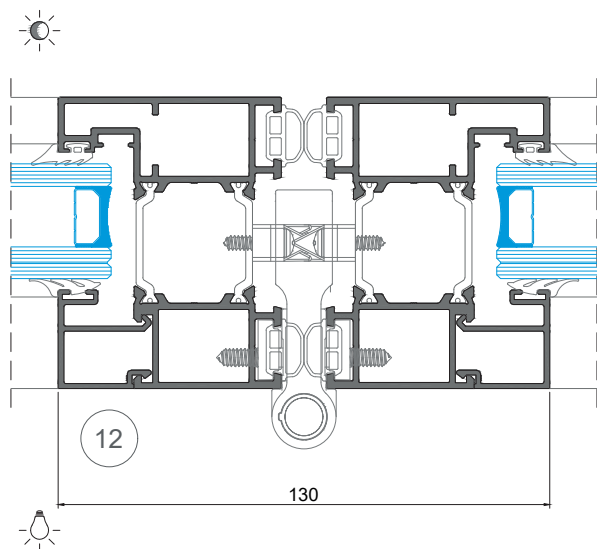
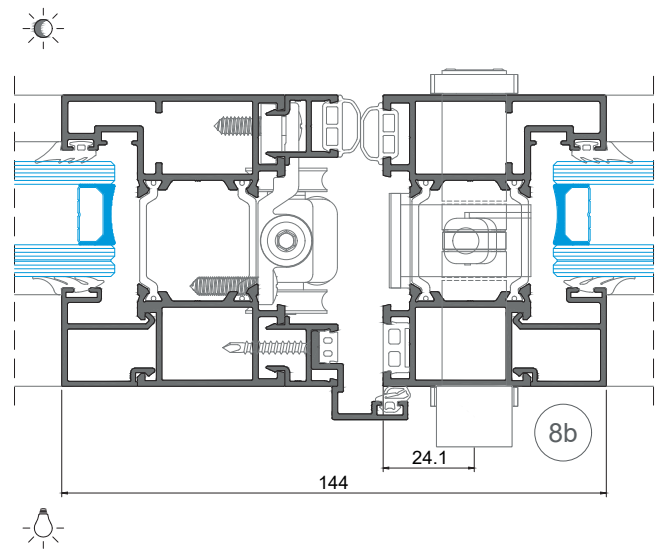
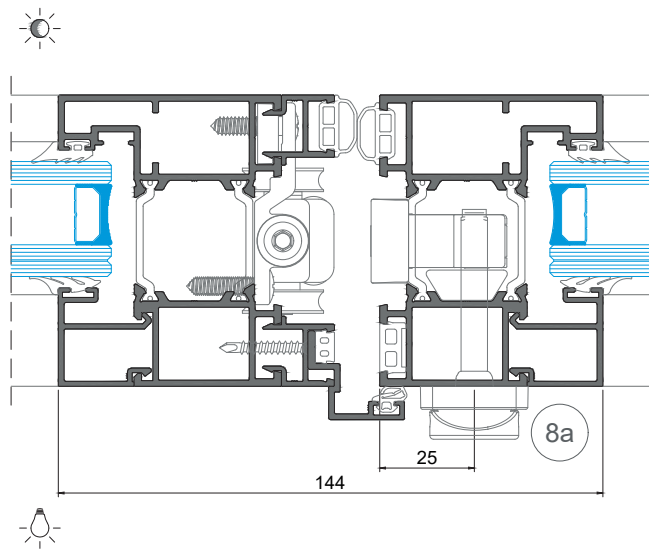
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



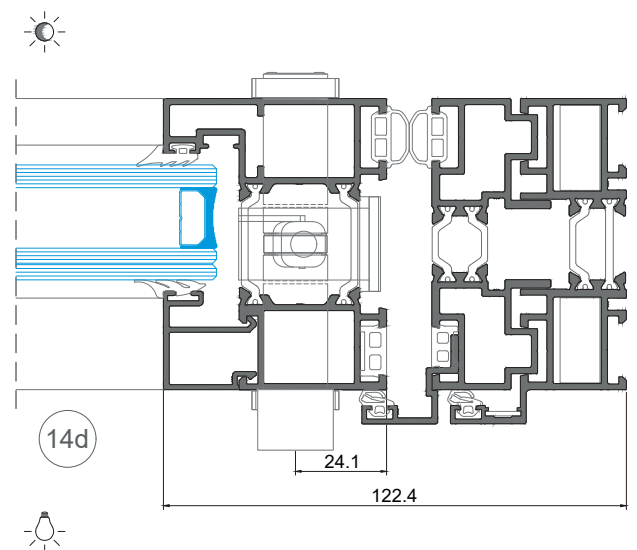
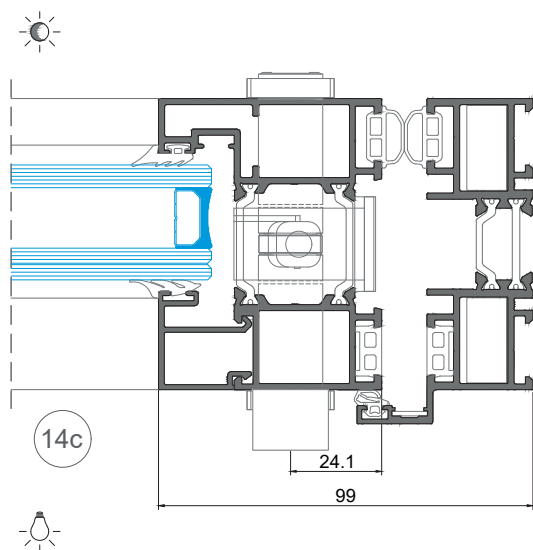
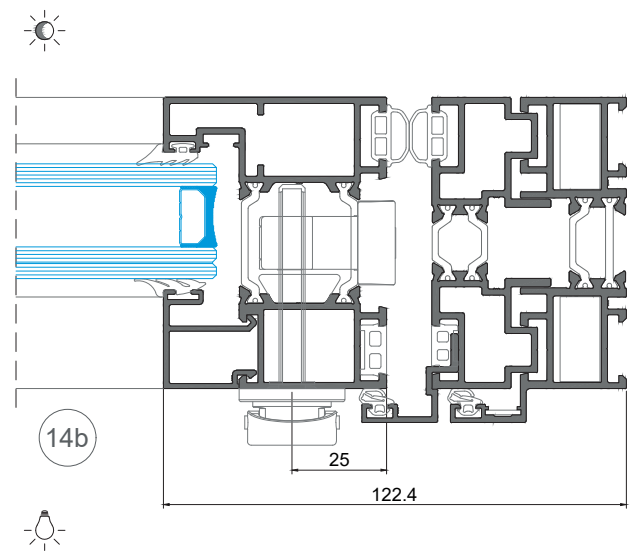
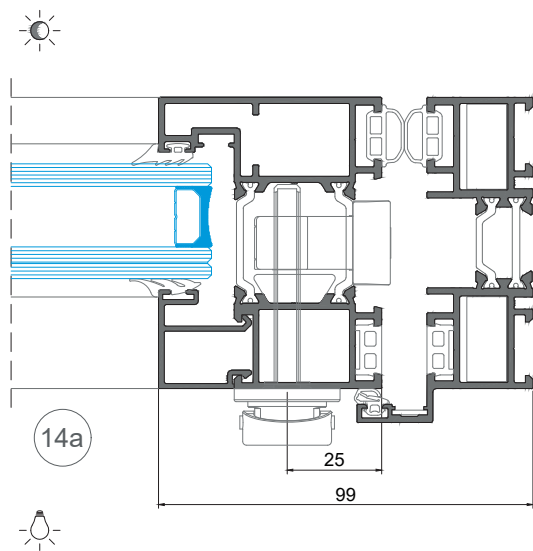
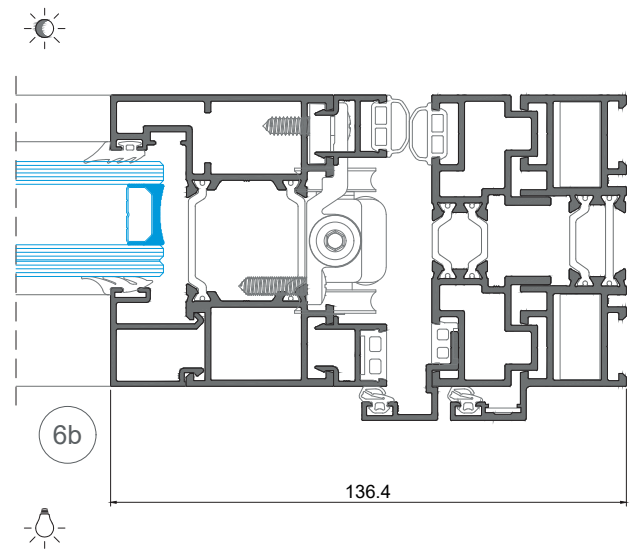
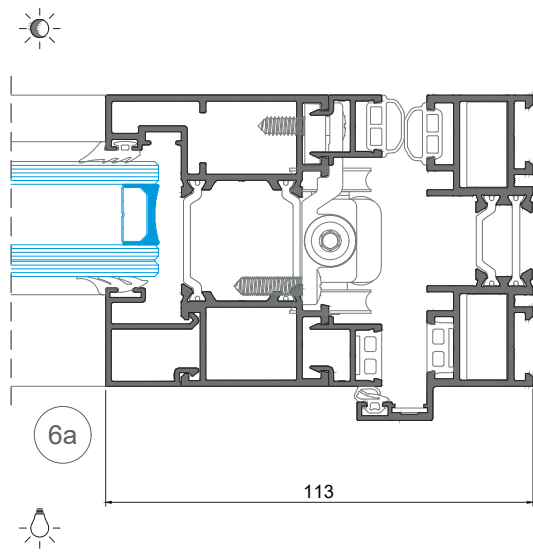
**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING

DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**  
**DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING**  
**DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR**

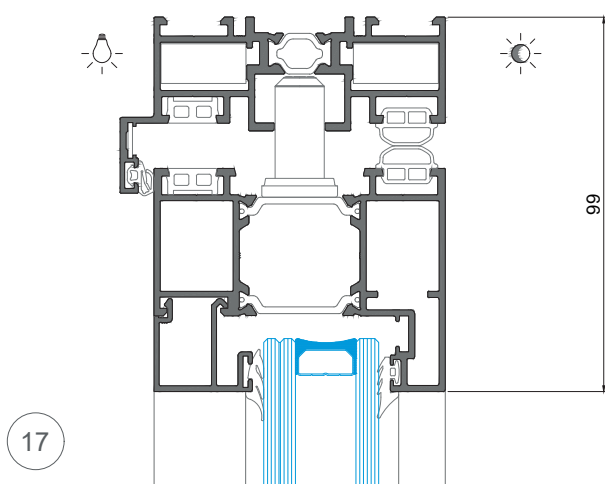
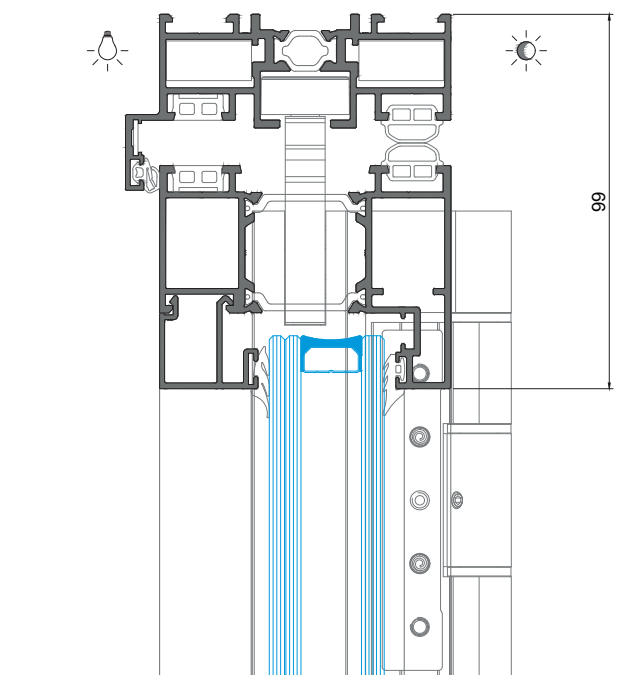
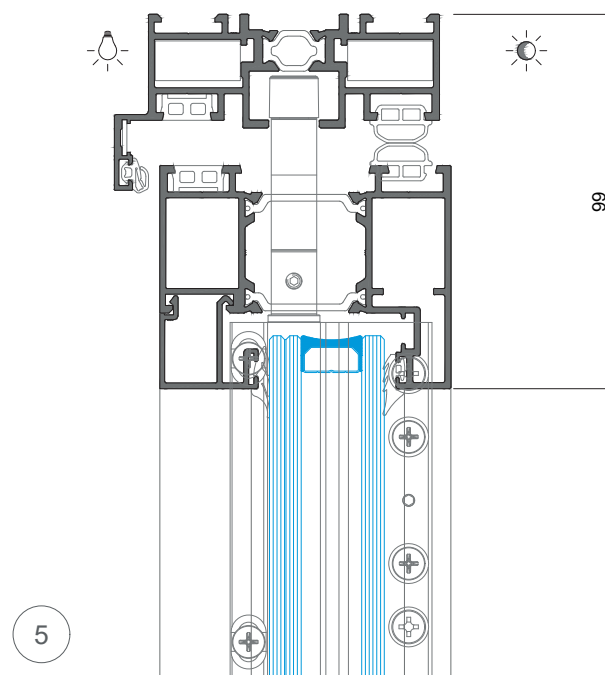
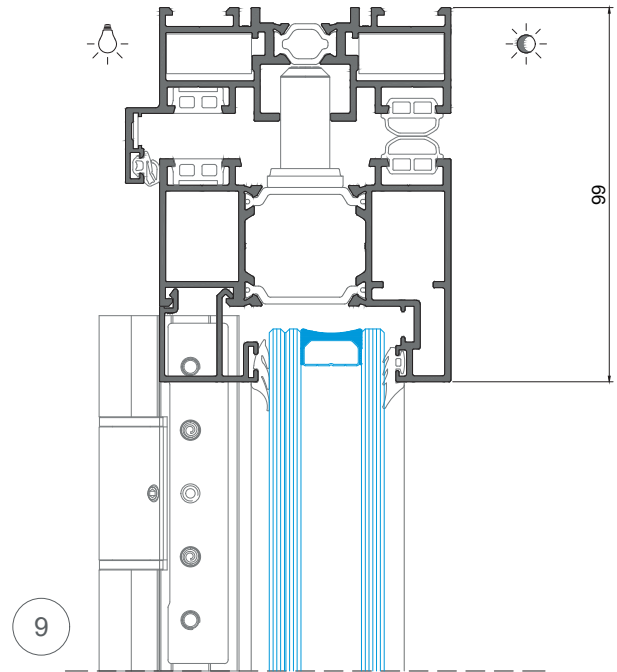
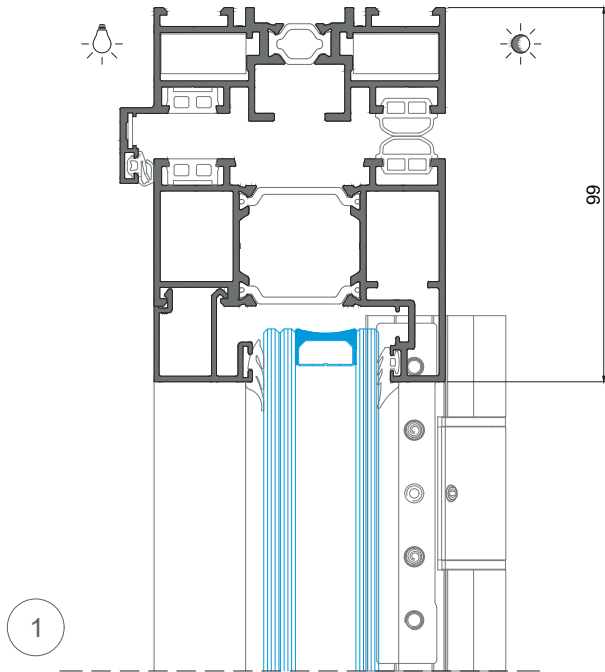




**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING

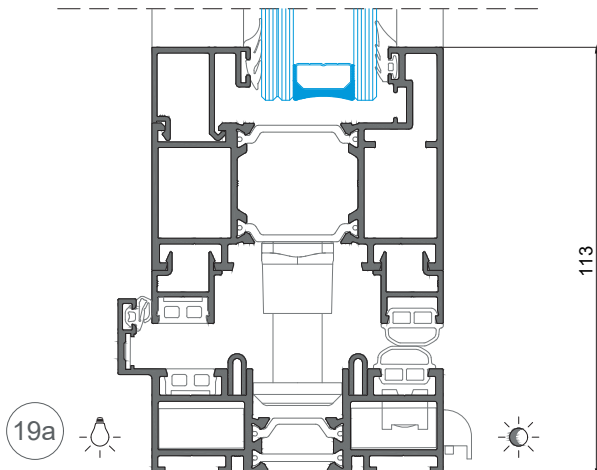
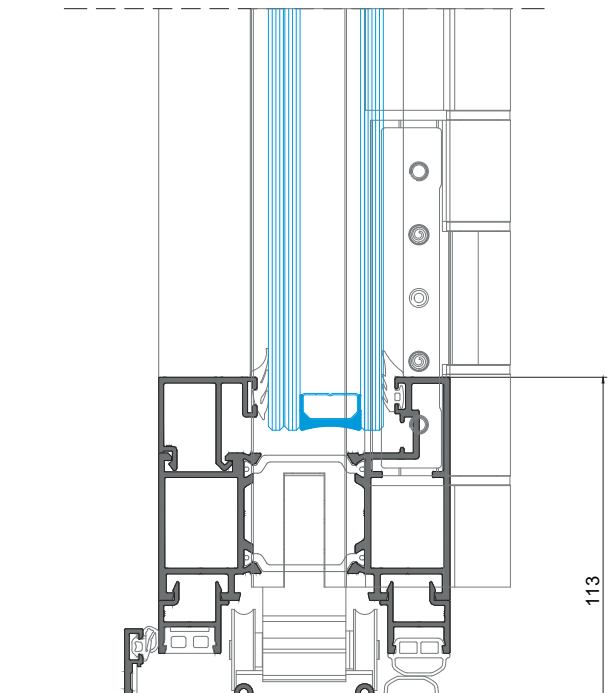
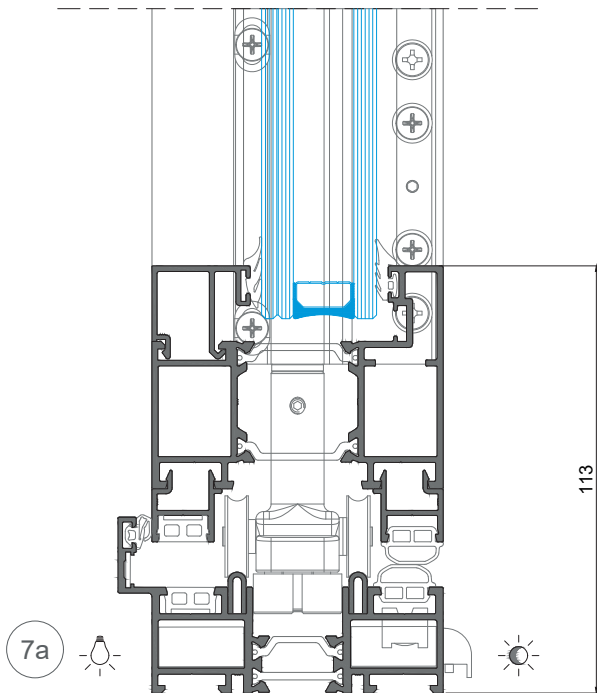
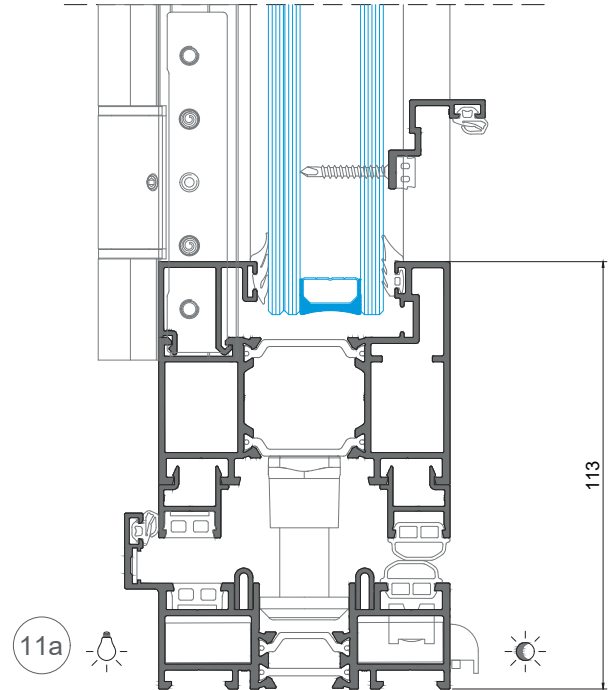
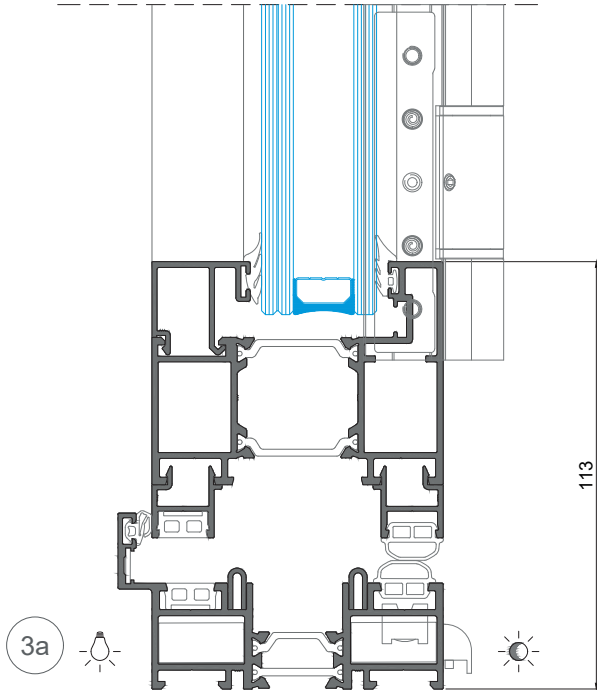
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING

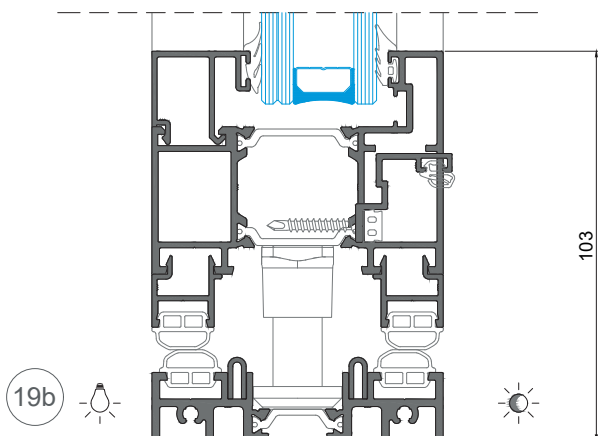
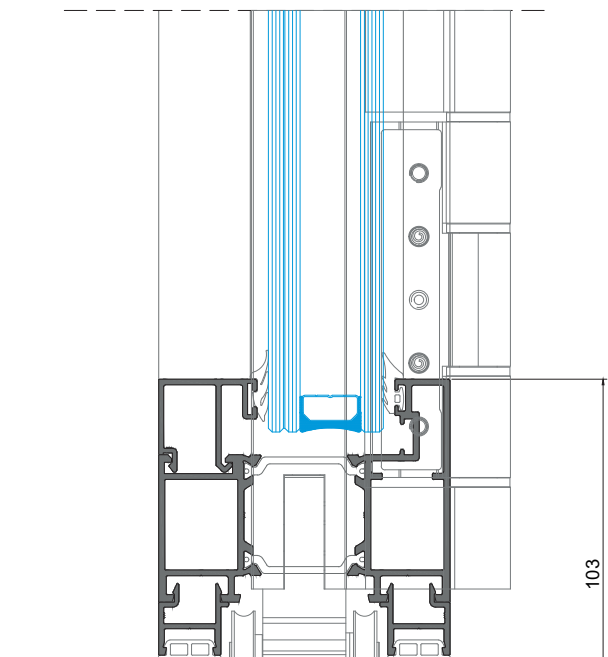
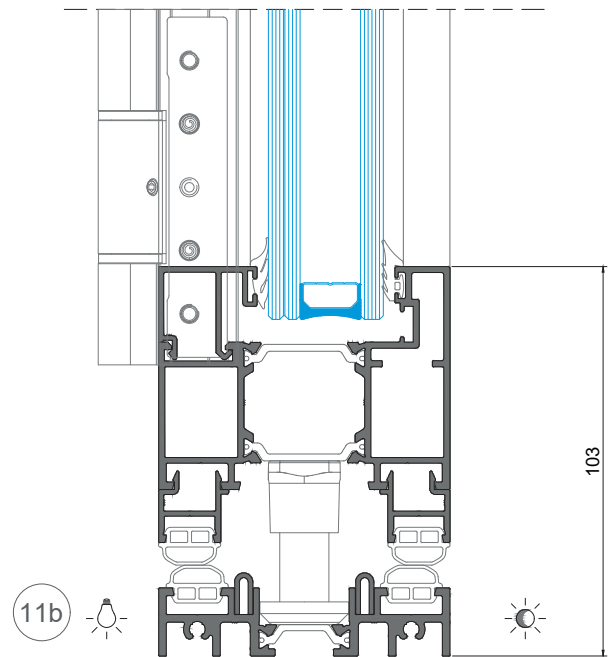
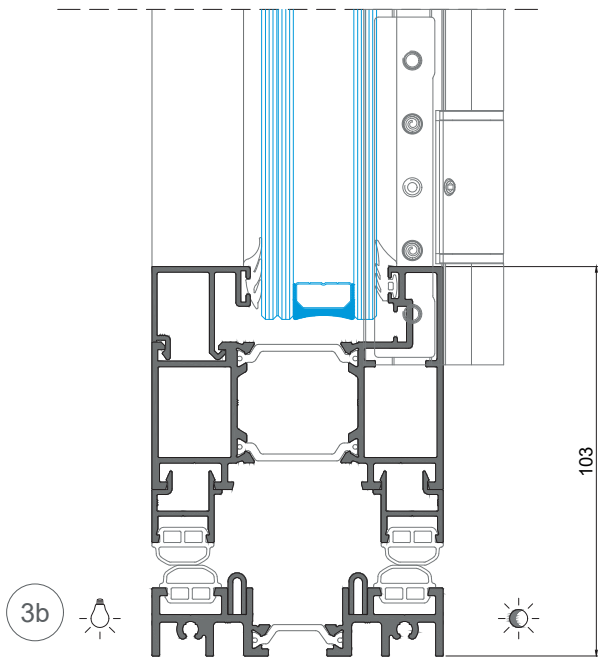
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR**

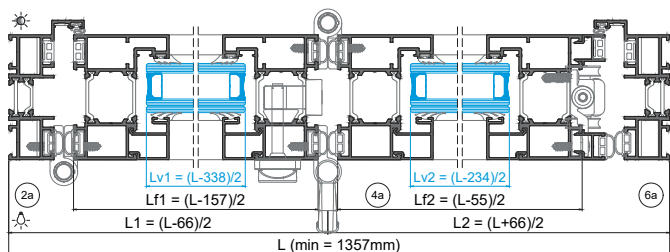
DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING

DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

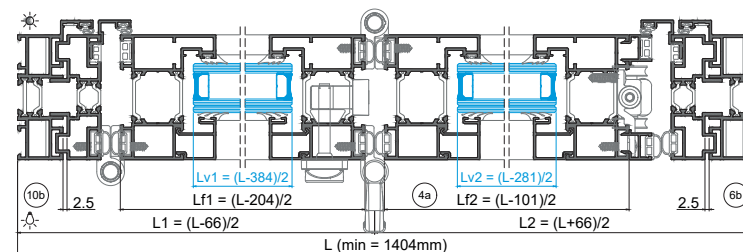


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

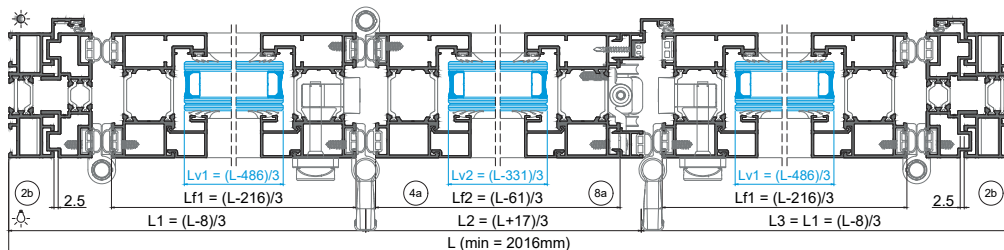
• 220



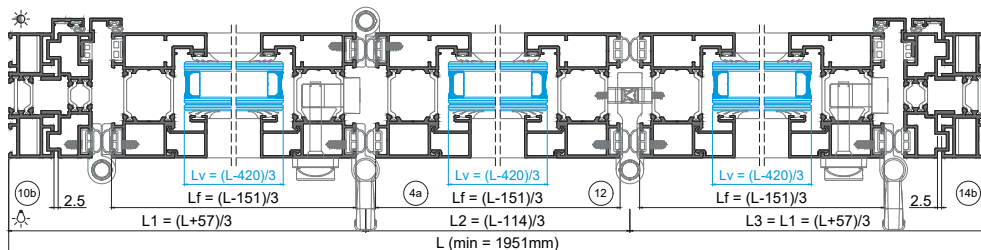
• 220 com | with | avec HT 82



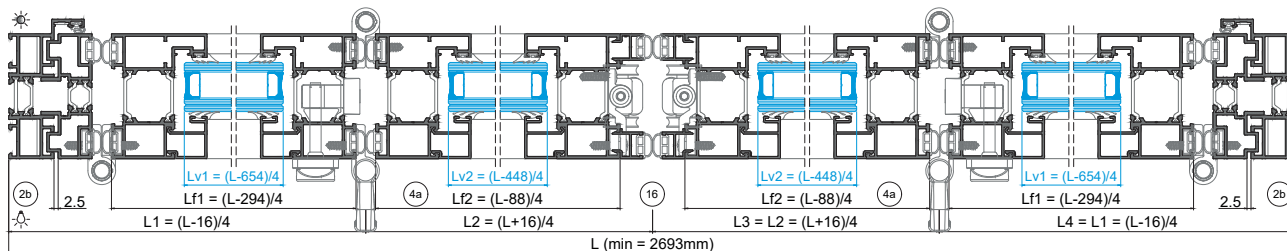
• 321 com | with | avec HT 82



• 330 com | with | avec HT 82

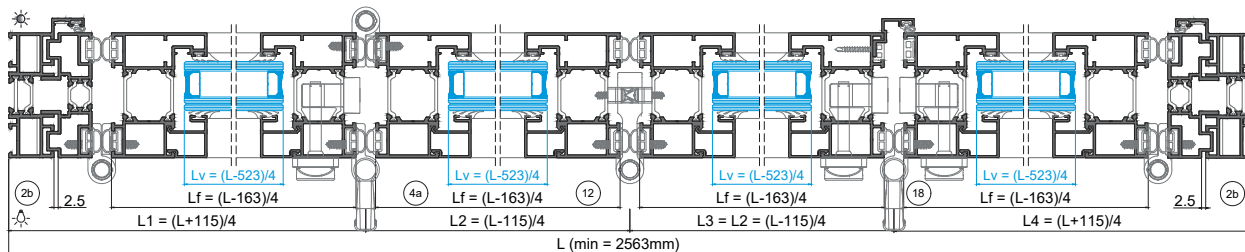


• 422 com | with | avec HT 82

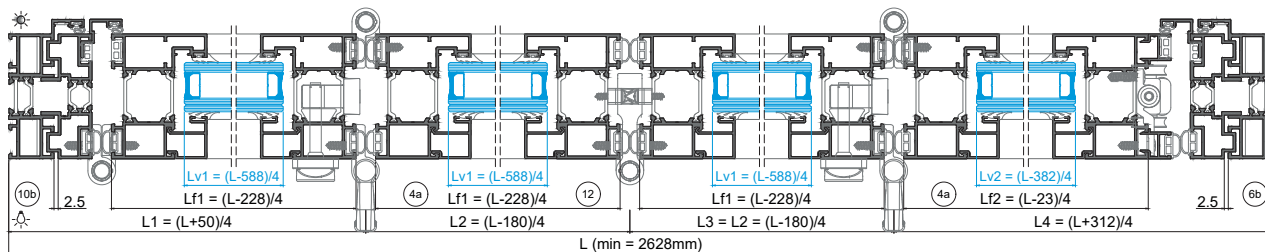


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

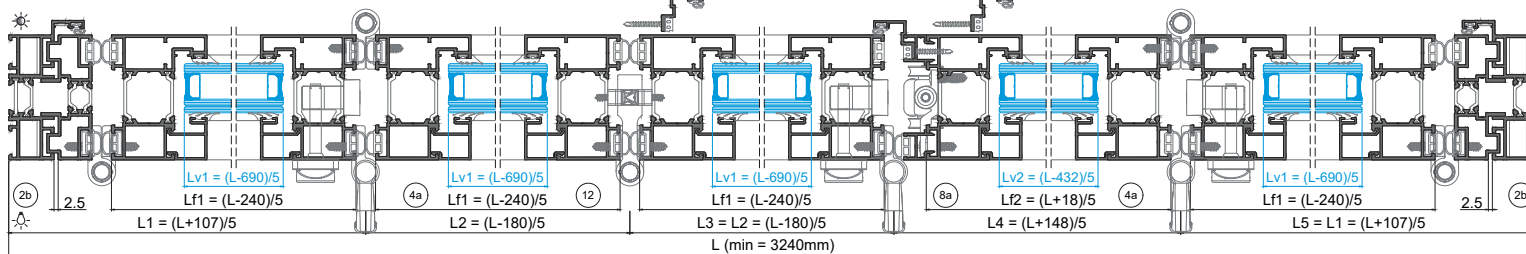
• 431 com | with | avec HT 82



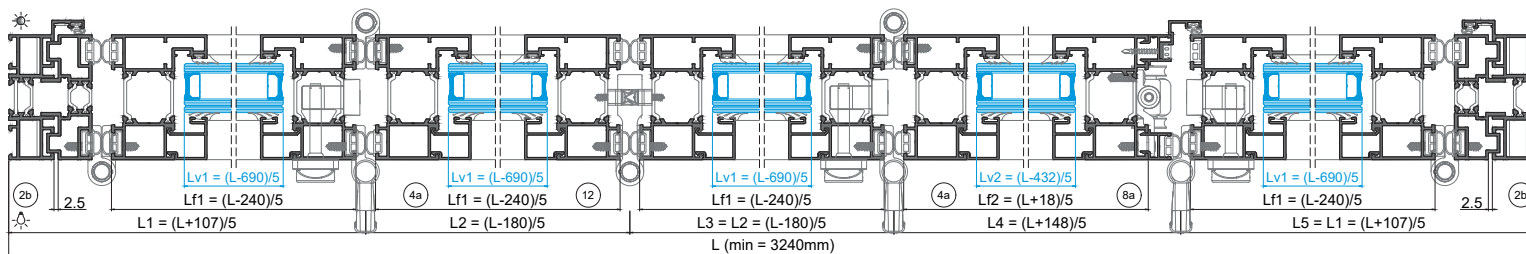
• 440 com | with | avec HT 82



• 532 com | with | avec HT 82

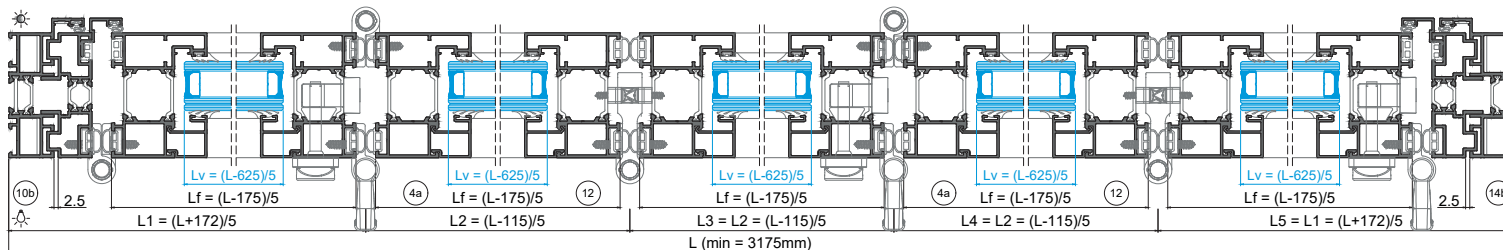


• 541 com | with | avec HT 82

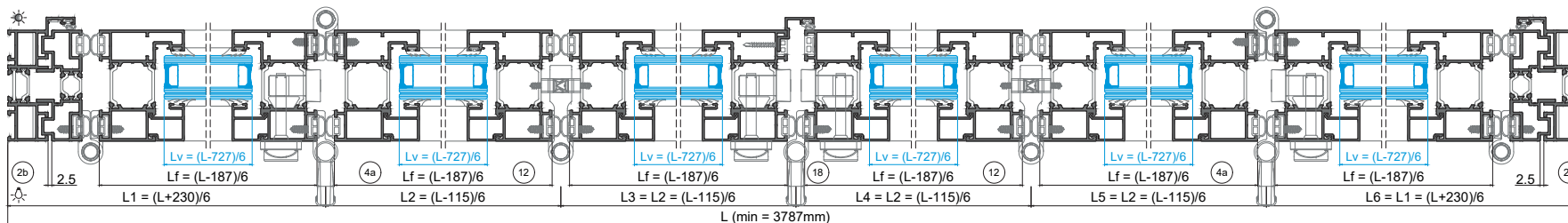


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

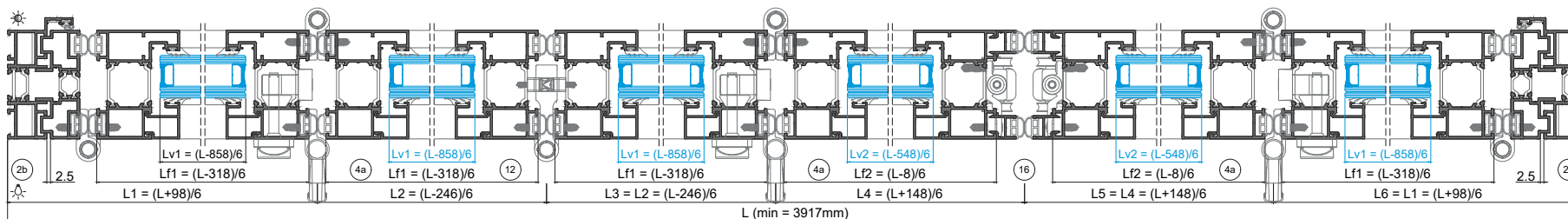
• 550 com | with | avec HT 82



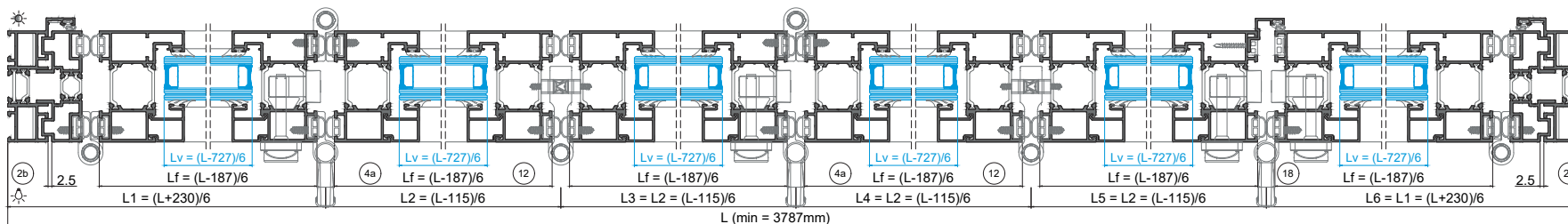
• 633 com | with | avec HT 82



• 642 com | with | avec HT 82

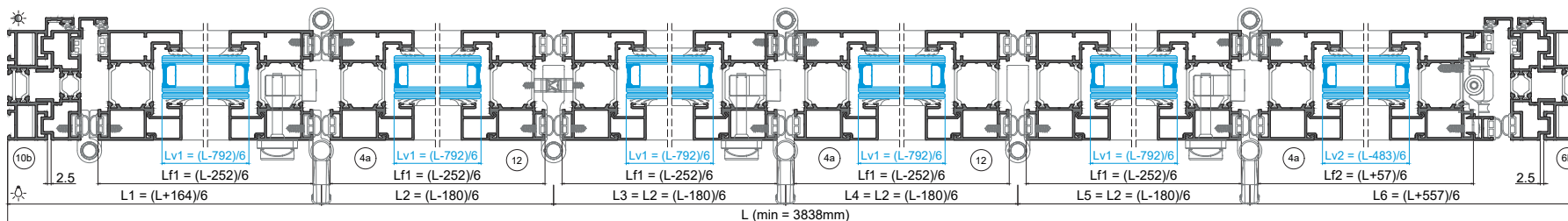


• 651 com | with | avec HT 82

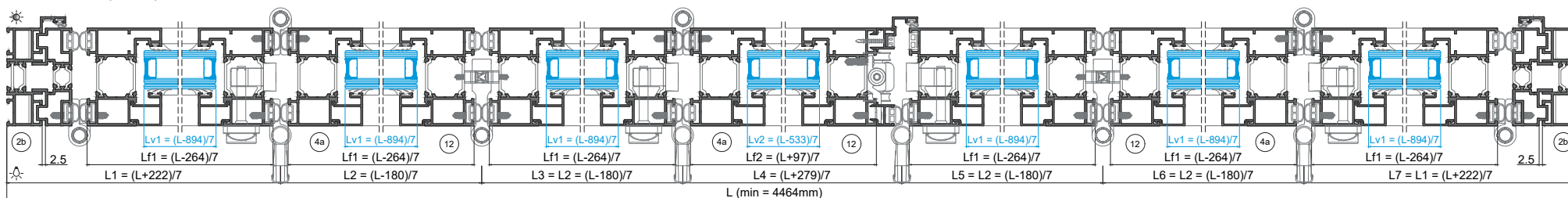


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

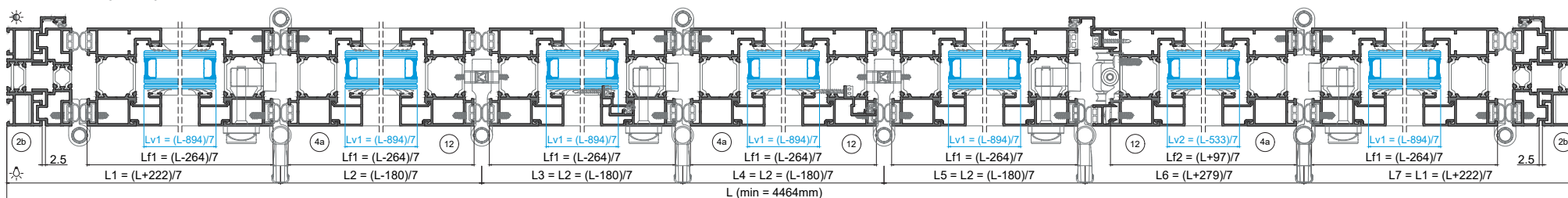
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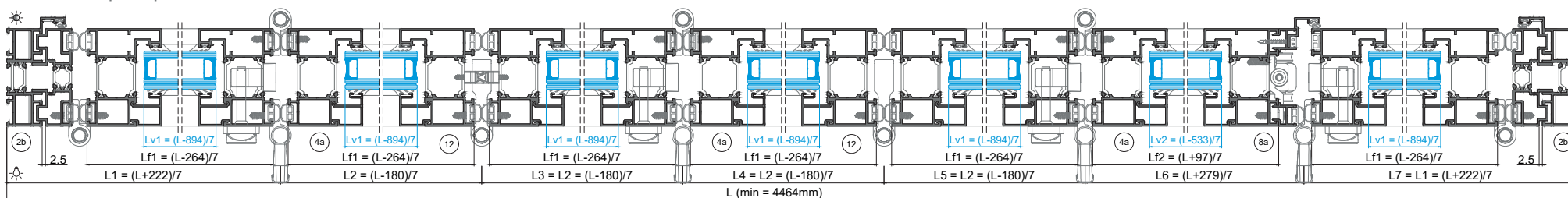
• 743 com | with | avec HT 82



• 752 com | with | avec HT 82

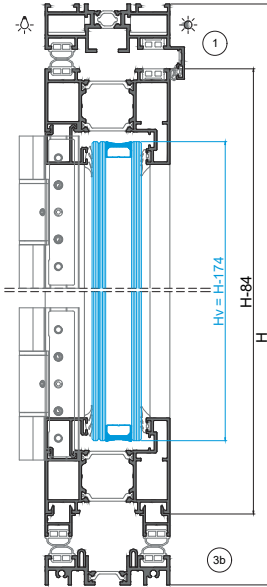
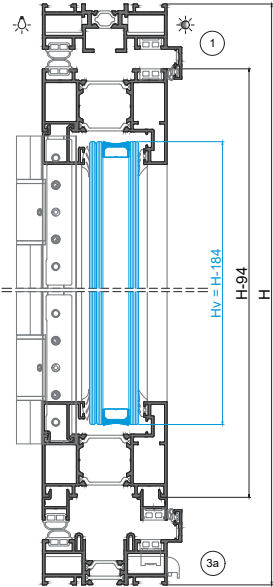
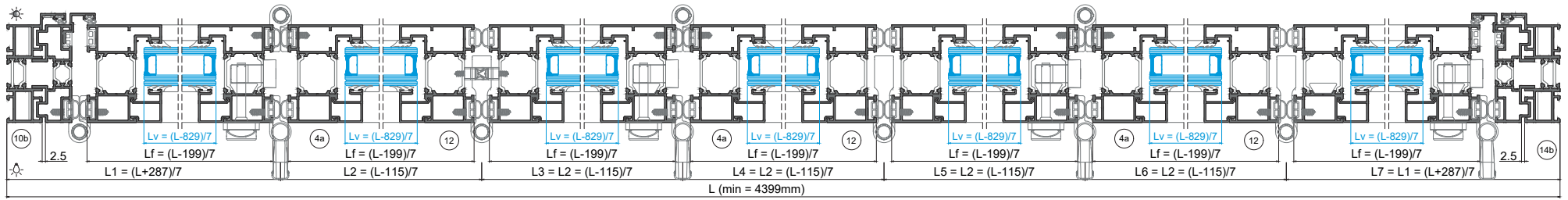


• 761 com | with | avec HT 82



PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR

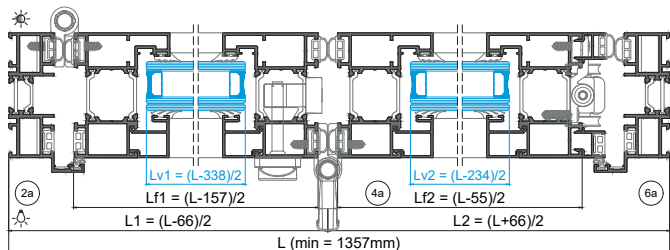
- 770 com | with | avec HT 82



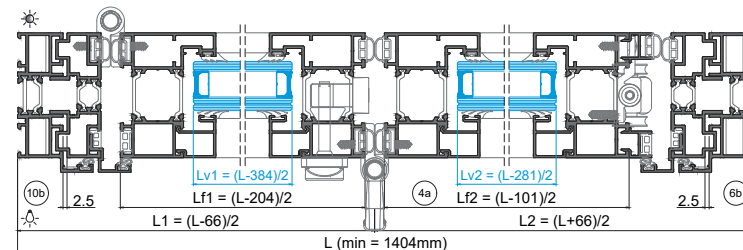


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

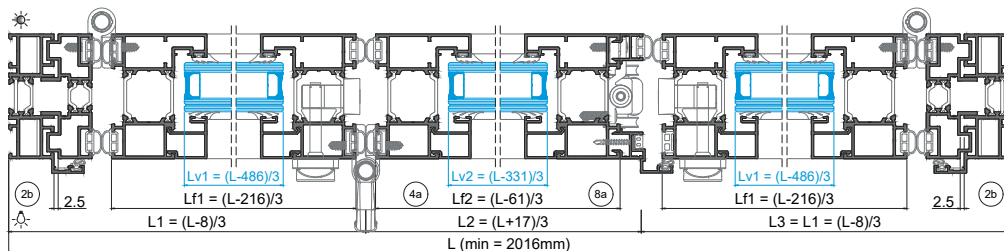
• 220



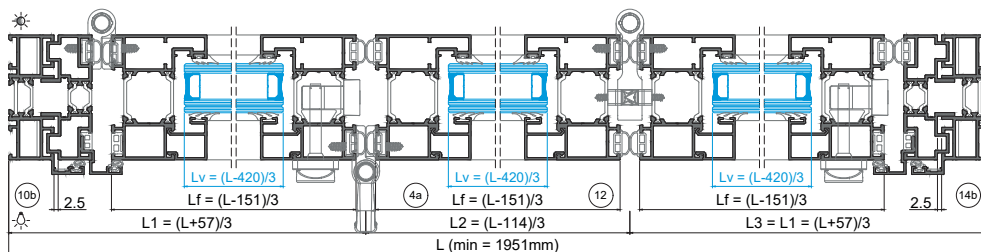
• 220 com | with | avec HT 82



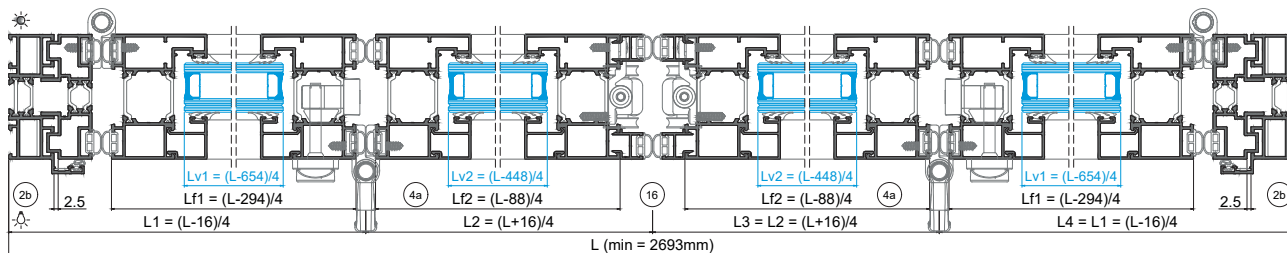
• 321 com | with | avec HT 82



• 330 com | with | avec HT 82

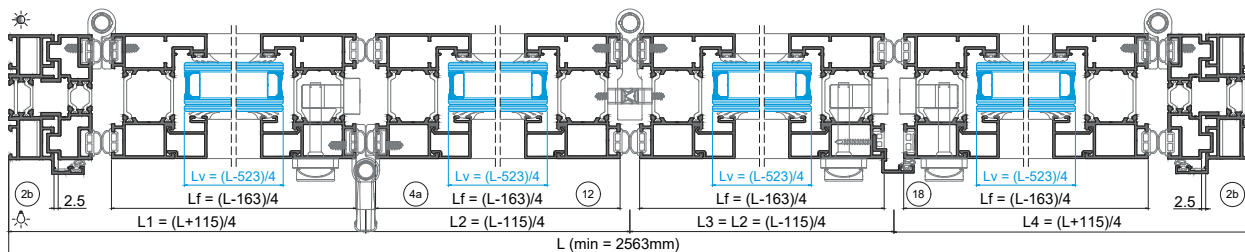


• 422 com | with | avec HT 82

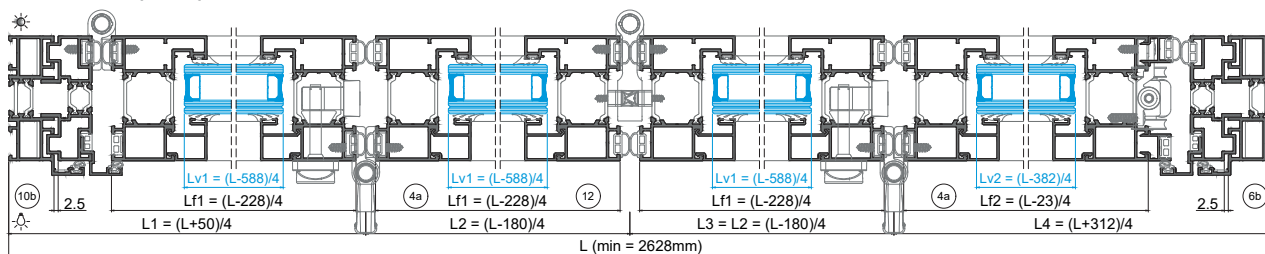


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

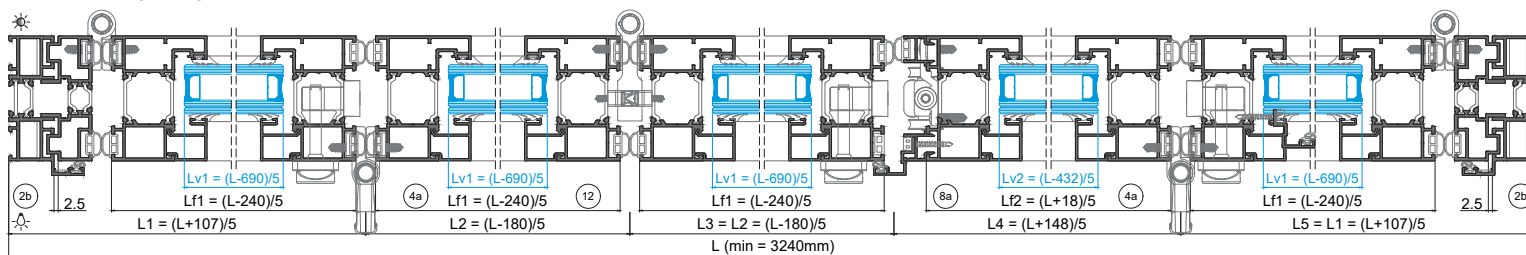
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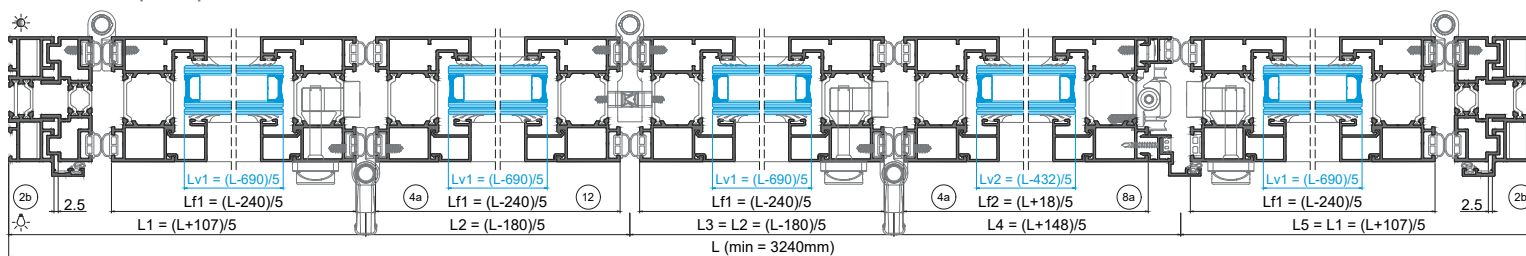
• 440 com | with | avec HT 82



• 532 com | with | avec HT 82

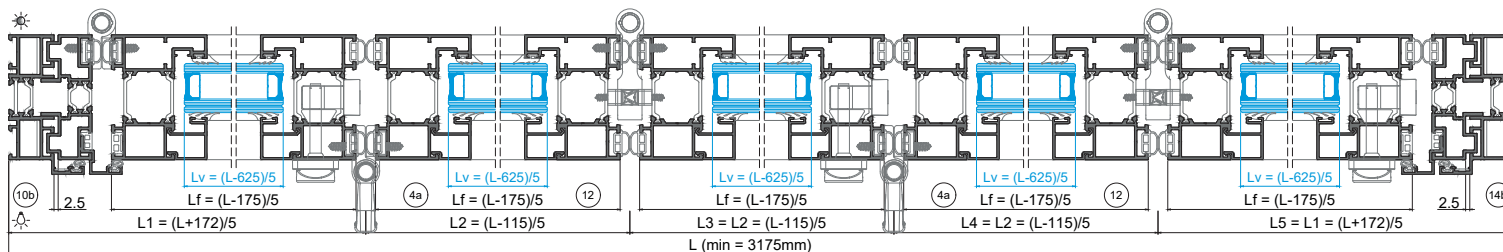


• 541 com | with | avec HT 82

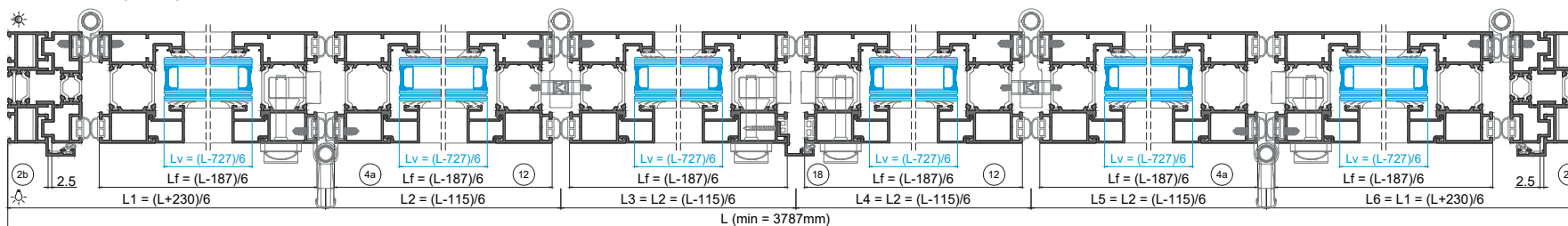


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

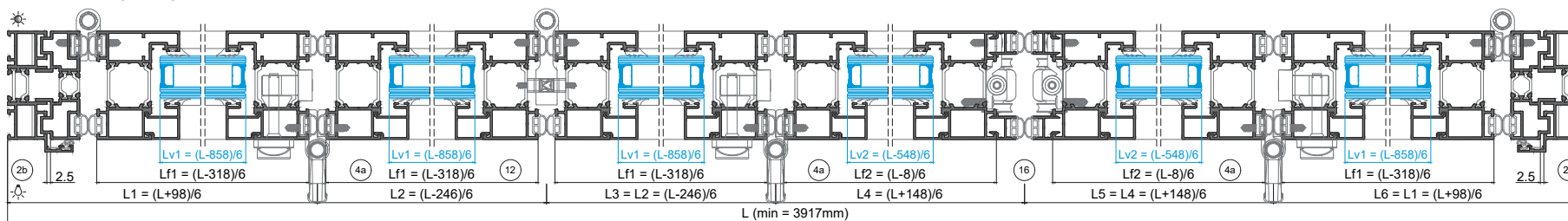
• 550 com | with | avec HT 82



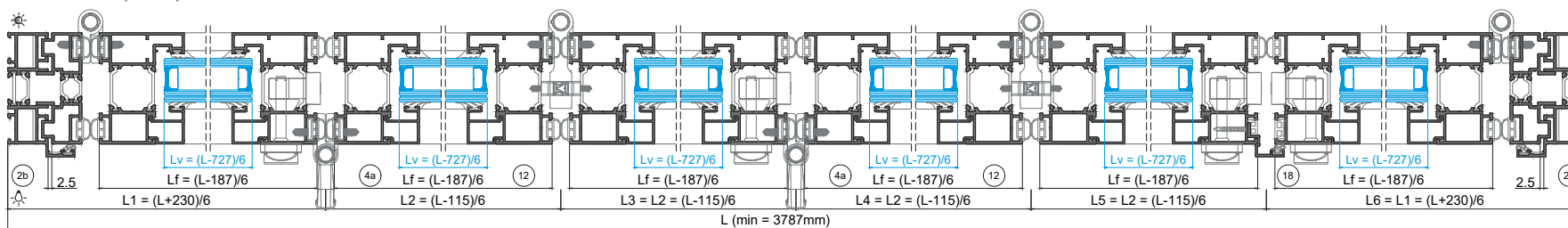
• 633 com | with | avec HT 82



• 642 com | with | avec HT 82

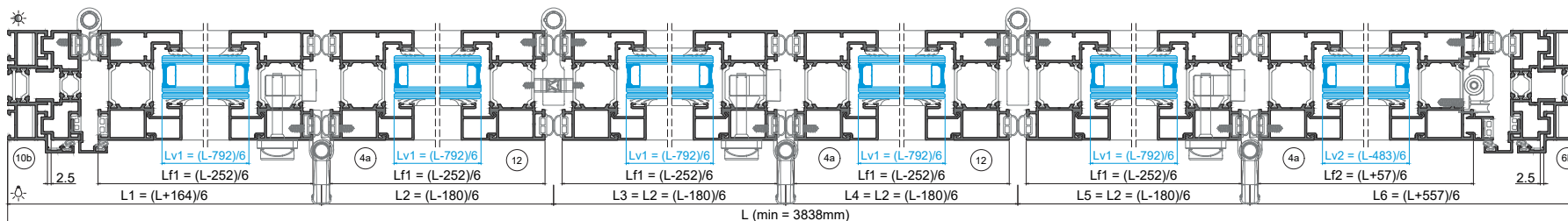


• 651 com | with | avec HT 82

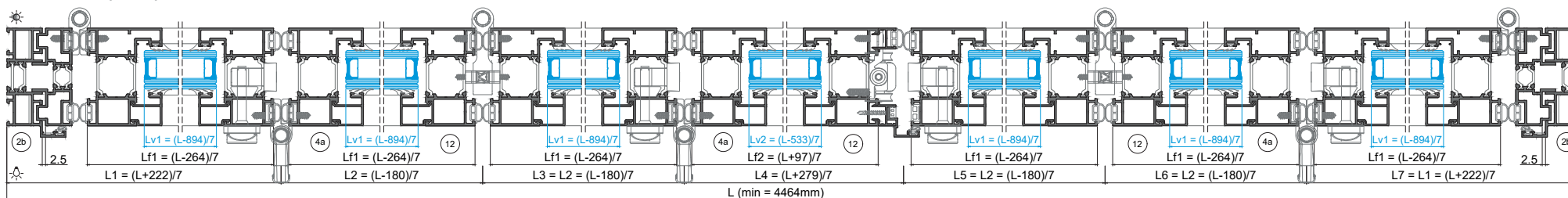


PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

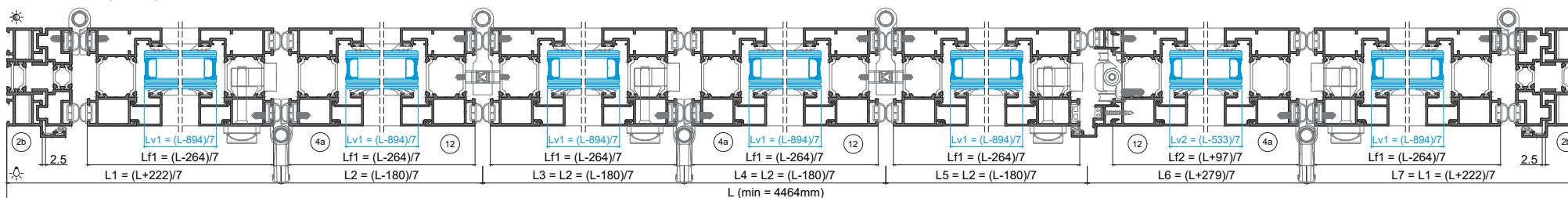
• 660 com | with | avec HT 82



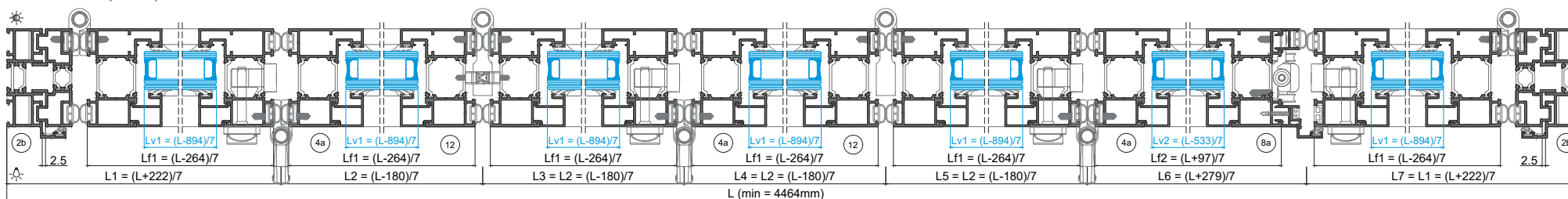
• 743 com | with | avec HT 82



• 752 com | with | avec HT 82

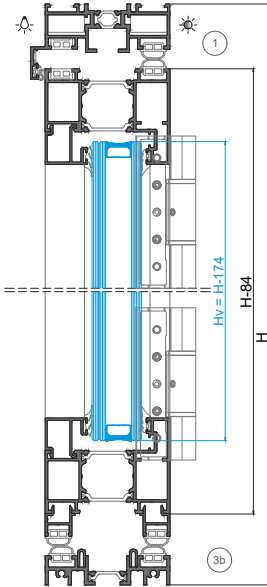
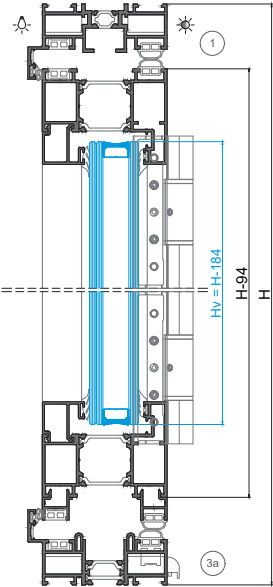
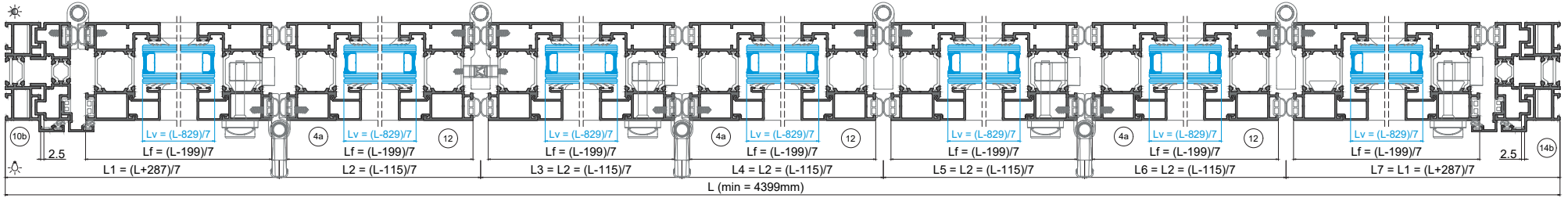


• 761 com | with | avec HT 82



PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA EXTERIOR  
 DETAILS ACCORDING TO TYPOLOGIES - OUTWARD OPENING  
 DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR

- 770 com | with | avec HT 82



**MEDIDAS DE CORTE PARA FOLHAS E VIDROS**  
**SASHES AND GLASSES CUTTING MEASURES**  
**MESURES DE COUPE POUR VENTAux ET VERRÉS**

Sem perfis laterais de ajuste Without adjustable lateral profiled   Sans profilés latéraux réglable				
Tipologia	L min	Qt	Lf	Lv
220	1357mm	1	Lf1 = (L-157)/2	Lv1 = (L-338)/2
		1	Lf2 = (L-55)/2	Lv2 = (L-234)/2

Com perfis laterais de ajuste With adjustable lateral profiled   Avec profilés latéraux réglable				
Tipologia	L min	Qt	Lf	Lv
220	1404mm	1	Lf1 = (L-204)/2	Lv1 = (L-384)/2
		1	Lf2 = (L-101)/2	Lv2 = (L-281)/2
321	2016mm	2	Lf1 = (L-216)/3	Lv1 = (L-486)/3
		1	Lf2 = (L-61)/3	Lv2 = (L-331)/3
330	1951mm	3	Lf = (L-151)/3	Lv = (L-420)/3
422	2693mm	2	Lf1 = (L-294)/4	Lv1 = (L-654)/4
		2	Lf2 = (L-88)/4	Lv2 = (L-448)/4
431	2563mm	4	Lf = (L-163)/4	Lv = (L-523)/4
440	2628mm	3	Lf1 = (L-228)/4	Lv1 = (L-588)/4
		1	Lf2 = (L-23)/4	Lv2 = (L-382)/4
532	3240mm	4	Lf1 = (L-240)/5	Lv1 = (L-690)/5
		1	Lf2 = (L+18)/5	Lv2 = (L-432)/5
541	3240mm	4	Lf1 = (L-240)/5	Lv1 = (L-690)/5
		1	Lf2 = (L+18)/5	Lv2 = (L-432)/5
550	3175mm	5	Lf = (L-175)/5	Lv = (L-625)/5
633	3787mm	6	Lf = (L-187)/6	Lv = (L-727)/6
642	3917mm	4	Lf1 = (L-318)/6	Lv1 = (L-858)/6
		2	Lf2 = (L-8)/6	Lv2 = (L-548)/6
651	3787mm	6	Lf = (L-187)/6	Lv = (L-727)/6
660	3838mm	5	Lf1 = (L-252)/6	Lv1 = (L-792)/6
		1	Lf2 = (L+57)/6	Lv2 = (L-483)/6
743	4464mm	6	Lf1 = (L-264)/7	Lv1 = (L-894)/7
		1	Lf2 = (L+97)/7	Lv2 = (L-533)/7
752	4464mm	6	Lf1 = (L-264)/7	Lv1 = (L-894)/7
		1	Lf2 = (L+97)/7	Lv2 = (L-533)/7
761	4464mm	6	Lf1 = (L-264)/7	Lv1 = (L-894)/7
		1	Lf2 = (L+97)/7	Lv2 = (L-533)/7
770	4399mm	7	Lf = (L-199)/7	Lv = (L-829)/7

**MEDIDAS PARA COLOCAÇÃO NO PROGRAMA DE ORÇAMENTAÇÃO**  
**MEASURES FOR PLACEMENT IN THE BUDGETING PROGRAM**  
**MESURES DE PLACEMENT DANS LE PROGRAMME BUDGÉTAIRE**

Sem perfis laterais de ajuste Without adjustable lateral profiled   Sans profilés latéraux réglable							
Tipologia	L1	L2	L3	L4	L5	L6	L7
220	(L-66)/2	(L+66)/2					

Com perfis laterais de ajuste With adjustable lateral profiled   Avec profilés latéraux réglable							
Tipologia	L1	L2	L3	L4	L5	L6	L7
220	(L-66)/2	(L+66)/2					
321	(L-8)/3	(L+17)/3	L1				
330	(L+57)/3	(L-114)/3	L1				
422	(L-16)/4	(L+16)/4	L2	L1			
431	(L+115)/4	(L-115)/4	L2	L1	-		
440	(L+50)/4	(L-180)/4	L2	(L+312)/4			
532	(L+107)/5	(L-180)/5	L2	(L+148)/5	L1		
541	(L+107)/5	(L-180)/5	L2	(L+148)/5	L1		
550	(L+172)/5	(L-115)/5	L2	L2	L1		
633	(L+230)/6	(L-115)/6	L2	L2	L2	L1	
642	(L+98)/6	(L-246)/6	L2	(L+148)/6	L4	L1	
651	(L+230)/6	(L-115)/6	L2	L2	L2	L1	
660	(L+164)/6	(L-180)/6	L2	L2	L2	(L+557)/6	
743	(L+222)/7	(L-180)/7	L2	(L+279)/7	L2	L2	L1
752	(L+222)/7	(L-180)/7	L2	L2	L2	(L+279)/7	L1
761	(L+222)/7	(L-180)/7	L2	L2	L2	(L+279)/7	L1
770	(L+287)/7	(L-115)/7	L2	L2	L2	L2	L1

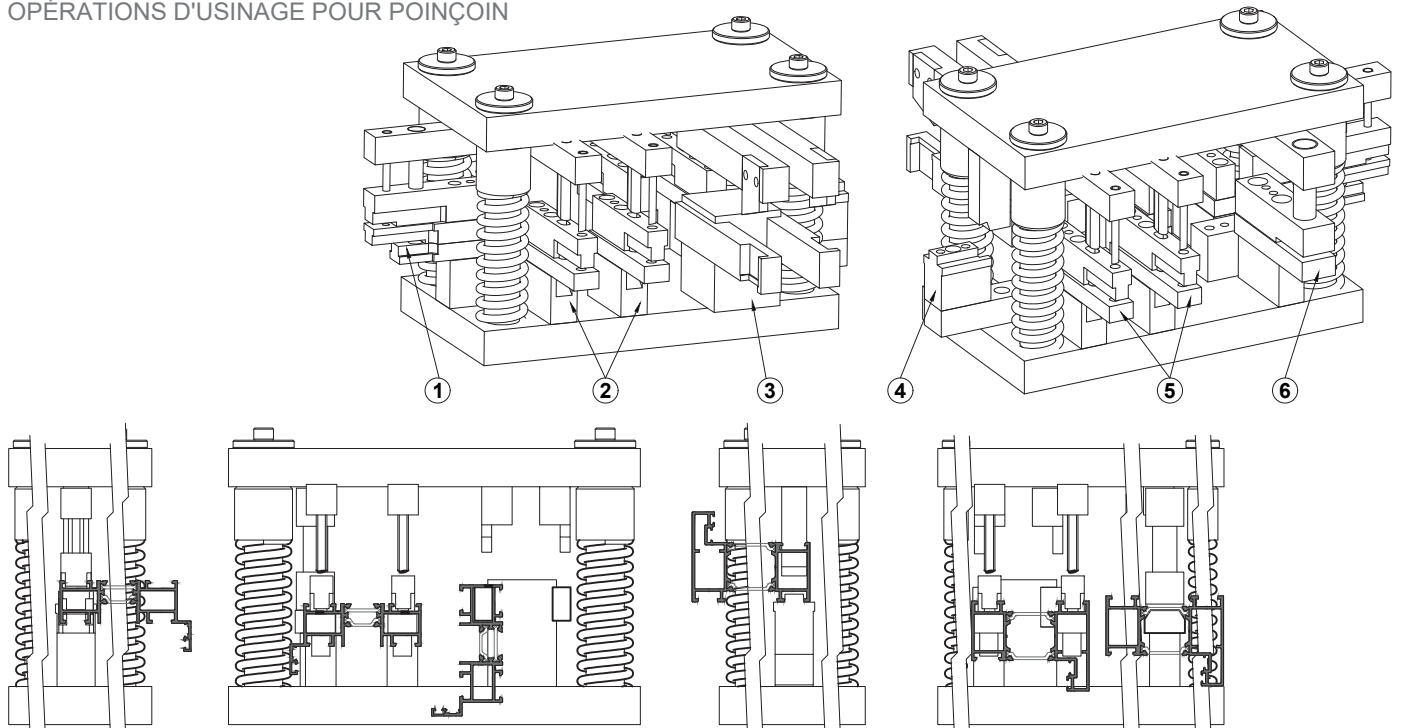
Considerar os valores de L com 1 casa decimal, para introdução no programa de orçamentação  
 Consider the values of L with 1 decimal place, for introduction in the budgeting program  
 Considérer les valeurs de L avec 1 décimale, à introduire dans le programme budgétaire.

# V

## MAQUINAÇÃO DOS PERFIS PROFILES MACHINING | USINAGE DES PROFILÉS

MAQUINAÇÕES NO CORTANTE MACHINING OPERATIONS ON THE PUNCHING TOOL OPÉRATIONS D'USINAGE POUR POINÇON	V.1
MAQUINAÇÕES DOS PERFIS ARO FIXO FIXED FRAME PROFILES MACHINING USINAGE DES PROFILÉS DORMANT	V.2
DRENAGENS DRAINAGE DRAINAGES	V.3
MAQUINAÇÕES DOS PERFIS ARO MÓVEL MOBILE FRAME PROFILES MACHINING USINAGE DES PROFILÉS OUVRANT	V.4
MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS PROFILES MACHINING FOR ACCESSORIES ASSEMBLY USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES	V.5

**MAQUINAÇÕES NO CORTANTE**  
MACHINING OPERATIONS ON THE PUNCHING TOOL  
OPÉRATIONS D'USINAGE POUR POINÇON



**1 - Furação de ombreiras (corte a 90°)**  
Jambs drilling (90° cut) | Perçage de jambages (coupe à 90°)

**2 - Furação para esquadros**  
Corner cleat drilling | Perçage pour équerres

**3 - Saída de águas**  
Water drainage | Sortie des eaux

Rasgo | Hole | Rainure R1: 30x5mm

**4 - Maquinação para corte de cantos**  
Milling for corners cut | Usinage pour coupe des coins

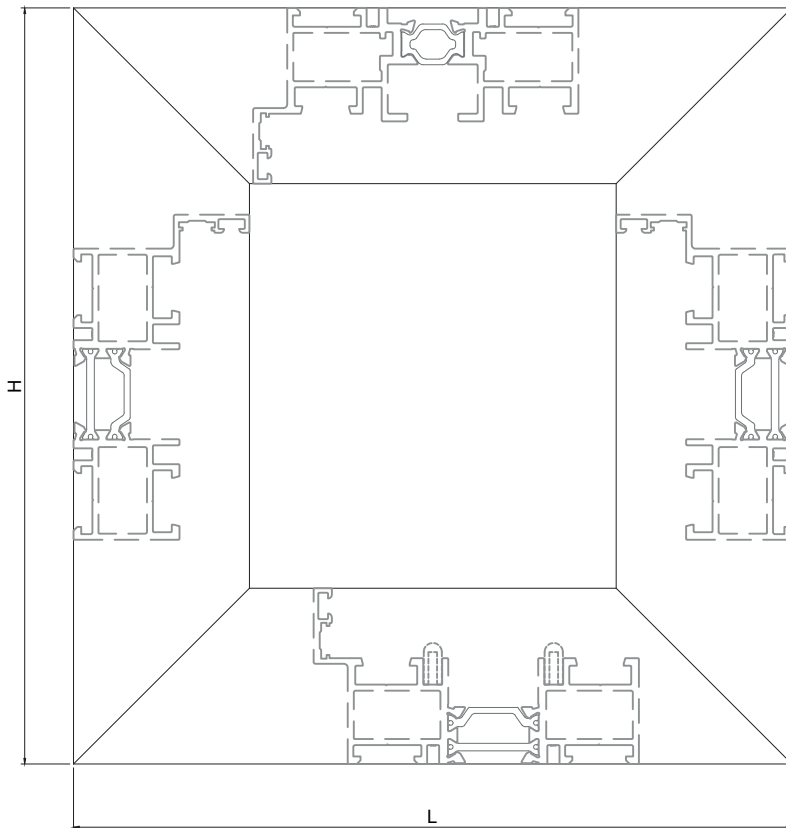
**5 - Furação para esquadros**  
Corner cleat drilling | Perçage pour équerres

**6 - Furação para varões**  
Rods drilling | Perçage pour tiges



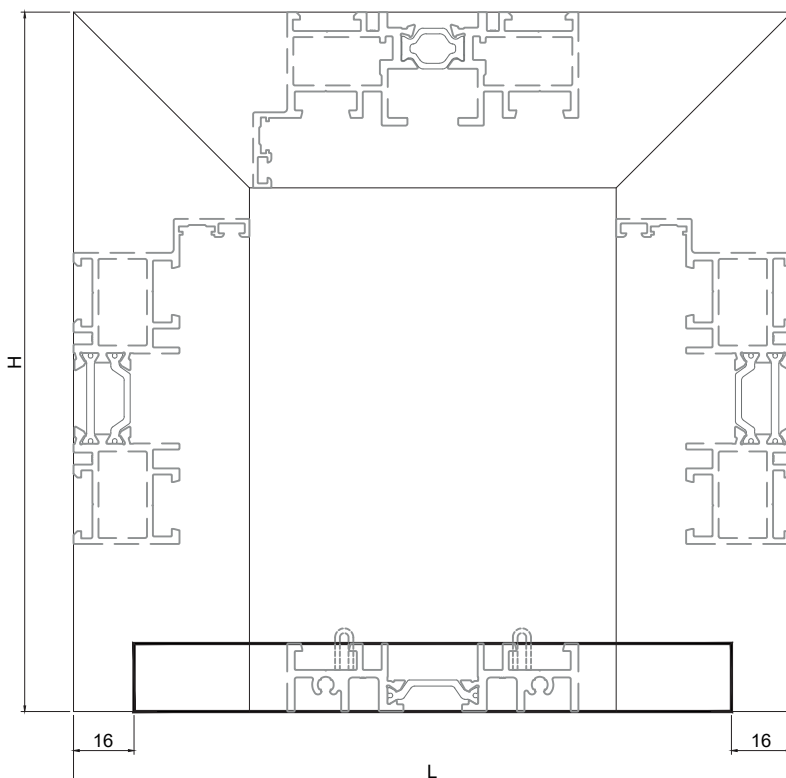
**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

**1 - Medidas de corte - Aro fixo perimetral.**  
Cut measures - Perimeter fixed frame.  
Mesures de coupe - Cadre dormant périmètre.



PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT	CORTE VERT. VERTICAL CUT	QUANT. QUANTITY	CORTE CUT
HT 01	SOLEIRA SILL PROFILE   PROFILÉ SEUIL	L	-	1	
HT 21	OMBREIRAS JAMB   JAMBAGE	-	H	2	
HT 21	PADIEIRA JAMB   JAMBAGE	L	-	1	
HT 801	GUIA INOX GUIDE   GUIDE	L-42	-	2	

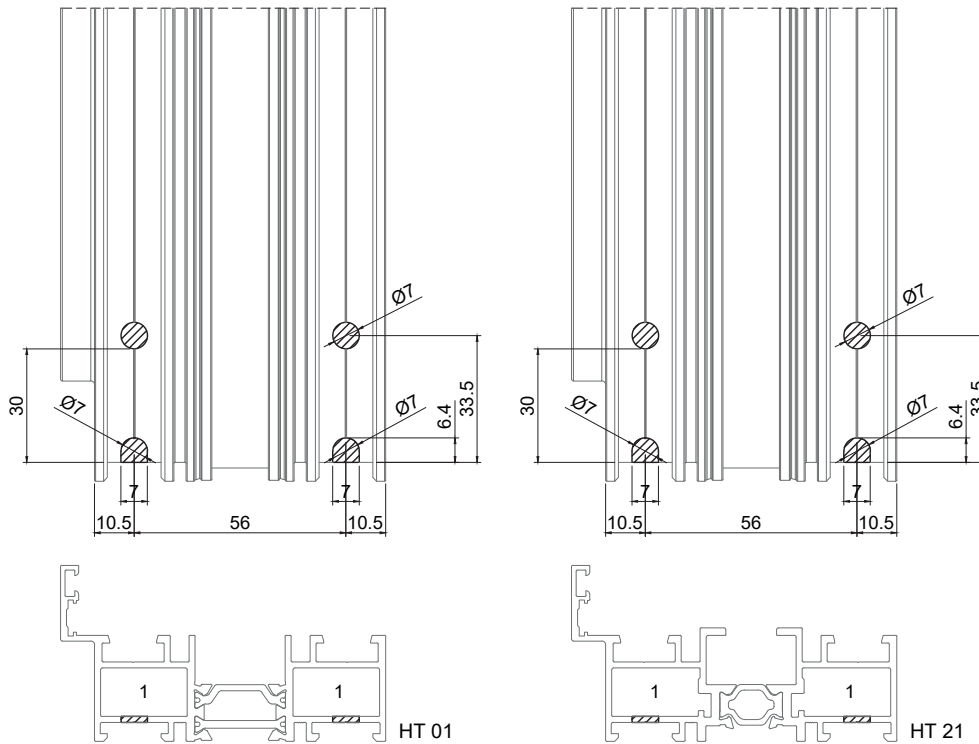
**2 - Medidas de corte - Aro fixo com soleira inferior.**  
Cut measures - Fixed frame with bottom sill.  
Mesures de coupe - Cadre dormant avec seuil inférieur.



PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT	CORTE VERT. VERTICAL CUT	QUANT. QUANTITY	CORTE CUT
HT 01	OMBREIRAS JAMB   JAMBAGE	-	H	2	
HT 21	PADIEIRA LINTEL   LINTEAU	L	-	1	
HT 49	SOLEIRA SILL PROFILE   PROFILÉ SEUIL	L-32	-	1	
HT 801	GUIA INOX GUIDE   GUIDE	L-42	-	2	

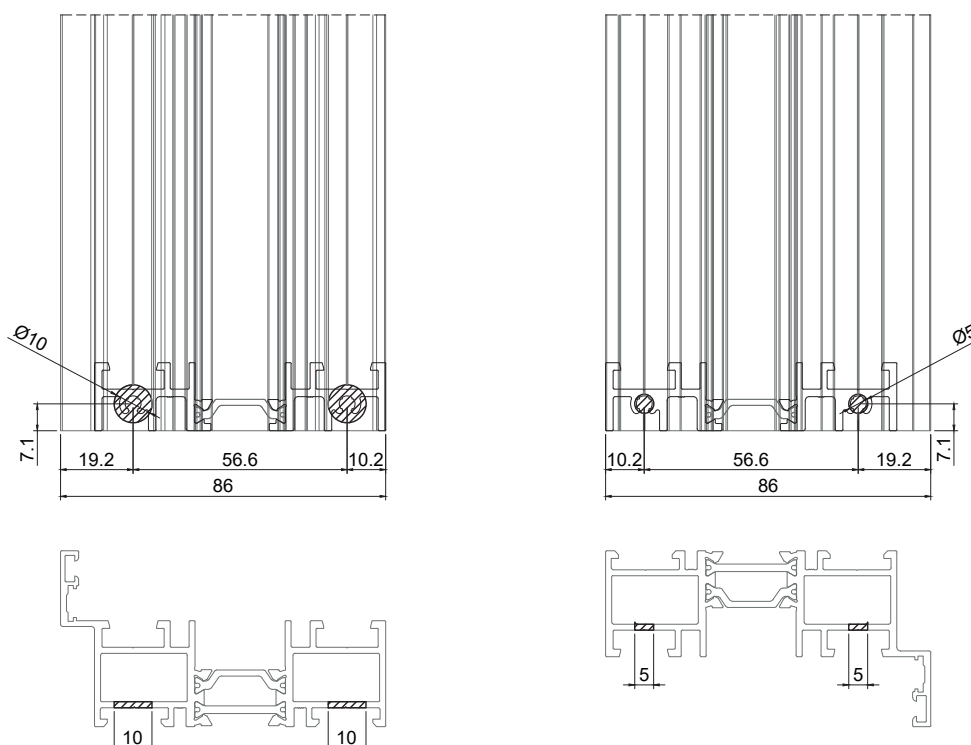
**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

**3 - Maquinação de perfis aro fixo para aplicação de esquadros.**  
Fixed frame profiles machining for corner cleat application.  
Usinage des profilés de cadre dormant pour l'application de équerres.



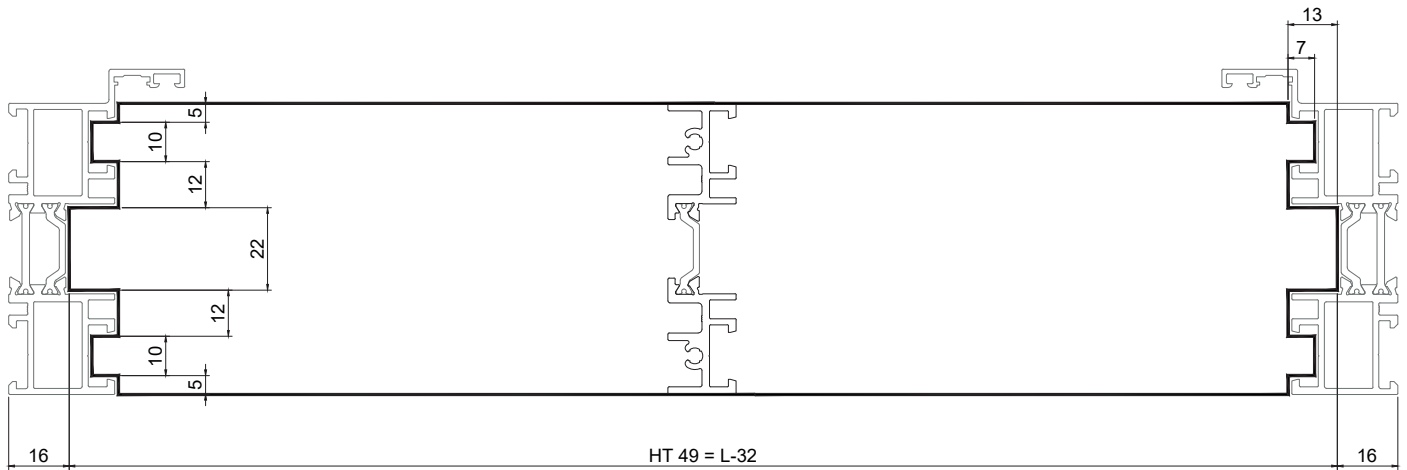
1 - ESQUADRO | BLOCKING BRACKET | EQUÉRRE HT N°1

**4 - Maquinação de perfis aro fixo para aplicação de soleira HT 49.**  
Fixed frame profiles machining for HT 49 sill.  
Usinage des profilés de cadre dormant pour l'application de seuil HT 49.



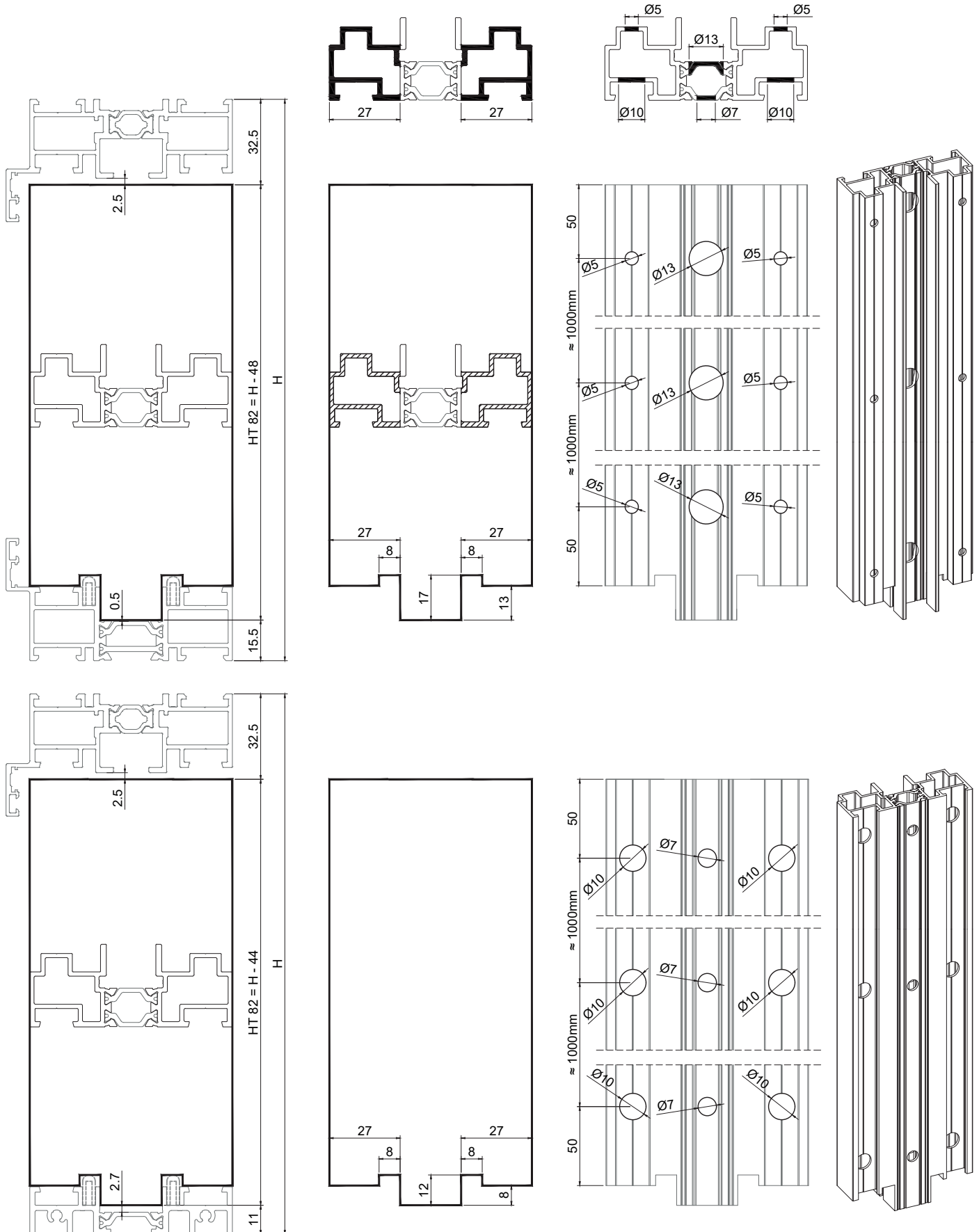
**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

- 5 - Maquinação do perfil soleira HT 49.  
HT 49 sill profile machining.  
Usinage du profilé de seuil HT 49.



**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

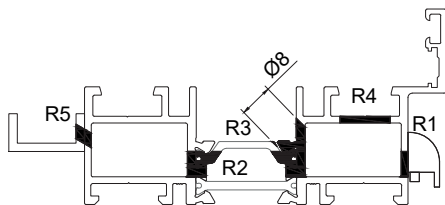
**6 - Maquinação do perfil lateral de ajuste HT 82.**  
HT 82 adjustable jamb profile machining.  
Usinage du profilé de jambage réglable HT 82.



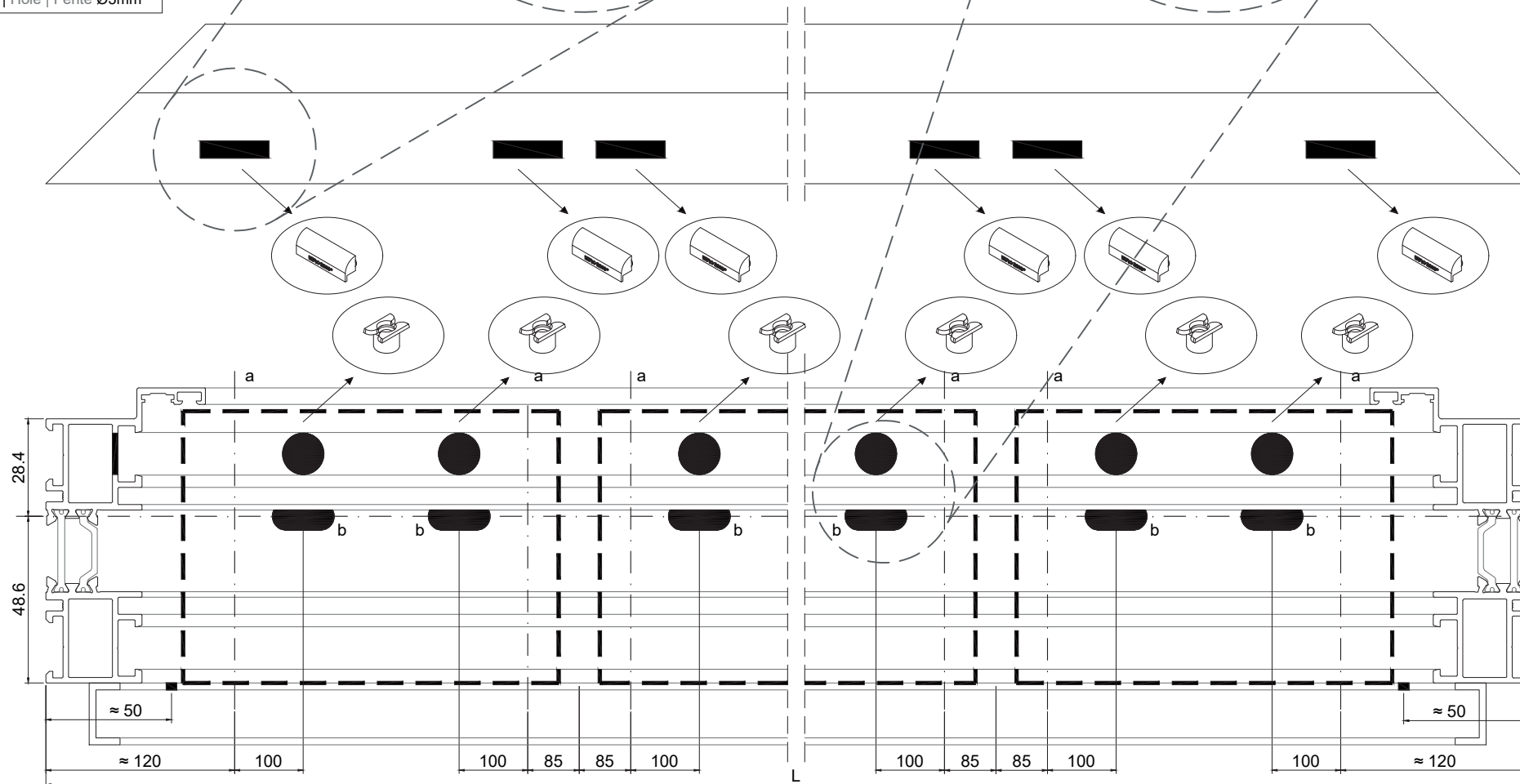
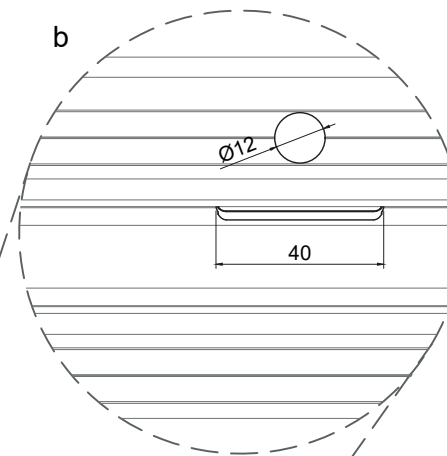
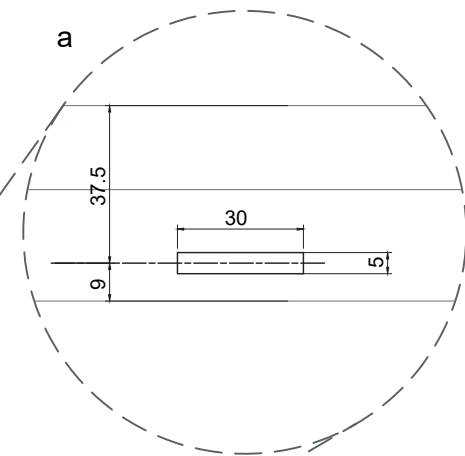
# DRENAGENS

## DRAINAGE

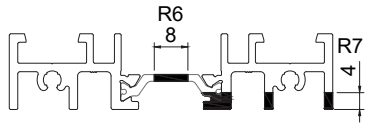
### DRAINAGES



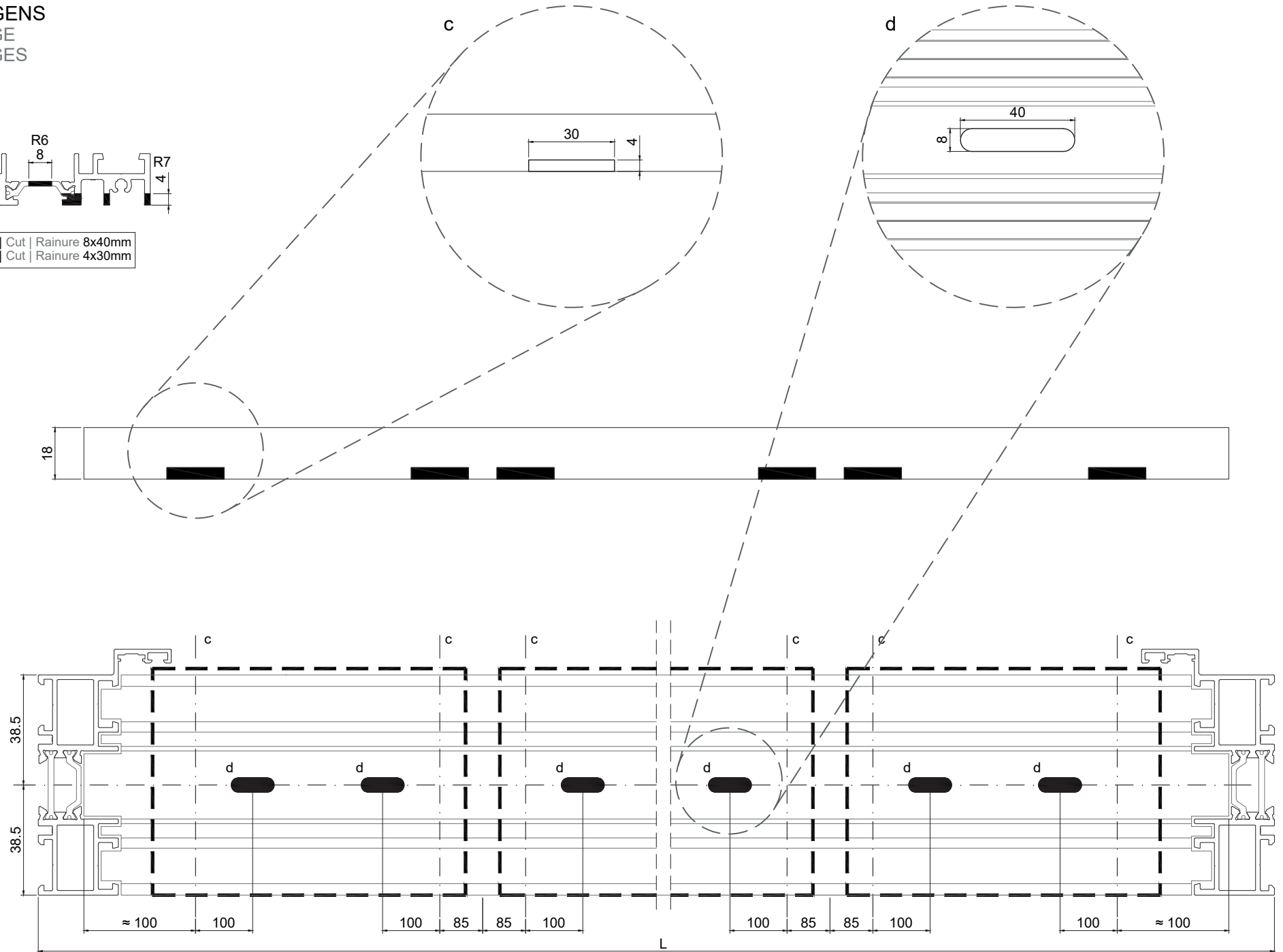
- R1:** Rasgo | Cut | Rainure 5x30mm
- R2:** Rasgo | Cut | Rainure 5x30mm
- R3:** Rasgo | Cut | Rainure 8x40mm
- R4:** Furo | Hole | Fente Ø12mm
- R5:** Furo | Hole | Fente Ø3mm



DRENAGENS  
DRAINAGE  
DRAINAGES



R6: Rasgo | Cut | Rainure 8x40mm  
R7: Rasgo | Cut | Rainure 4x30mm

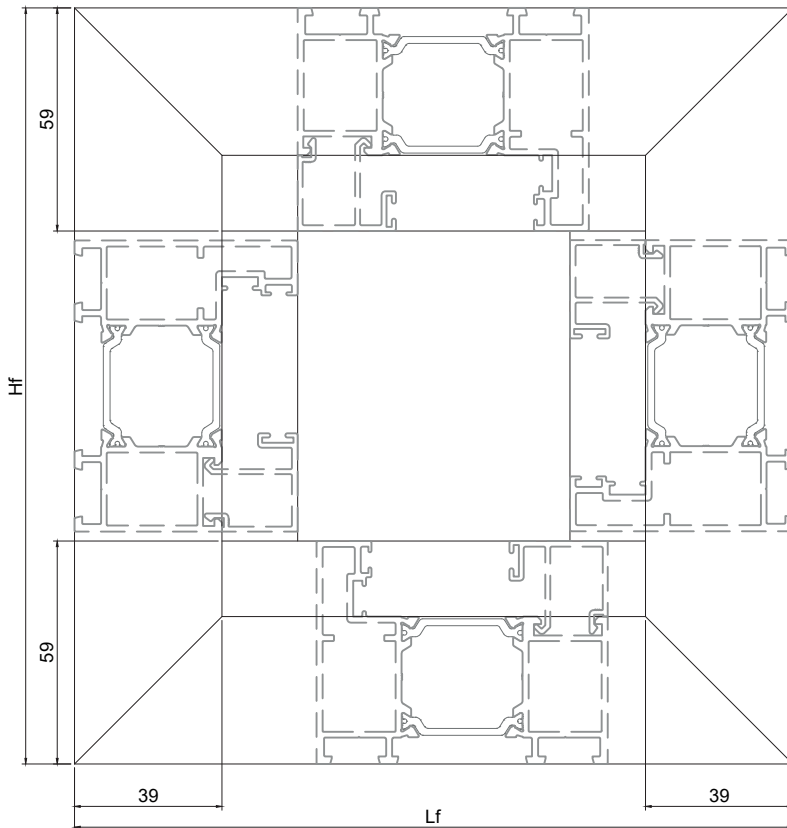


**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

**1 - Medidas de corte - Aro móvel.**

Cut measures - Mobile frame.

Mesures de coupe - Cadre ouvrant .



PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ HORIZONTAL CUT	CORTE VERT. VERTICAL CUT	QUANT. QUANTITY	CORTE CUT
HT 11	PERFIL MÓVEL MOBILE PROFILE PROFILE OUVRANT	Lf	-	2	
		-	Hf	8	
	BITE BEADS   PARCLOSE	Lf-78	Hf-118	2+2	

**2 - Maquinação de perfis aro móvel.**

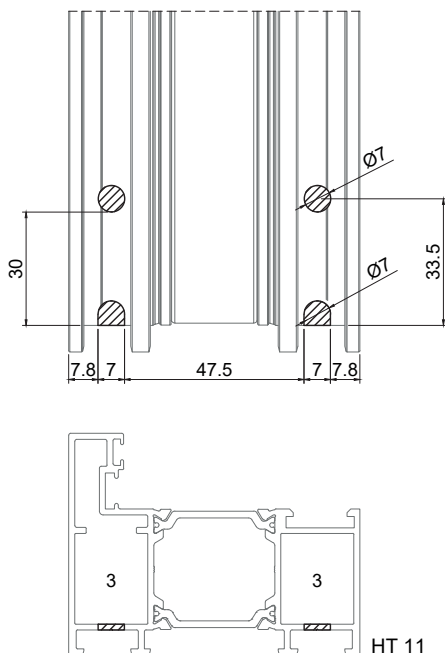
Mobile frame profiles machining.

Usinage des profilés cadre ouvrant.

**2.1- Para aplicação de esquadros.**

For corner cleat application.

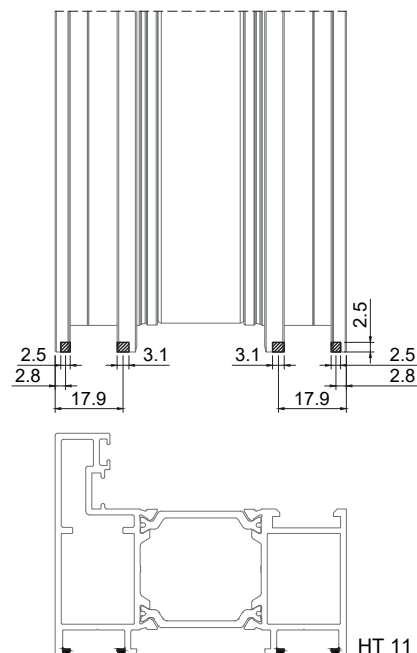
Pour l'application de équerres.



**2.2- Para aplicação de acessórios.**

For accessories application.

Pour l'application des accessoires.



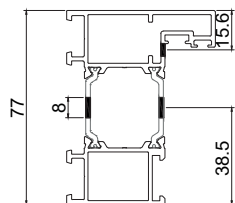
3 - ESQUADRO | BLOCKING BRACKET | ÉQUÉRRE HT Nº2

**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

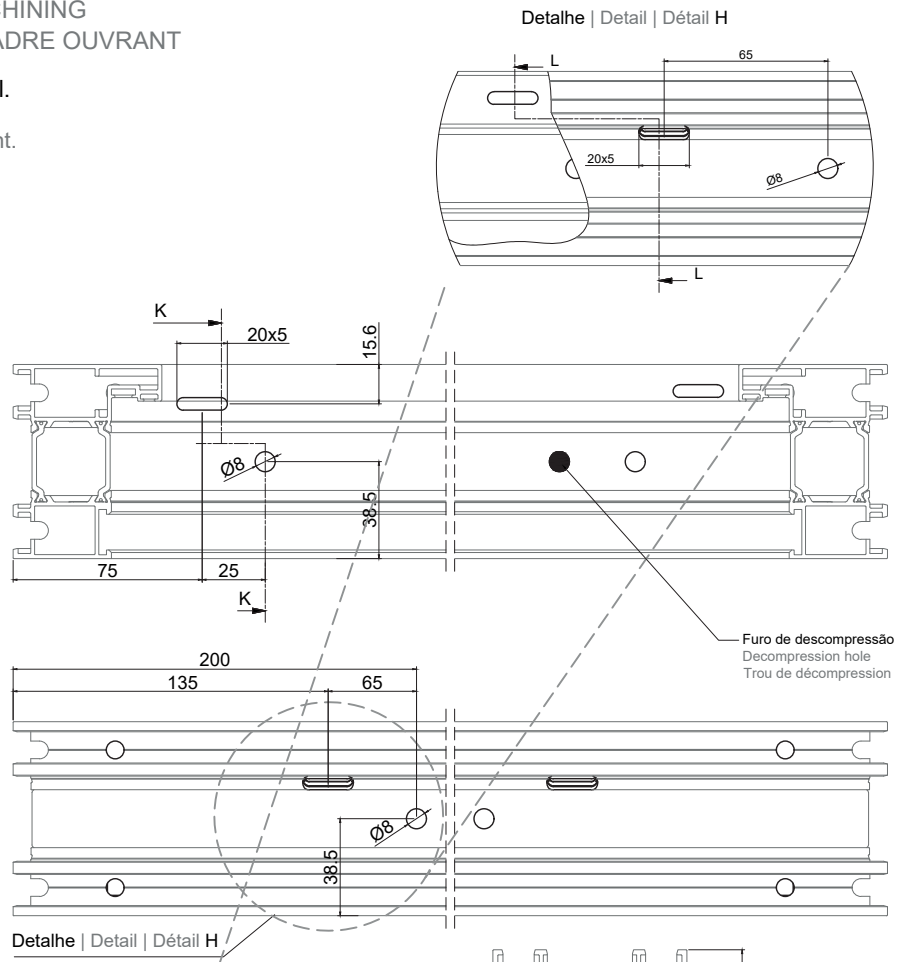
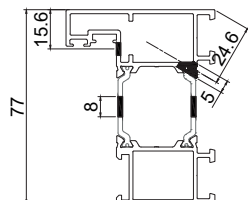
**2 - Maquinação de perfis aro móvel.**  
Mobile frame profiles machining.  
Usinage des profilés cadre ouvrant.

**2.3- Drenagem e descompressão.**  
Drainage and decompression.  
Drainage et décompression.

Corte | Cut | Coupe K-K



Corte | Cut | Coupe L-L



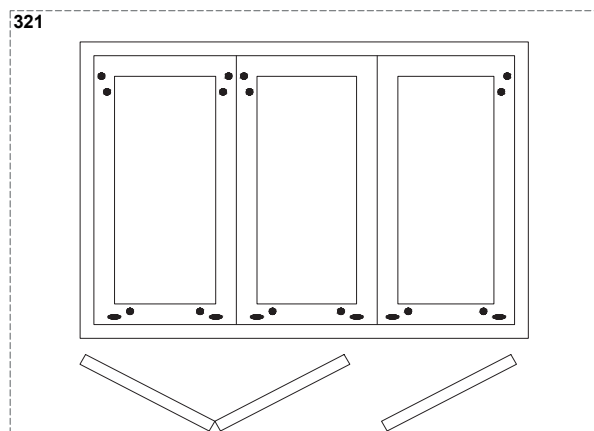
A drenagem e descompressão nos perfis verticais deverá ser feita em cima e apenas no lado das dobradiças.

Drainage and decompression in the vertical profiles must be done above and only on the hinge side.

Le drainage et la décompression dans les profilés verticaux doivent être effectués en haut et uniquement du côté charnière.

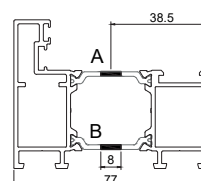
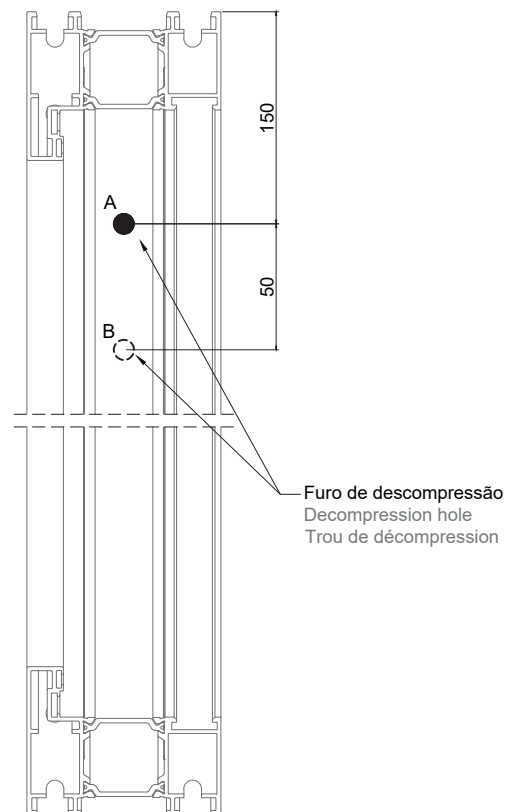
**Exemplo:**

Example | Exemple:



**LEGENDA | LEGEND | LÉGENDE**

- Rasgo 20x5mm para drenagem  
Drainage and decompression cut  
Rainure de drainage
- Furo Ø8m para drenagem e descompressão  
Drainage and decompression hole  
Fente de drainage et décompression

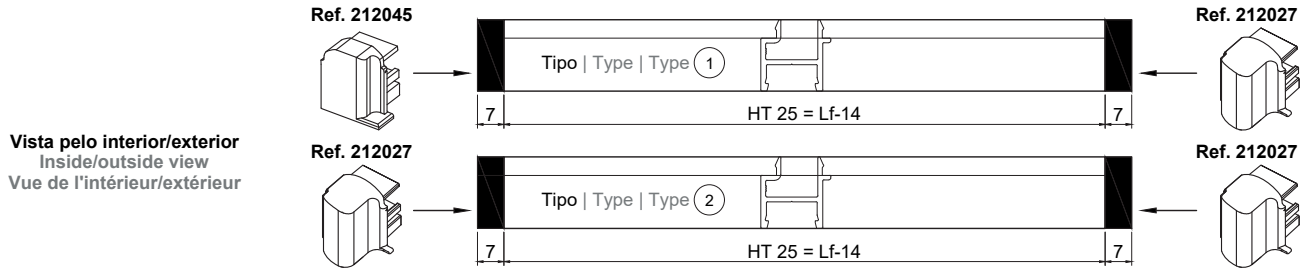
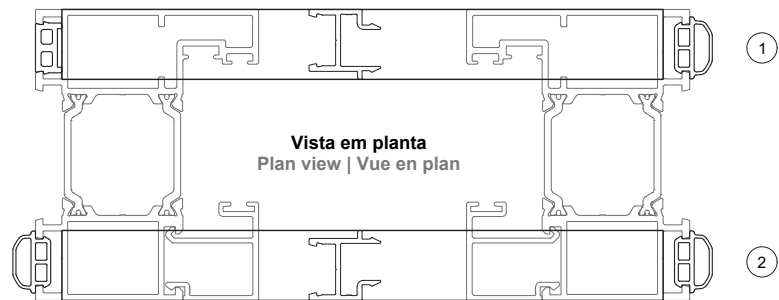




**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

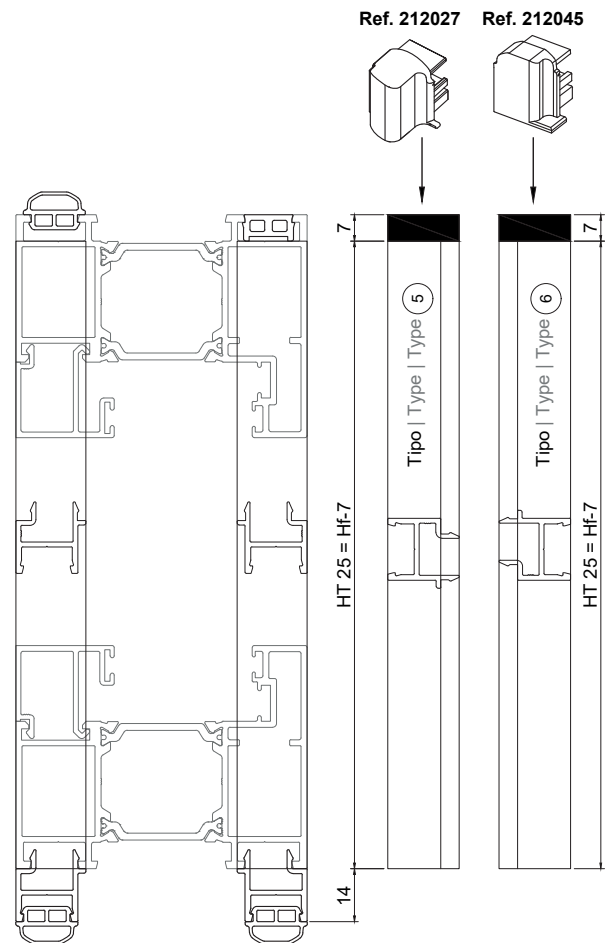
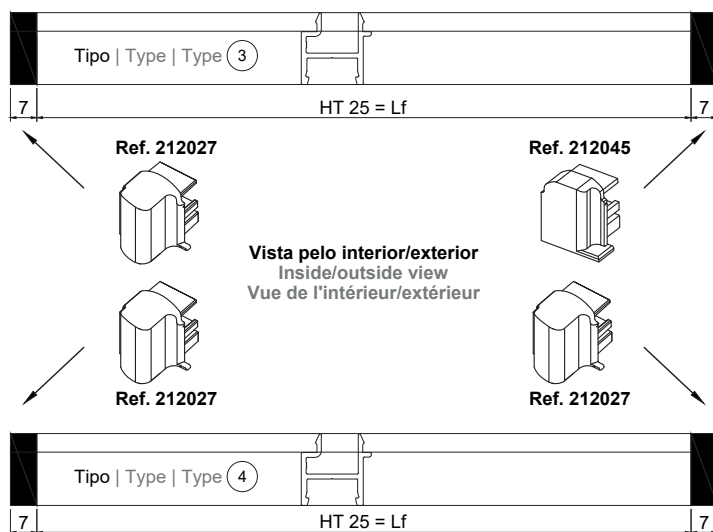
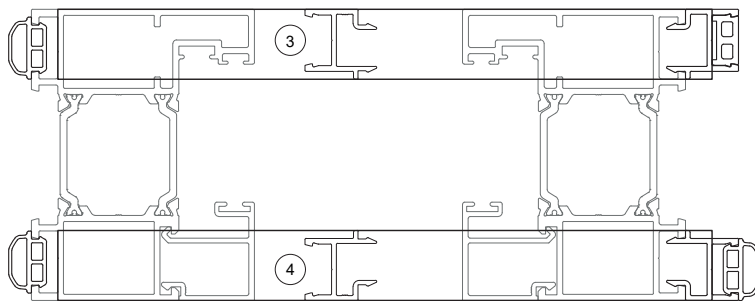
**3 - Medidas de corte do perfil horizontal HT 25.**  
HT 25 horizontal profile cut measures.  
Mesures de coupe du profilé horizontale HT 25.

**3.1- Opção A: Sem perfis verticais HT 25.**  
Option A: Without HT 25 vertical profiles.  
Option A: Sans profilés verticaux HT 25.



Vista pelo interior/exterior  
Inside/outside view  
Vue de l'intérieur/extérieur

**3.2- Opção B: Com perfis verticais HT 25.**  
Option B: With HT 25 vertical profiles.  
Option B: Avec profilés verticaux HT 25.



Vista frontal  
Front view  
Vue de face

Vista lateral pelo interior/exterior  
Inside/Outside lateral view  
Vue latérale de l'intérieur/extérieur

**IMPORTANTE | IMPORTANT | IMPORTANT:**

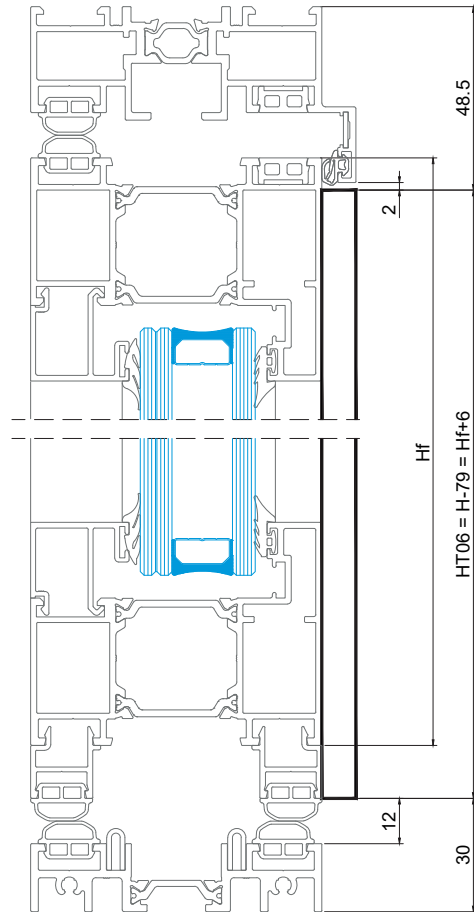
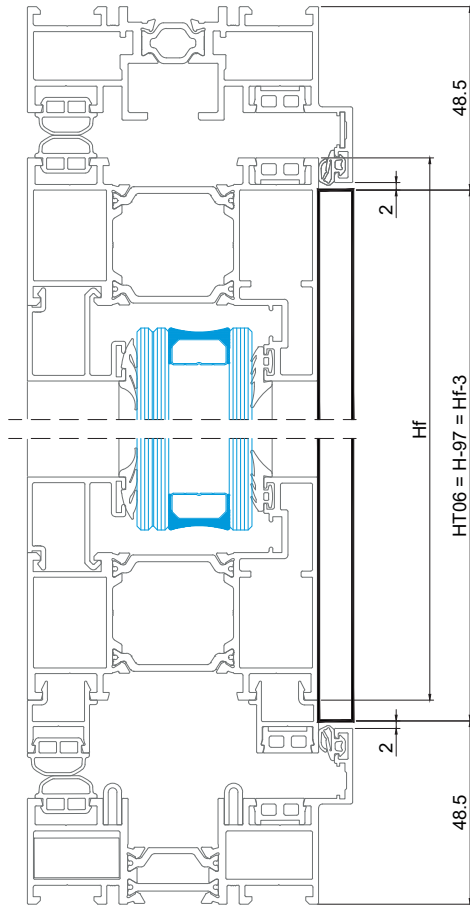
Consultar informação da secção "Maquinação do perfil complementar inferior HT 25 para aplicação de dobradiças".

Consult information in the section "HT 25 bottom complementary profile machining for hinges application".

Consulter les informations au chapitre "Usinage du profilé complémentaire inférieure HT 25 pour l'application des paumelles."

**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

**4 - Medidas de corte HT 06.**  
HT 06 cut measures.  
Mesures de coupe HT 06.

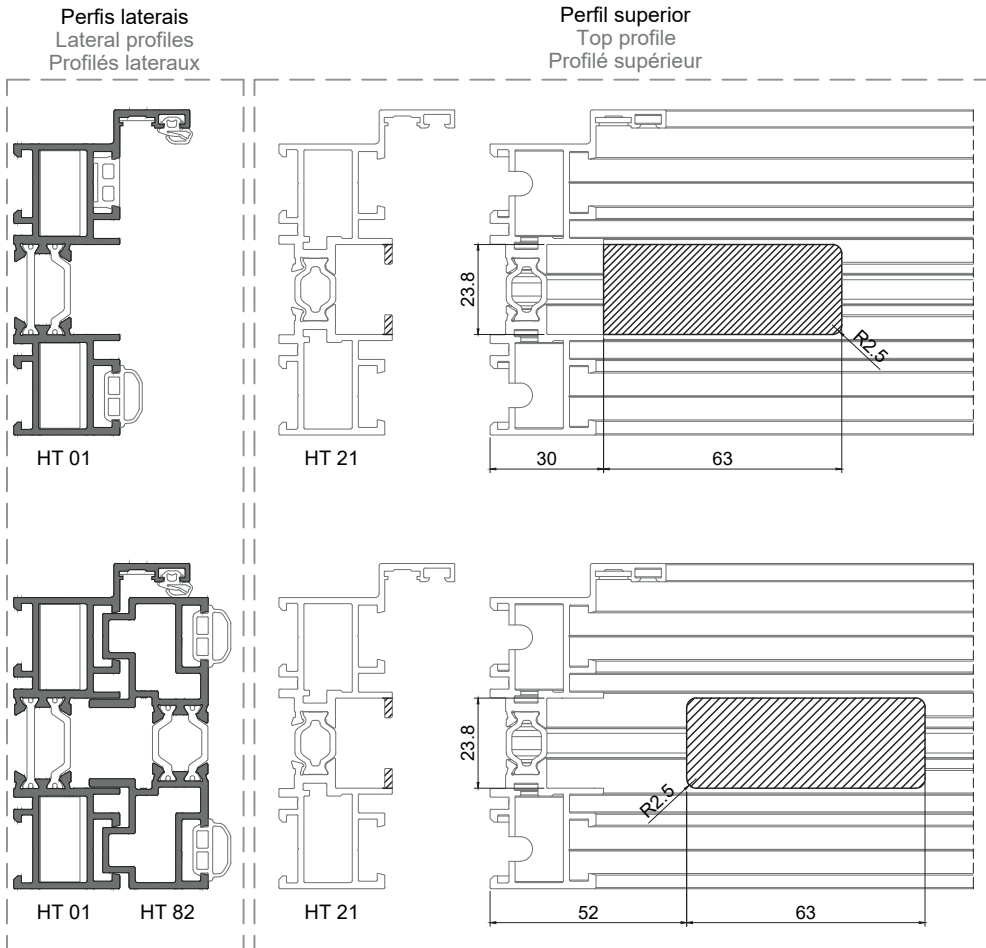
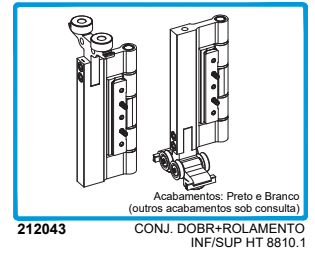


PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT CUTURE HORIZONTALE	CORTE VERT. VERTICAL CUT CUTURE VERTICALE	QUANT. QUANTITY	CORTE CUT
HT 06	PERFIL BATENTE CASEMENT PROF.   PROF. BATTANT	-	H-97 = Hf-3	1	■

PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT CUTURE HORIZONTALE	CORTE VERT. VERTICAL CUT CUTURE VERTICALE	QUANT. QUANTITY	CORTE CUT
HT 06	PERFIL BATENTE CASEMENT PROF.   PROF. BATTANT	-	H-79 = Hf+6	2	■

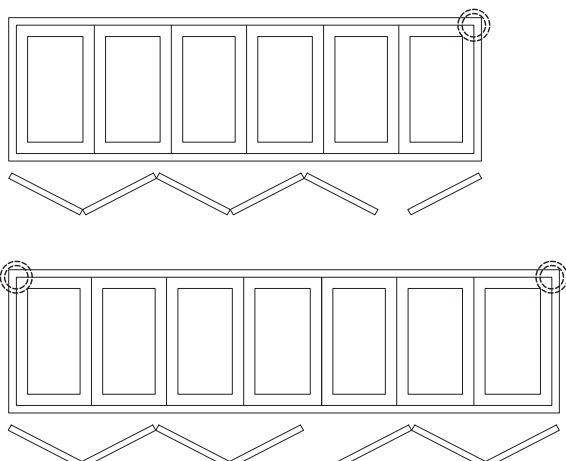
**MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS**  
PROFILES MACHINING FOR ACCESSORIES ASSEMBLY  
USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES

**1 - Maquinação da padieira HT 21 para aplicação das guias superiores.**  
HT 21 jamb profile machining for upper guides application.  
Usinage de la jambage HT 21 pour l'application des guides supérieures.

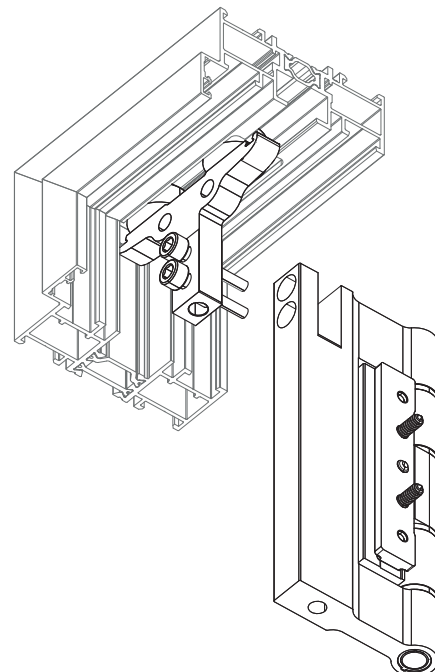


Esta maquinação serve para o caso de ser necessário substituir o acessório superior e deverá ser feita no extremo oposto à abertura das folhas (ver exemplos abaixo).  
This machining is used in case it's necessary to replace the upper accessory and should be done at the end opposite the opening of the leaves (see examples below).  
Cet usinage est utilisé dans le cas où il est nécessaire de remplacer l'accessoire supérieur et doit être fait à l'extrémité opposée à l'ouverture des vantaux (voir exemples ci-dessous).

**Exemplos | Examples | Exemples:**

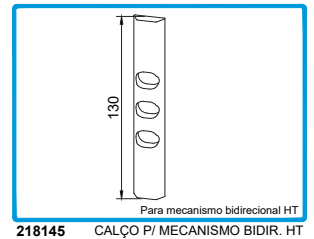
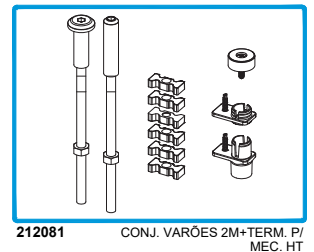
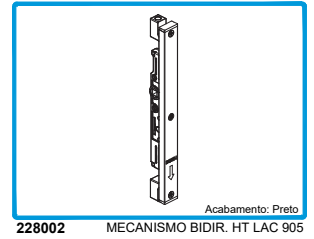
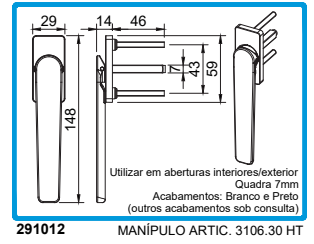
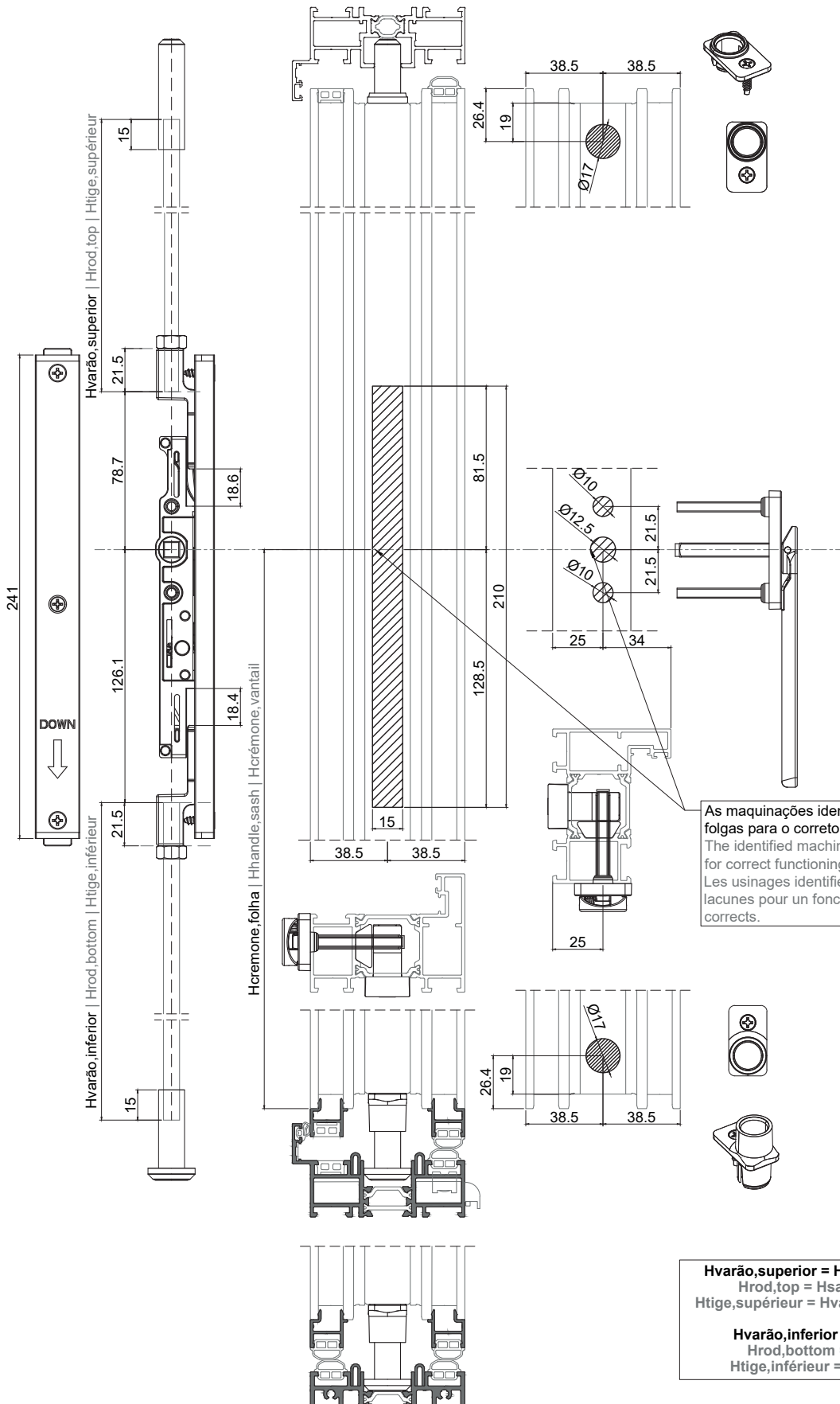


2 possibilidades  
2 possibilités  
2 possibilités



**MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS**  
PROFILES MACHINING FOR ACCESSORIES ASSEMBLY  
USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES

**2 - Maquinação para mecanismo e manípulo - aberturas interior e exterior.**  
Mechanism and handle machining - **inwards and outwards opening.**  
Usinage pour mécanisme et poignée - **ouverture vers l'intérieur et extérieure.**

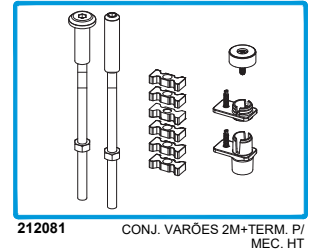
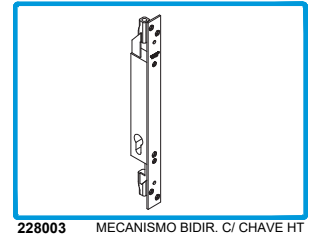
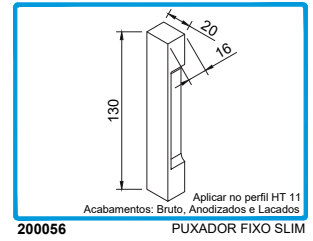
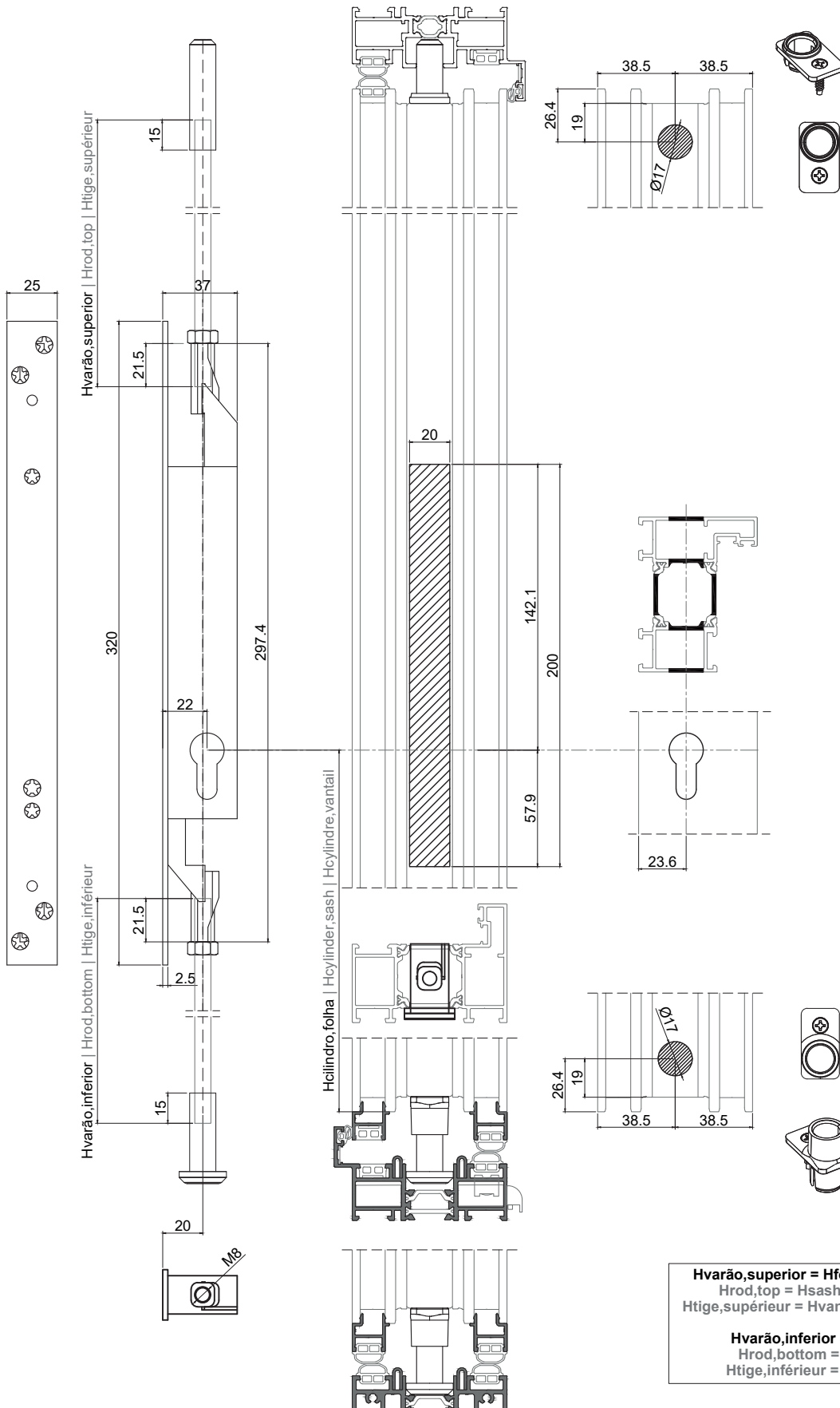


As maquinações identificadas devem ficar sem folgas para o correto funcionamento e estética.  
The identified machinations must be free of gaps for correct functioning and aesthetics.  
Les usinages identifiés doivent être exempts de lacunes pour un fonctionnement et une esthétique corrects.

Hvarão,superior = Hfolha - Hcremone,folha - 92  
Hrod,top = Hsash - Hhandle,sash - 92  
Htige,supérieur = Hvantail - Hcrémone,vantail - 92  
  
Hvarão,inferior = Hcremone,folha - 125  
Hrod,bottom = Hhandle,sash - 125  
Htige,inférieur = Hcrémone,vantail - 125

**MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS**  
PROFILES MACHINING FOR ACCESSORIES ASSEMBLY  
USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES

**3 - Maquinação para mecanismo com chave e manípulo.**  
Mechanism with key and handle machining.  
Usinage pour mécanisme avec clé et poignée.

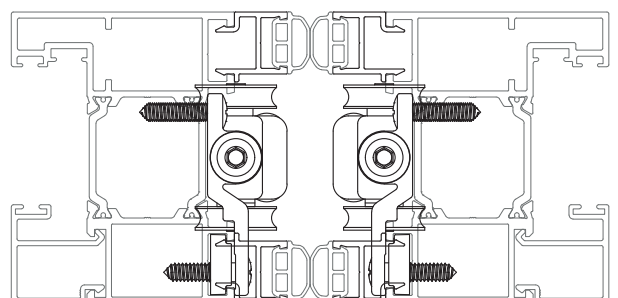
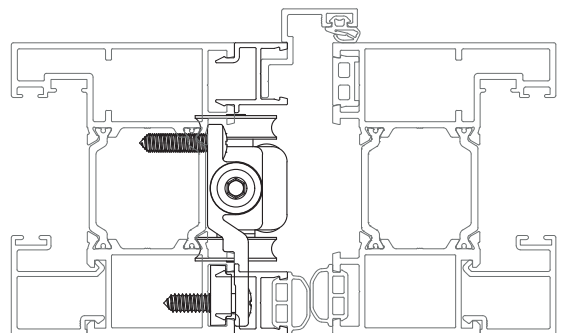
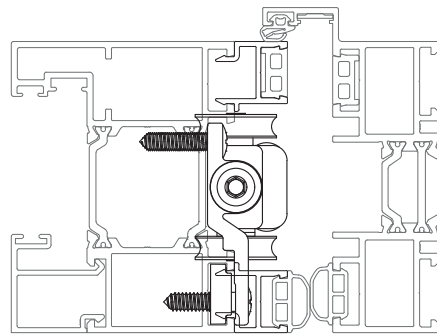
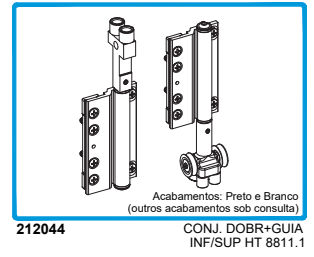
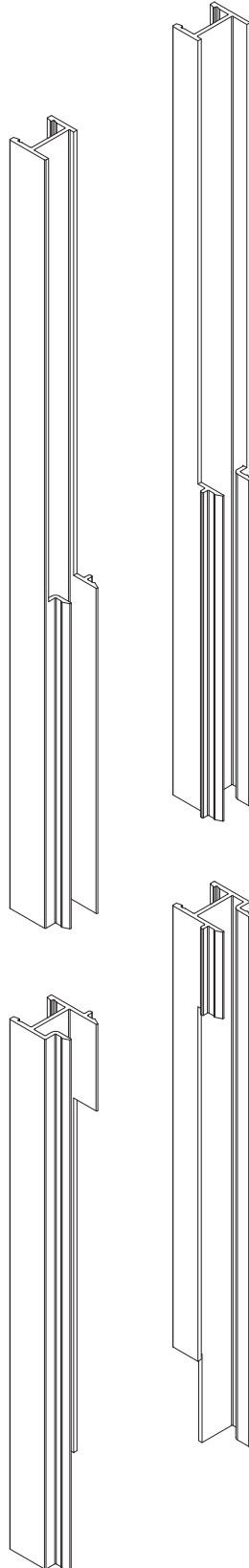
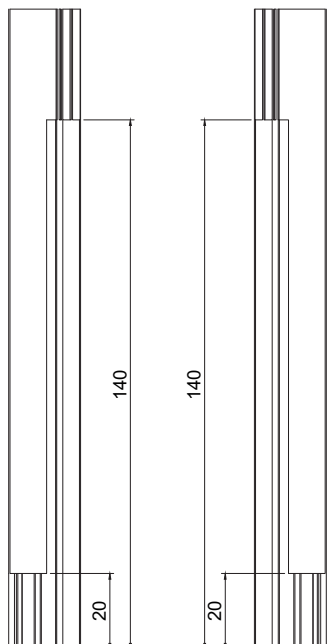
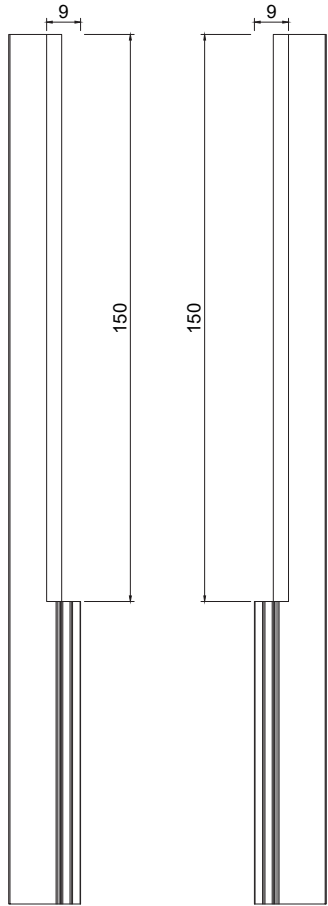
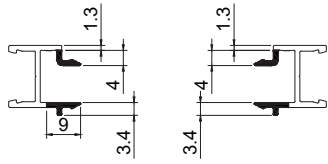


**Hvarão,superior = Hfolha - Hcilindro,folha - 194**  
Hrod,top = Hsash - Hcylinder,sash - 194  
Htige,supérieur = Hvantail - Hcylindre,vantail - 194

**Hvarão,inferior = Hcilindro,folha - 73**  
Hrod,bottom = Hcylinder,sash - 73  
Htige,inférieur = Hcylindre,vantail - 73

**MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS**  
PROFILES MACHINING FOR ACCESSORIES ASSEMBLY  
USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES

**5 - Maquinação do perfil complementar HT 25 vertical para aplicação de dobradiças.**  
Vertical HT 25 complementary profile machining for hinges application.  
Usinage du profilé complémentaire HT 25 vertical pour l'application des paumelles.



# VI

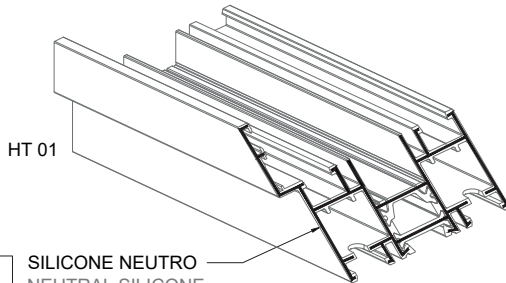
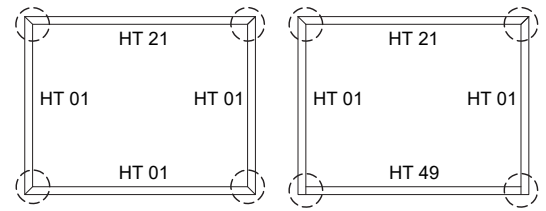
## MONTAGEM DOS PERFIS PROFILES ASSEMBLY | ASSEMBLAGE DES PROFILÉS

MONTAGEM DOS PERFIS ARO FIXO FIXED FRAME PROFILES ASSEMBLY ASSEMBLÉE DES PROFILÉS DORMANT	VI.1
MONTAGEM DOS PERFIS ARO MÓVEL MOBILE FRAME PROFILES ASSEMBLY ASSEMBLÉE DES PROFILÉS OUVRANT	VI.2
MONTAGEM DOS ACESSÓRIOS ACCESSORIES ASSEMBLY ASSEMBLAGE DES ACCESSOIRES	VI.3

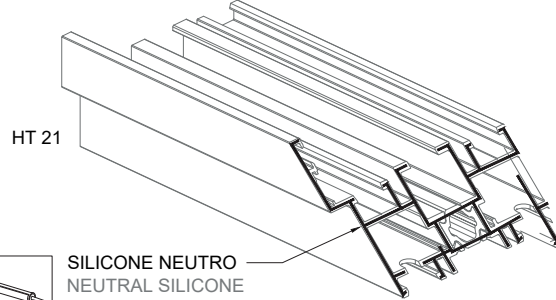
**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

**1 - Montagem a 45°.**  
45° assembly.  
Assemblage à 45°.

**1.1 - Aplicar silicone à cor do perfil ou neutro na zona das esquadrias.**  
Apply silicone in the same color as the profiles or neutral in the frame's areas.  
Appliquer du silicone sur la couleur des profilés ou neutre dans la zone des cadres.

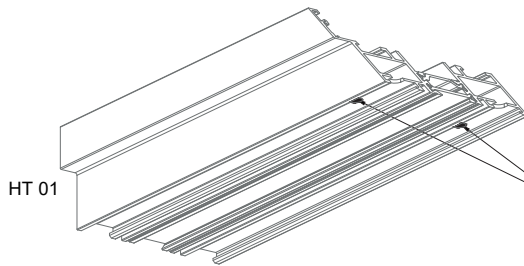
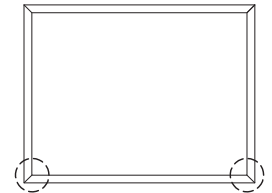


**SILICONE NEUTRO**  
NEUTRAL SILICONE  
SILICONE NEUTRE



**SILICONE NEUTRO**  
NEUTRAL SILICONE  
SILICONE NEUTRE

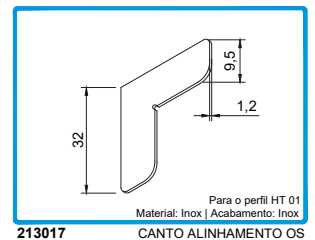
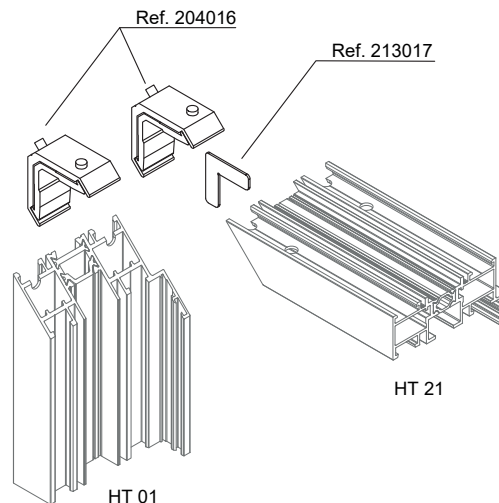
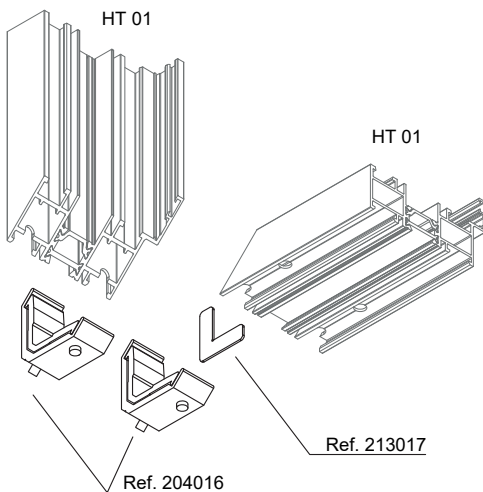
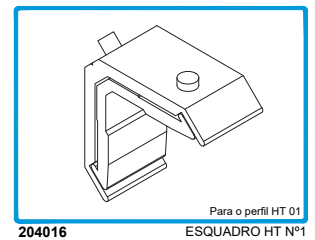
**1.2 - Antes de se colocarem os esquadros de aperto, deverão encher-se as câmaras dos perfis fixos com silicone neutro, de modo a ficarem seladas.**  
Before placing the corner cleats, the fixed frame profiles channels must be filled with neutral silicone, in order to be sealed.  
Avant d'installer les étriers de serrage, les chambres des profilés fixes doivent être remplies de silicone neutre afin d'être scellées.



**SILICONE NEUTRO**  
NEUTRAL SILICONE  
SILICONE NEUTRE



**1.3 - Aplicação dos esquadros e cantos de alinhamento e preenchimento de todas as zonas de aperto dos esquadros, com silicone neutro.**  
Corner cleats and alignment corners application and filling all the tightening areas of the corner cleats with neutral silicone.  
Application des équerres et angles d'alignement et remplissage de toutes les zones de serrage des équerres avec du silicone neutre.

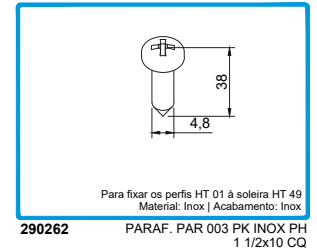
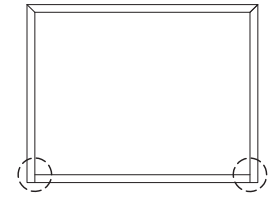
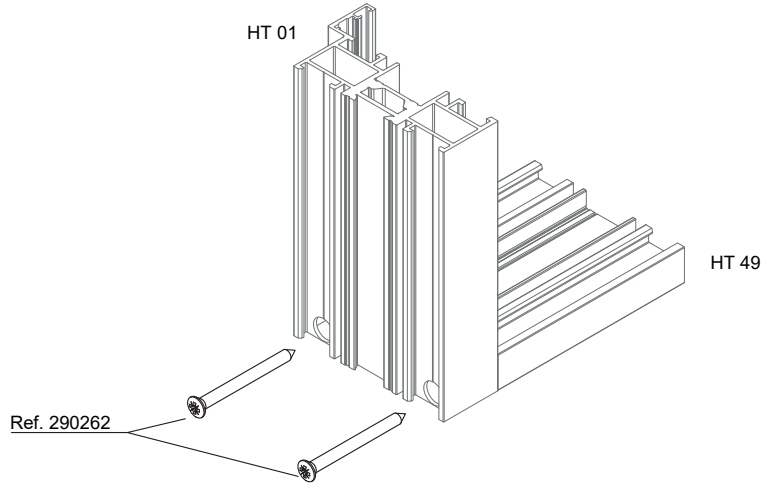




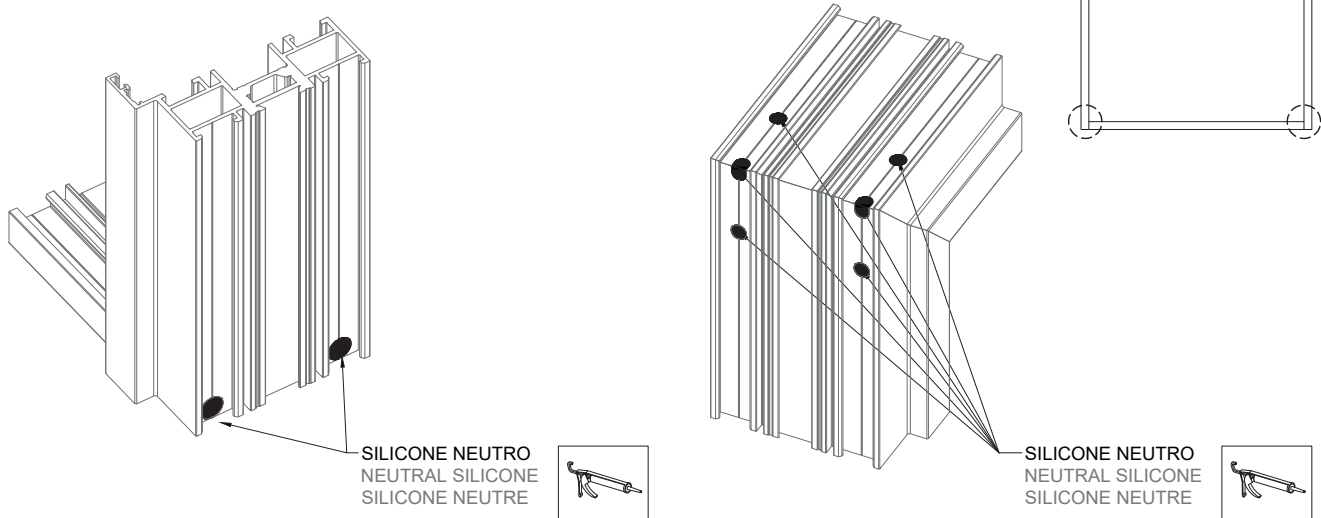
**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

**2 - Montagem a 90°.**  
90° Assembly.  
Assemblage à 90°.

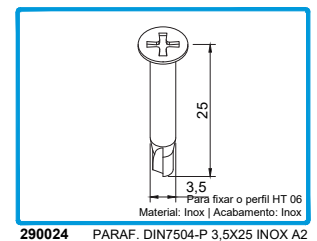
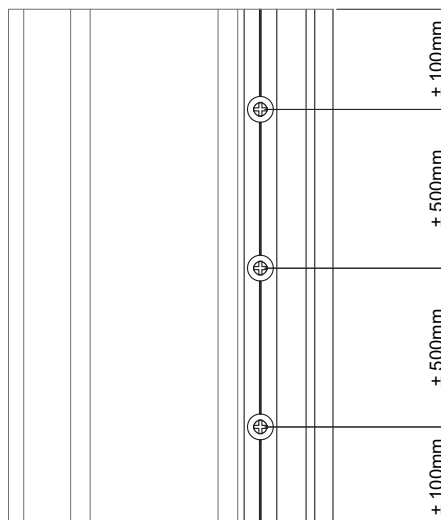
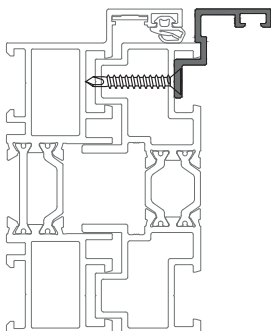
**2.1 - Fixação dos perfis ombreira HT 01 e soleira HT 49 usando parafusos.**  
HT 01 jamb and HT 49 sill profiles fixation using screws.  
Fixation des profilés jambage HT 01 et seuil HT 49 à l'aide de vis.



**2.2 - Enchimento das câmaras nos 4 lados do aro fixo e colocação do aro ao sítio.**  
Filling the chambers on the 4 sides of the fixed frame and placing the frame in place.  
Remplissage des chambres sur les 4 côtés du cadre dormant et mise en place du cadre.



**2.3 - Fixação do perfil complementar batente.**  
Casement complementary profile fixation.  
Fixation du profilé complémentaire battant.



**É necessário escarear os furos efetuados de forma a embeber a cabeça do parafuso.**  
It is necessary to countersink the drilled holes in order to embed the screw head.  
Il est nécessaire de fraiser les trous percés afin d'encaster la tête de vis.

**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

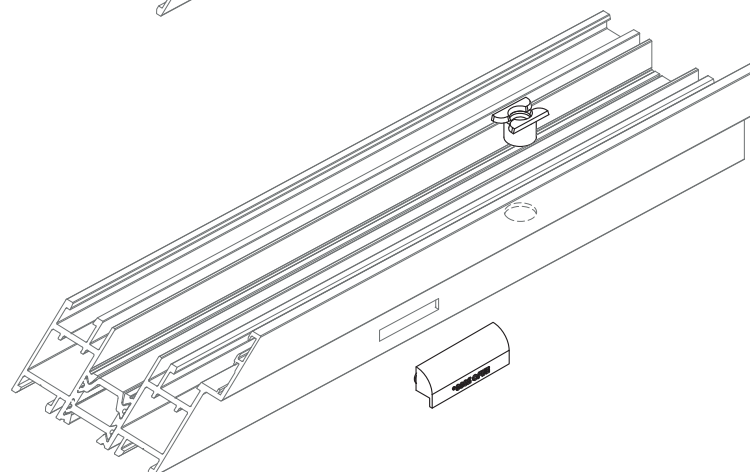
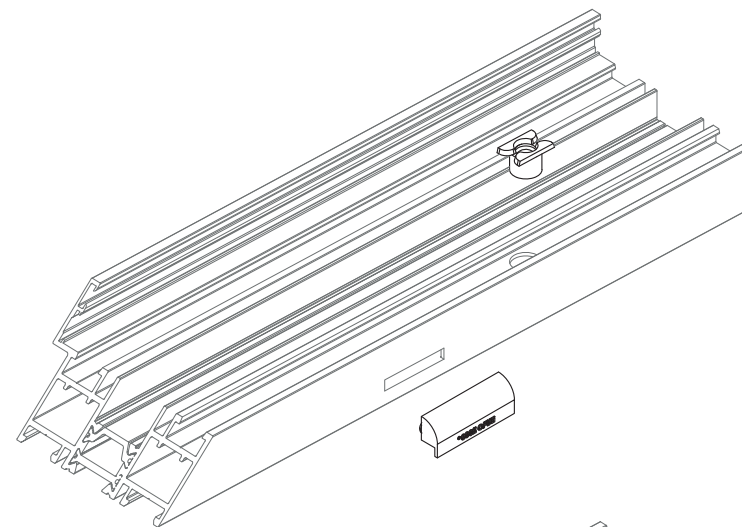
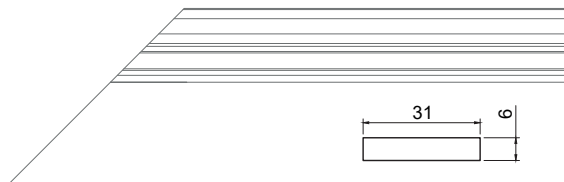
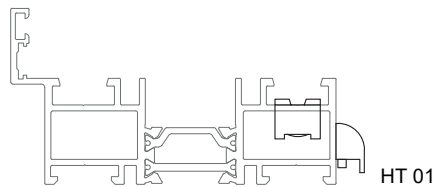
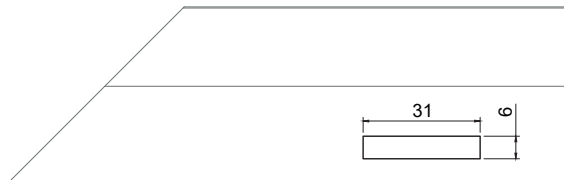
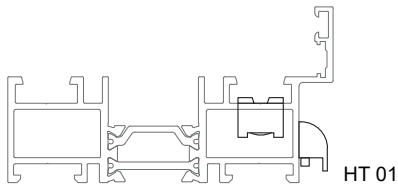
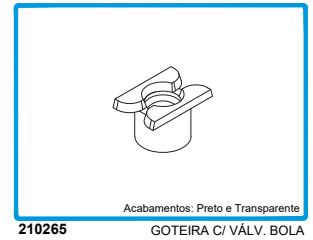
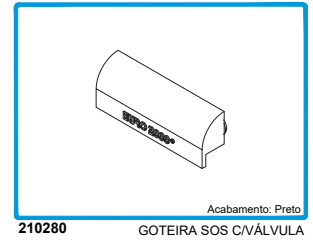
**3 - Colocação de goteiras nos aros fixos.**

Drips placing in fixed frames.  
Placement des clapets sur les cadres dormants.

Colocar as goteiras pelo exterior do perfil e fixá-las com pontos de silicone nas extremidades.

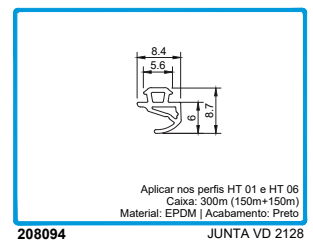
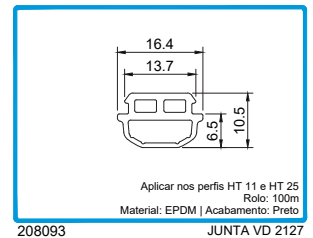
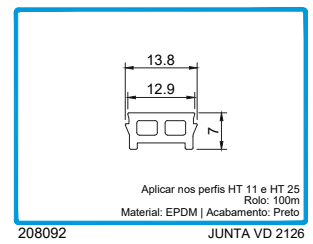
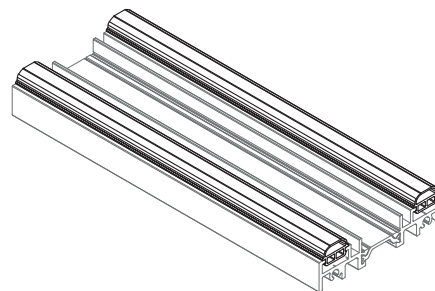
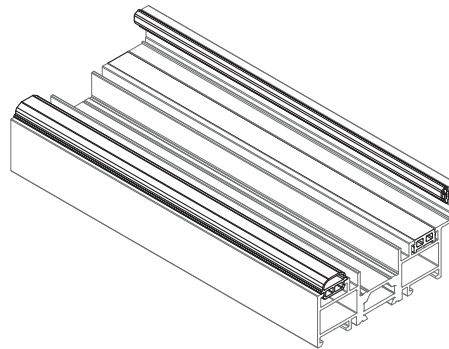
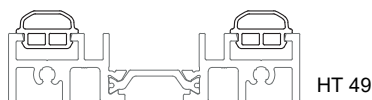
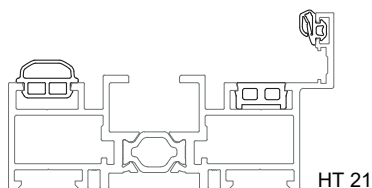
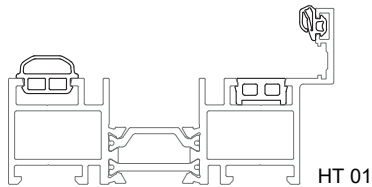
Place the drips from the outside of the profile and fix them with silicone points at the edges.

Placer les clapets à l'extérieur du profilé et fixer-les avec des points de silicone aux extrémités.



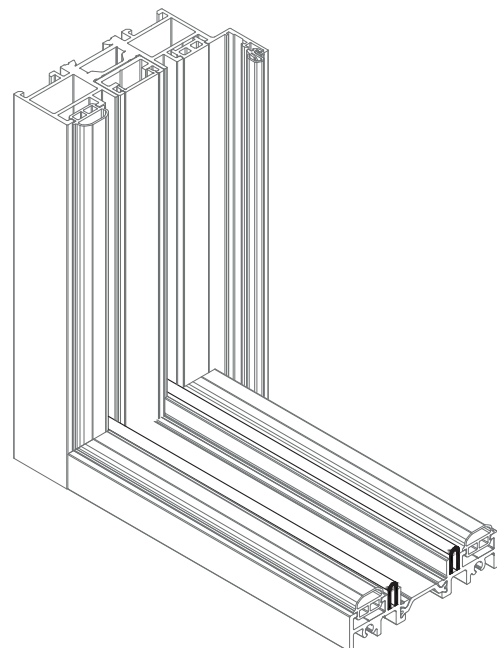
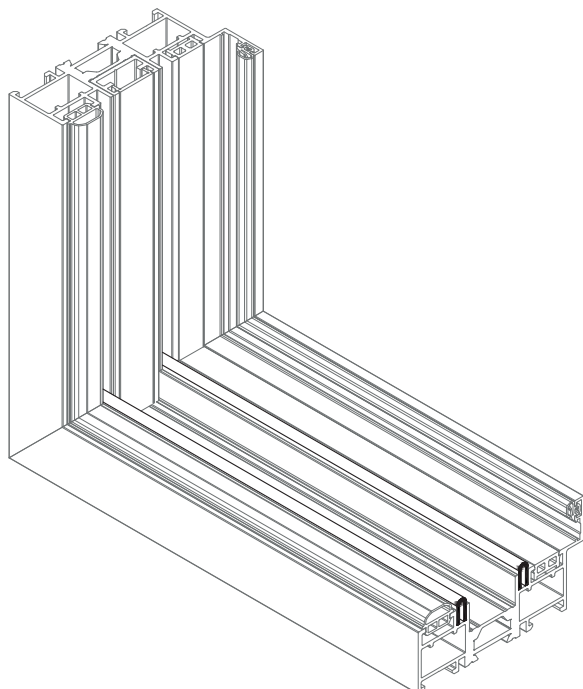
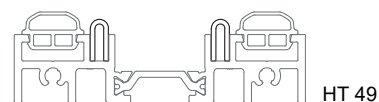
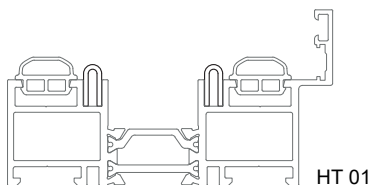
**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

**4 - Aplicação de vedantes nos aros fixos.**  
Seals application in fixed frames.  
Application des joints sur les cadres dormants.



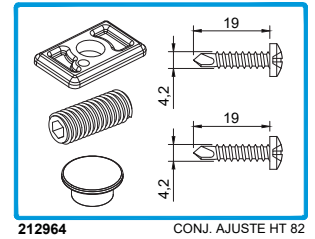
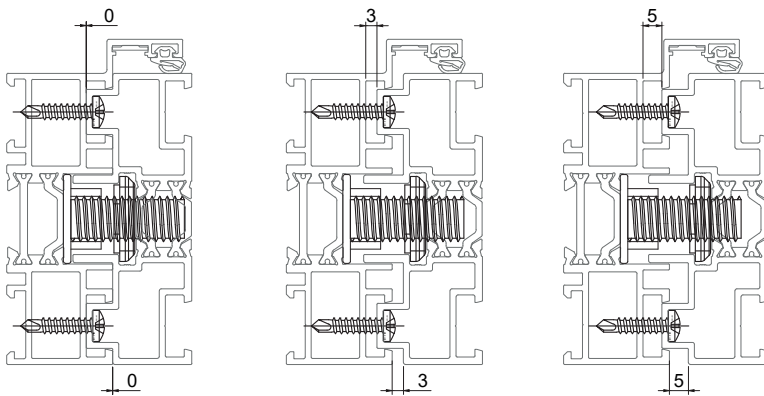
**5 - Aplicação do perfil guia HT 801 nos aros fixos.**  
HT 801 rail profile application in fixed frames.  
Aplicação du profilé de guide HT 801 sur les cadres dormants.

O perfil HT 801 deverá ser aplicado nas soleiras, conforme esquemas abaixo:  
The HT 801 profile must be applied in the sills, according to the schemes below:  
Le profilé HT 801 doit être appliqué aux seuils, selon les schémas ci-dessous:

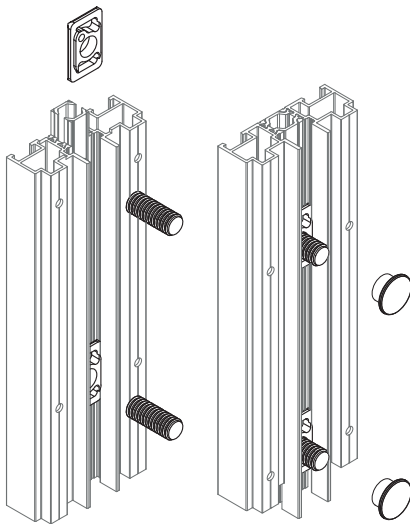


**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

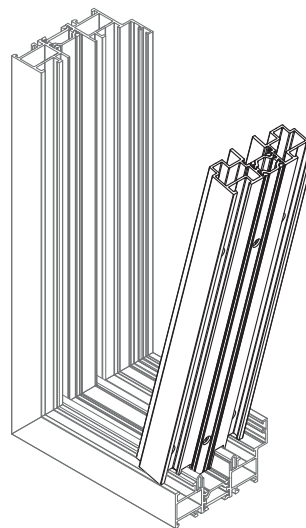
**6 - Aplicação do perfil lateral de ajuste HT 82.**  
HT 82 adjustable jamb profile application.  
Application du profilé de jambage réglable HT 82.



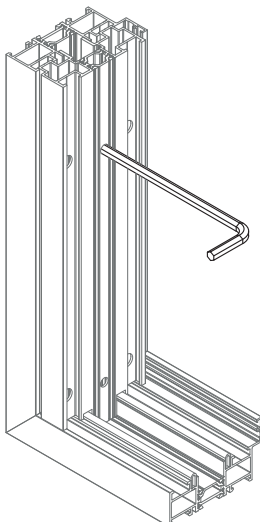
**PASSO | STEP | ÉTAPE 1:**  
Colocação dos acessórios no perfil HT 82.  
Accessories application in the HT 82 profile.  
Fixation d'accessoires au profilé HT 82.



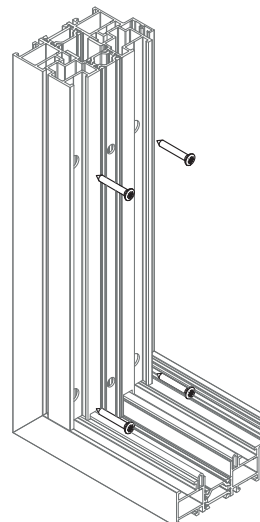
**PASSO | STEP | ÉTAPE 2:**  
Colocação do perfil HT 82 nos perfis laterais do aro fixo.  
Placement of the HT 82 profile on the side profiles of the fixed frame.  
Poser du profilé HT 82 sur les profilés latéraux du cadre dormant.



**PASSO | STEP | ÉTAPE 3:**  
Ajustar a posição do perfil HT 82.  
Adjust the position of the HT 82 profile.  
Ajuster la position du profilé HT 82.



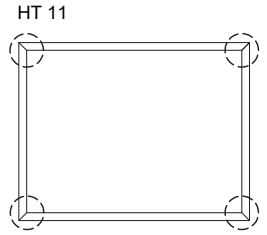
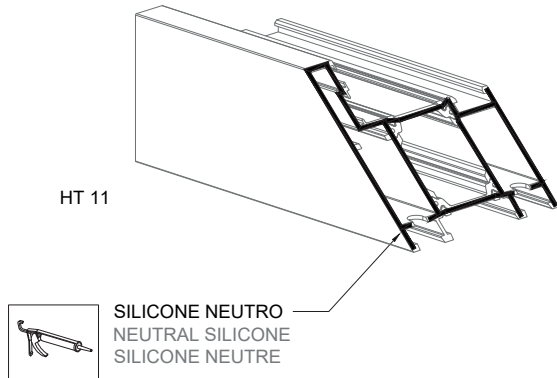
**PASSO | STEP | ÉTAPE 4:**  
Fixação do perfil HT 82 ao aro fixo.  
Fixing the HT 82 profile to the fixed frame.  
Fixation du profilé HT 82 au cadre dormant.



**MONTAGEM DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS OUVRANTS

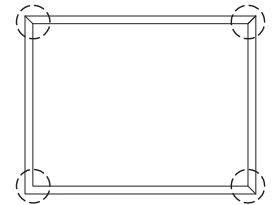
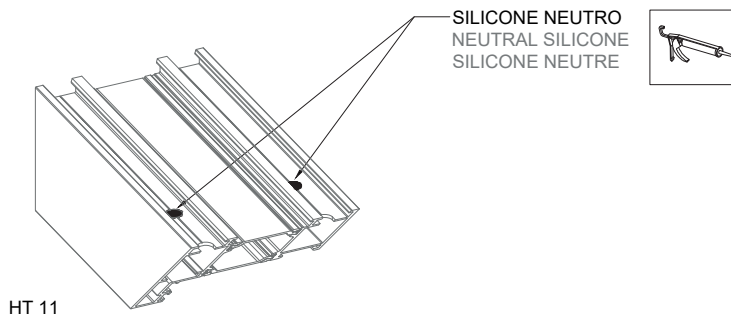
**1 - Aplicar silicone à cor do perfil ou neutro na zona das esquadrias.**

Apply silicone in the same color as the profiles or neutral in the frame's areas.  
Appliquer du silicone sur la couleur des profilés ou neutre dans la zone des cadres.



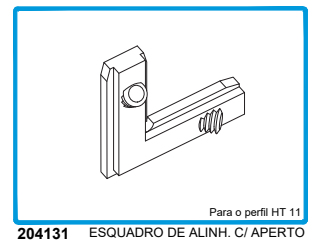
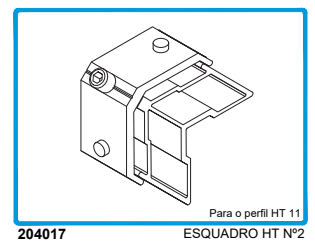
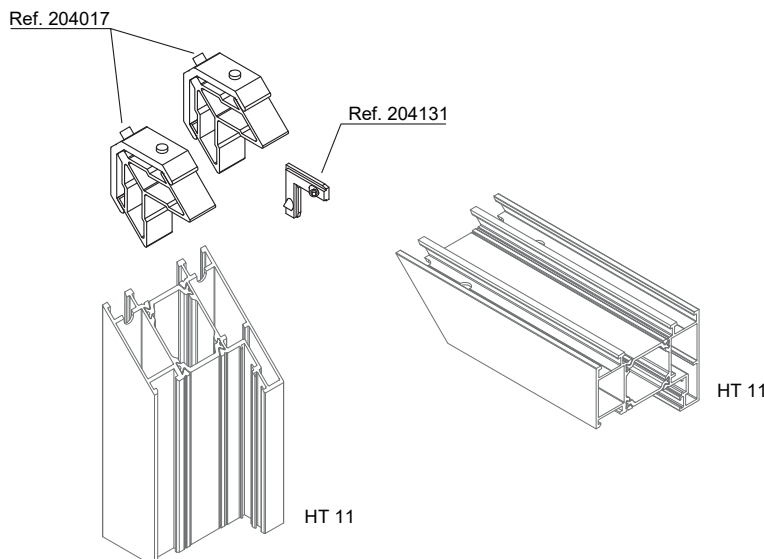
**2 - Antes de se colocarem os esquadros de aperto, deverão encher-se as câmaras dos perfis fixos com silicone neutro, de modo a ficarem seladas.**

Before placing the corner cleats, the fixed frame profiles channels must be filled with neutral silicone, in order to be sealed.  
Avant d'installer les étriers de serrage, les chambres des profilés fixes doivent être remplies de silicone neutre afin d'être scellées.



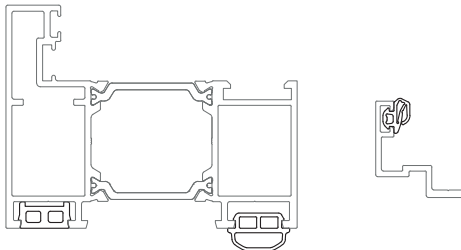
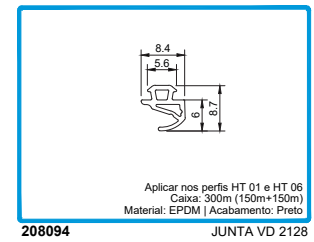
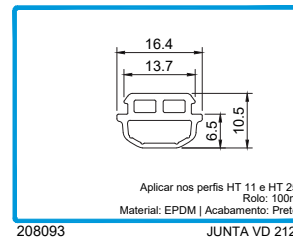
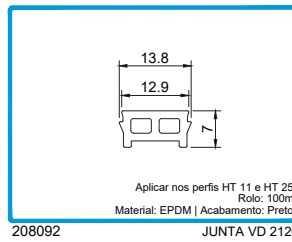
**3 - Aplicação dos esquadros e cantos de alinhamento e preenchimento de todas as zonas de aperto dos esquadros, com silicone neutro.**

Corner cleats and alignment corners application and filling all the tightening areas of the corner cleats with neutral silicone.  
Application des équerres et angles d'alignement et remplissage de toutes les zones de serrage des équerres avec du silicone neutre.

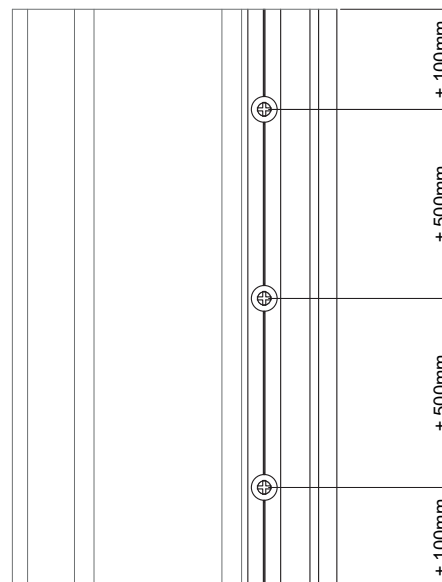
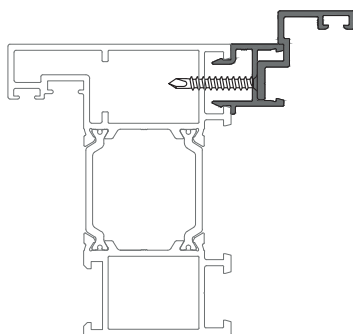
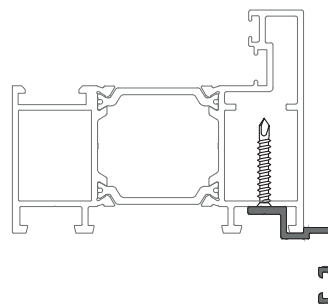
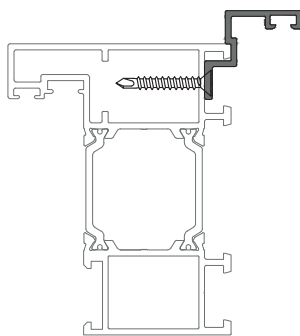
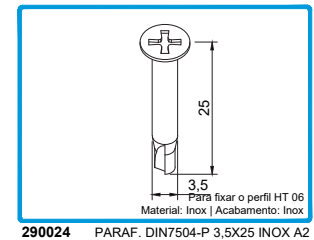


**MONTAGEM DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS OUVRANTS

**4 - Aplicação de vedantes.**  
Seals application.  
Application des joints.



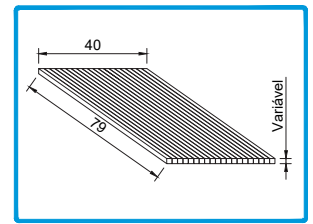
**5 - Fixação do perfil complementar batente.**  
Casement complementary profile fixation.  
Fixation du profilé complémentaire battant.



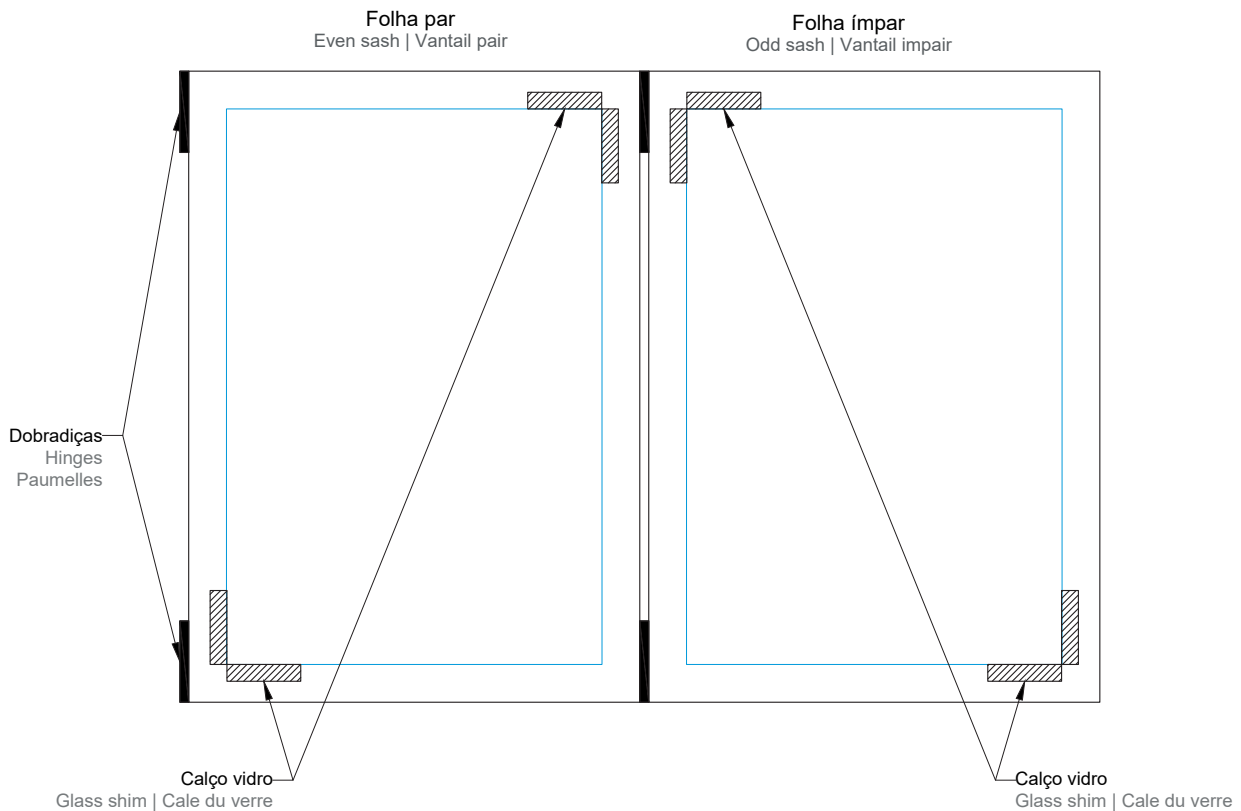
É necessário escarear os furos efetuados de forma a embeber a cabeça do parafuso.  
It is necessary to countersink the drilled holes in order to embed the screw head.  
Il est nécessaire de fraiser les trous percés afin d'encastrer la tête de vis.

**MONTAGEM DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS OUVRANTS

**6 - Aplicação dos calços de vidro.**  
Glass shims application.  
Application des cales du verre.



**218113** CALÇO PARA VIDRO 79x40x2  
**218109** CALÇO PARA VIDRO 79x40x3  
**218111** CALÇO PARA VIDRO 79x40x4  
**218112** CALÇO PARA VIDRO 79x40x5



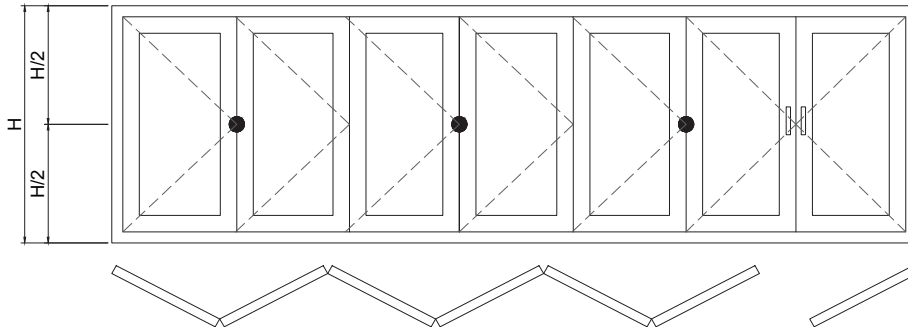
**Os calços de vidro deverão ser sempre aplicados de forma simétrica entre folhas consecutivas.**  
Glass shims should always be applied symmetrically between consecutive sheets.  
Les cales de verre doivent toujours être appliquées symétriquement entre les feuilles consécutives.

**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

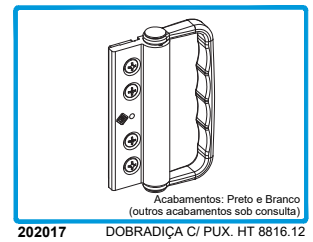
1 - Aplicação das dobradiças com puxador.  
Pulling hinges application.  
Application des paumelles avec poignée.

**EXEMPLO | EXAMPLE | EXEMPLE**

Tipologia 761 - abertura interior  
Typology 761 - inward opening | Typologie 761 - ouverture vers l'intérieur



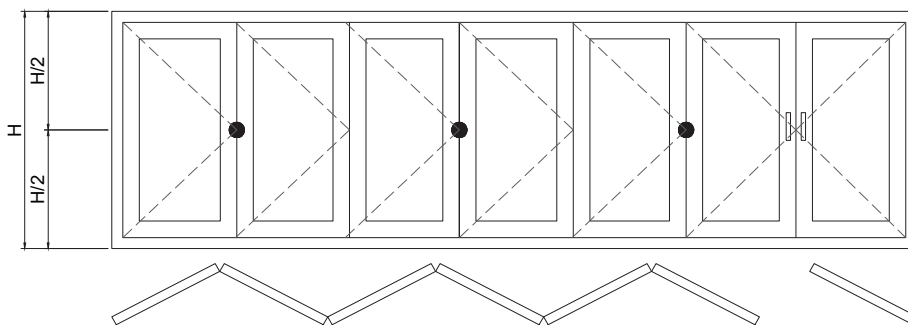
● Posição de aplicação  
Application position  
Position d'application



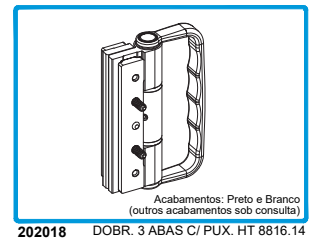
2 - Aplicação das dobradiças 3 lemes com puxador.  
3 Flaps pulling hinges application.  
Application des paumelles de 3 lames avec poignée.

**EXEMPLO | EXAMPLE | EXEMPLE**

Tipologia 761 - abertura exterior  
Typology 761 - outward opening | Typologie 761 - ouverture vers l'extérieur



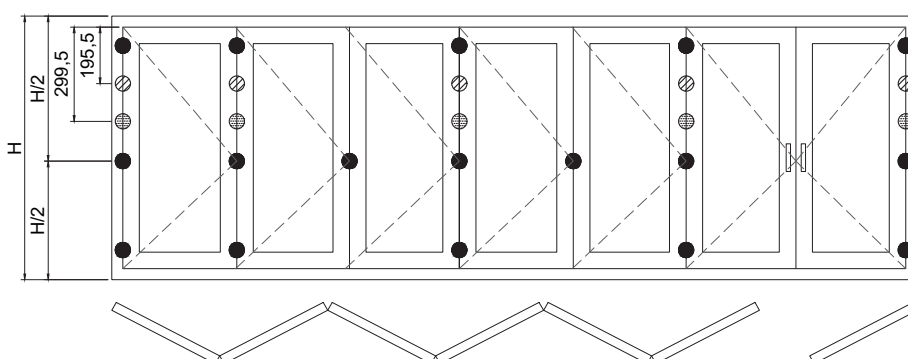
● Posição de aplicação  
Application position  
Position d'application



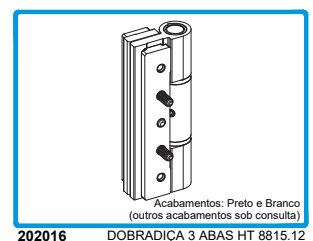
3 - Aplicação das dobradiças 3 abas.  
3 Flaps hinges application.  
Application des paumelles de 3 lames.

**EXEMPLO | EXAMPLE | EXEMPLE**

Tipologia 761 - abertura interior  
Typology 761 - inward opening | Typologie 761 - ouverture vers l'intérieur



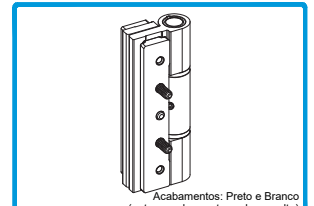
- Quantidade Base (para folhas com P<90kg e H<2200mm)  
Standard Quantity (for sashes with P<90kg and H<2200mm)  
Quantité Standard (pour vantaux avec P<90kg et H<2200mm)
- ⊗ Aumento 1 (para folhas com P<90kg e 2200mm<H<3000mm)  
Increase 1 (for sashes with P<90kg and 2200mm<H<3000mm)  
Augmente 1 (pour vantaux avec P<90kg et 2200mm<H<3000mm)
- Aumento 2 (para folhas com P<90kg e H>3000mm)  
Increase 2 (for sashes with P<90kg and H>3000mm)  
Augmente 2 (pour vantaux avec P<90kg et H>3000mm)





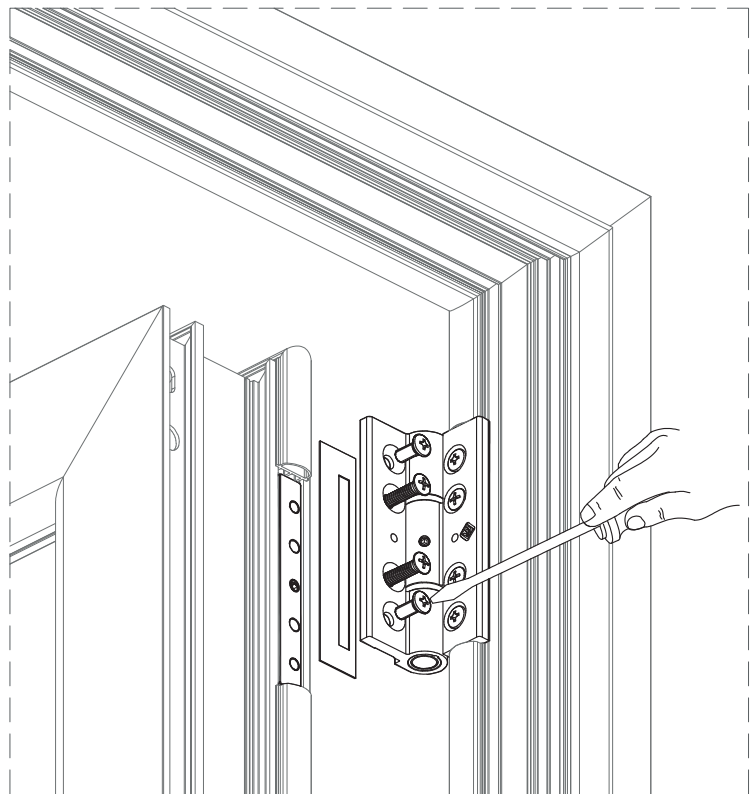
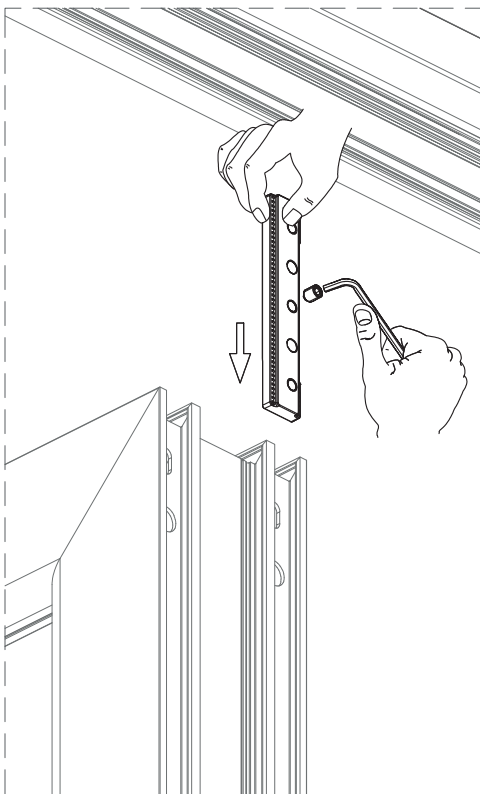
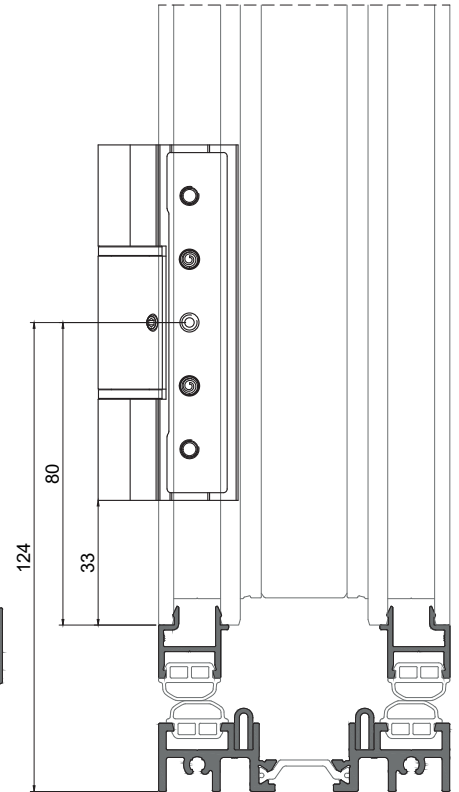
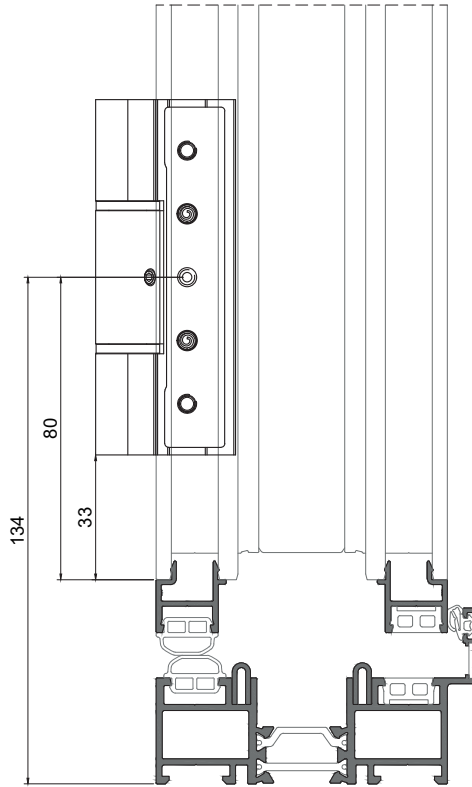
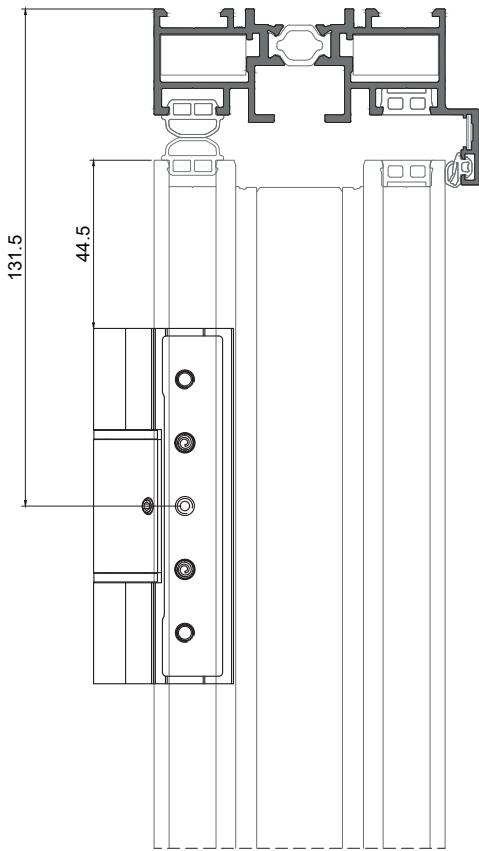
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

**4 - Aplicação das dobradiças 3 abas.**  
3 Flaps hinges application.  
Application des paumelles de 3 lames.



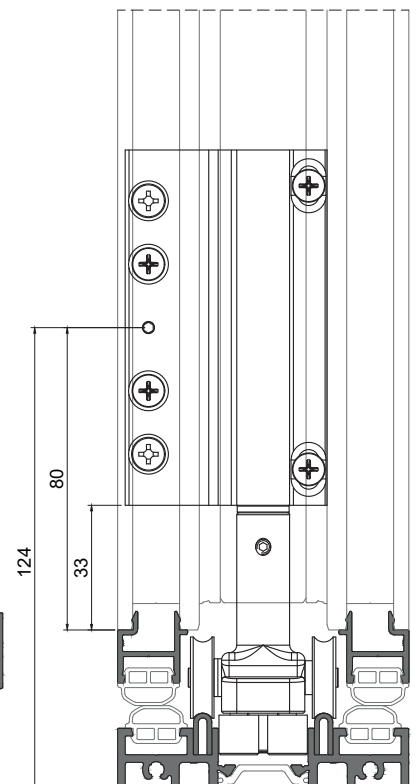
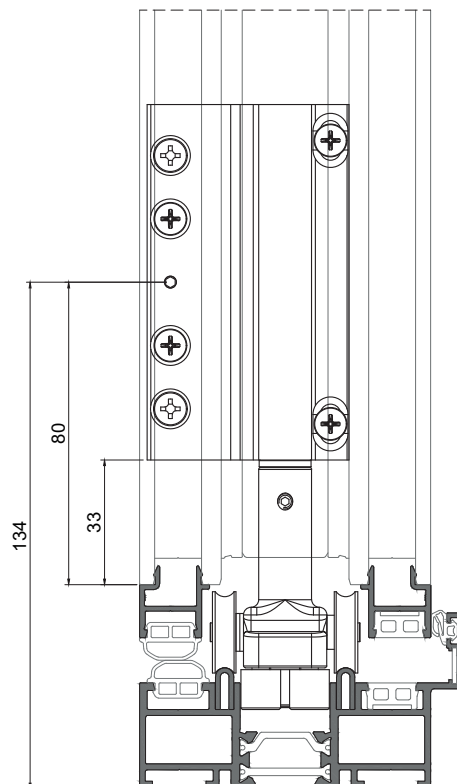
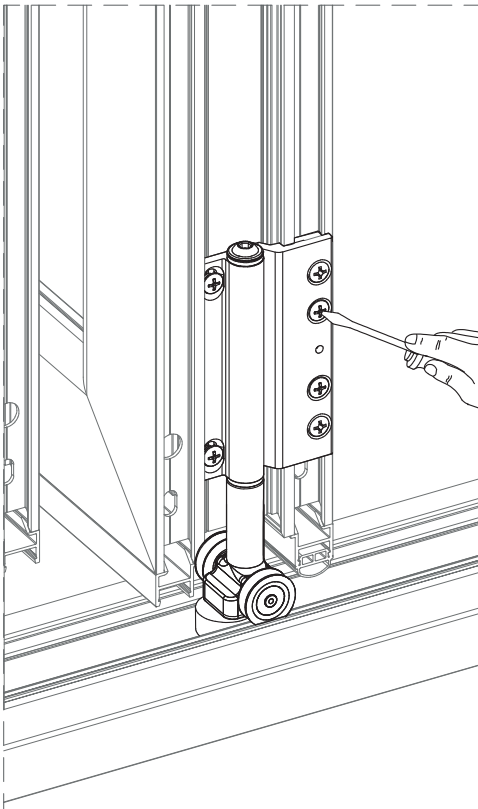
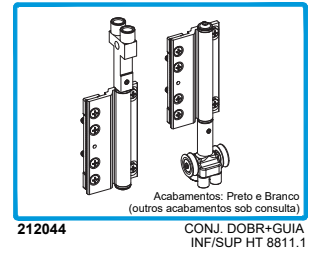
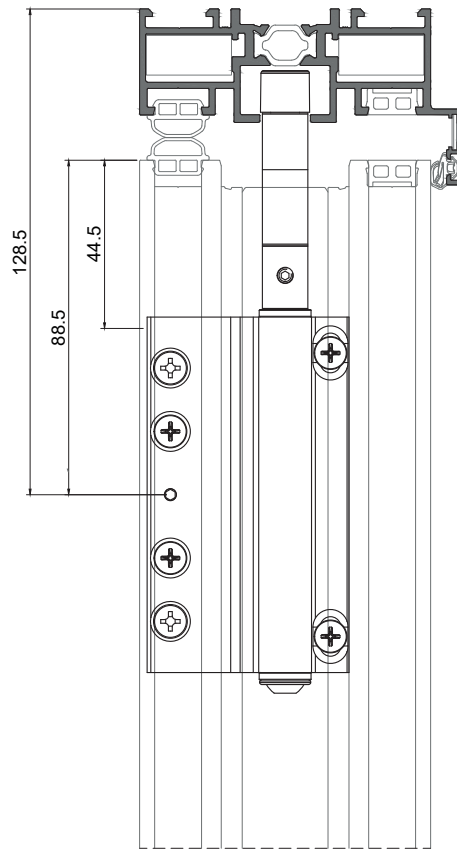
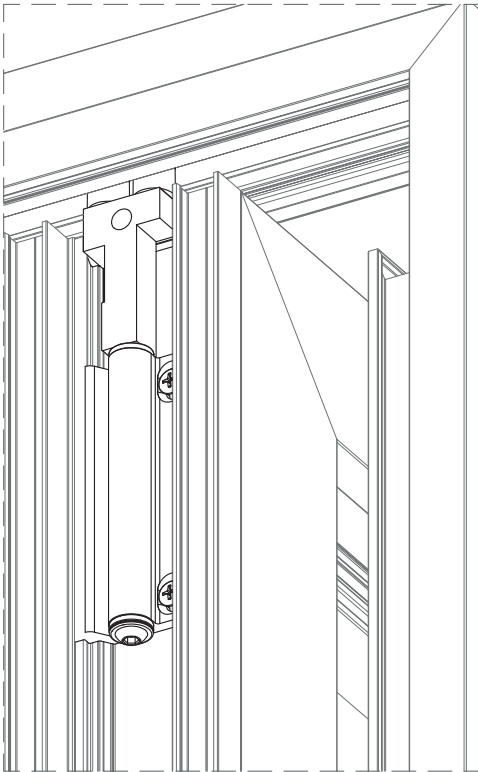
Acabamentos: Preto e Branco  
(outros acabamentos sob consulta)

202016 DOBRADIÇA 3 ABAS HT 8815.12



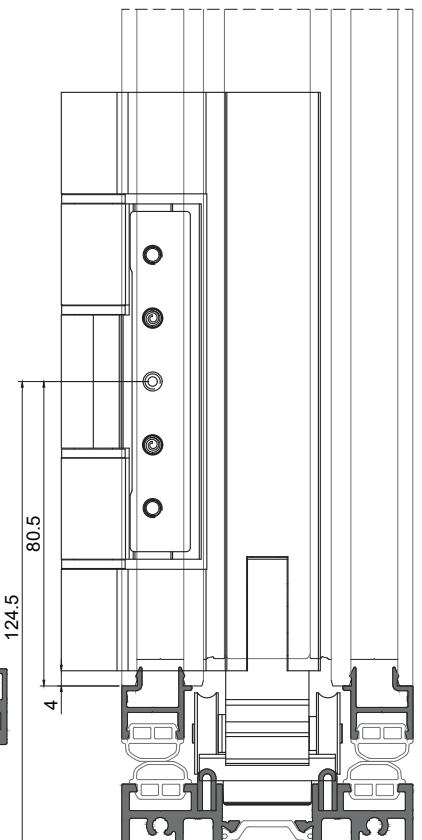
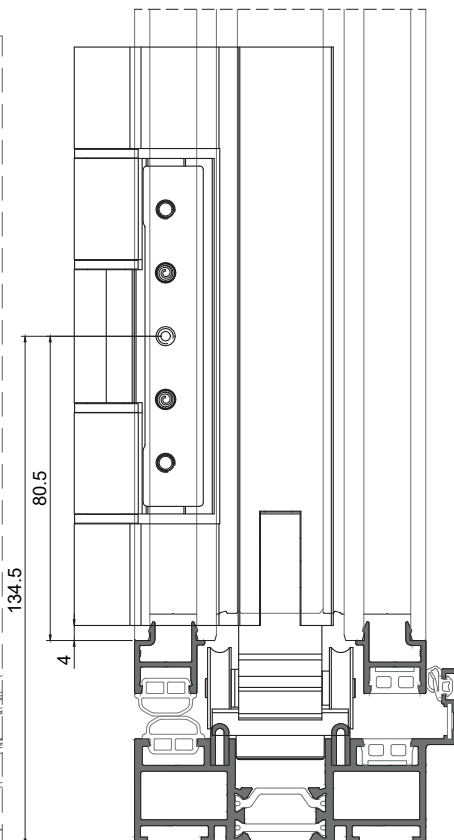
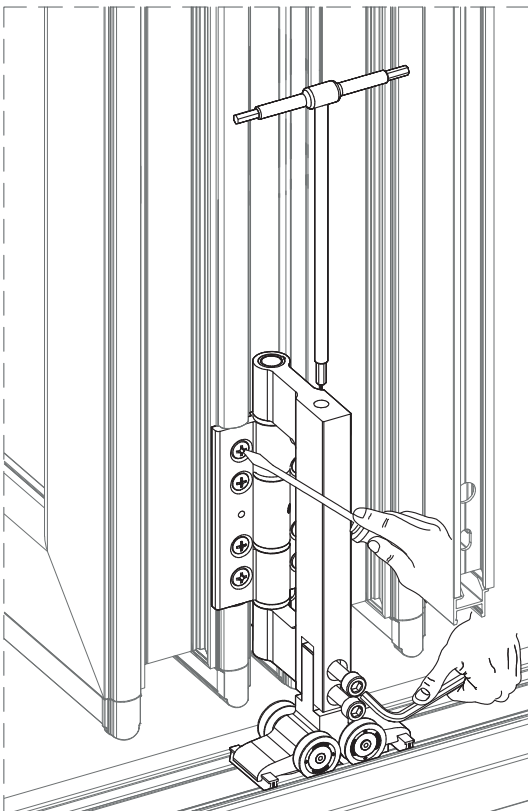
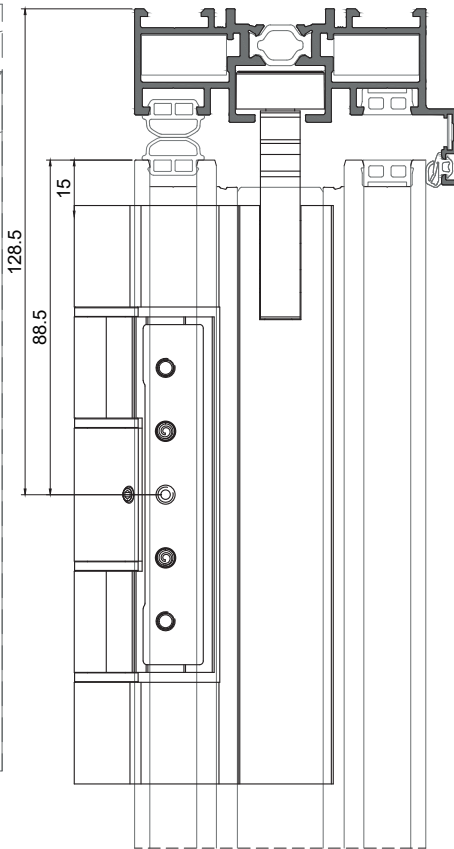
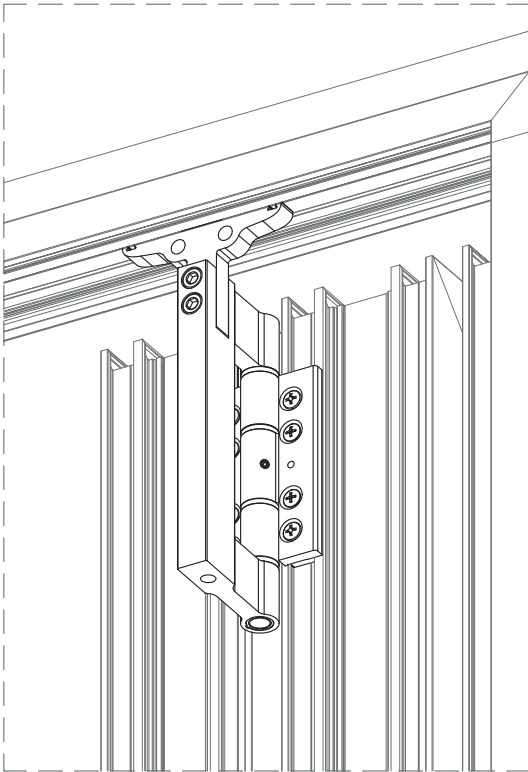
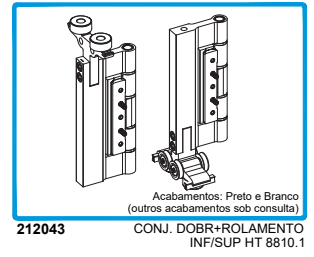
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

**5 - Aplicação do Conj. Dobradiça+Guia Inf/Sup.**  
Bottom/Top Hinge+Guide Kit application.  
Application du Kit de Paumelles+Guide Inf/Sup.



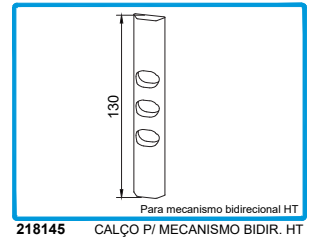
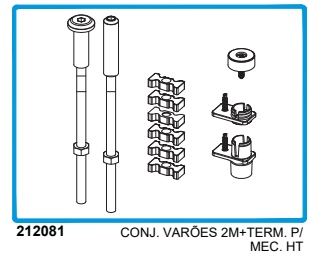
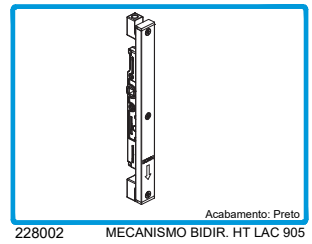
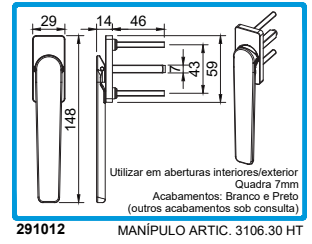
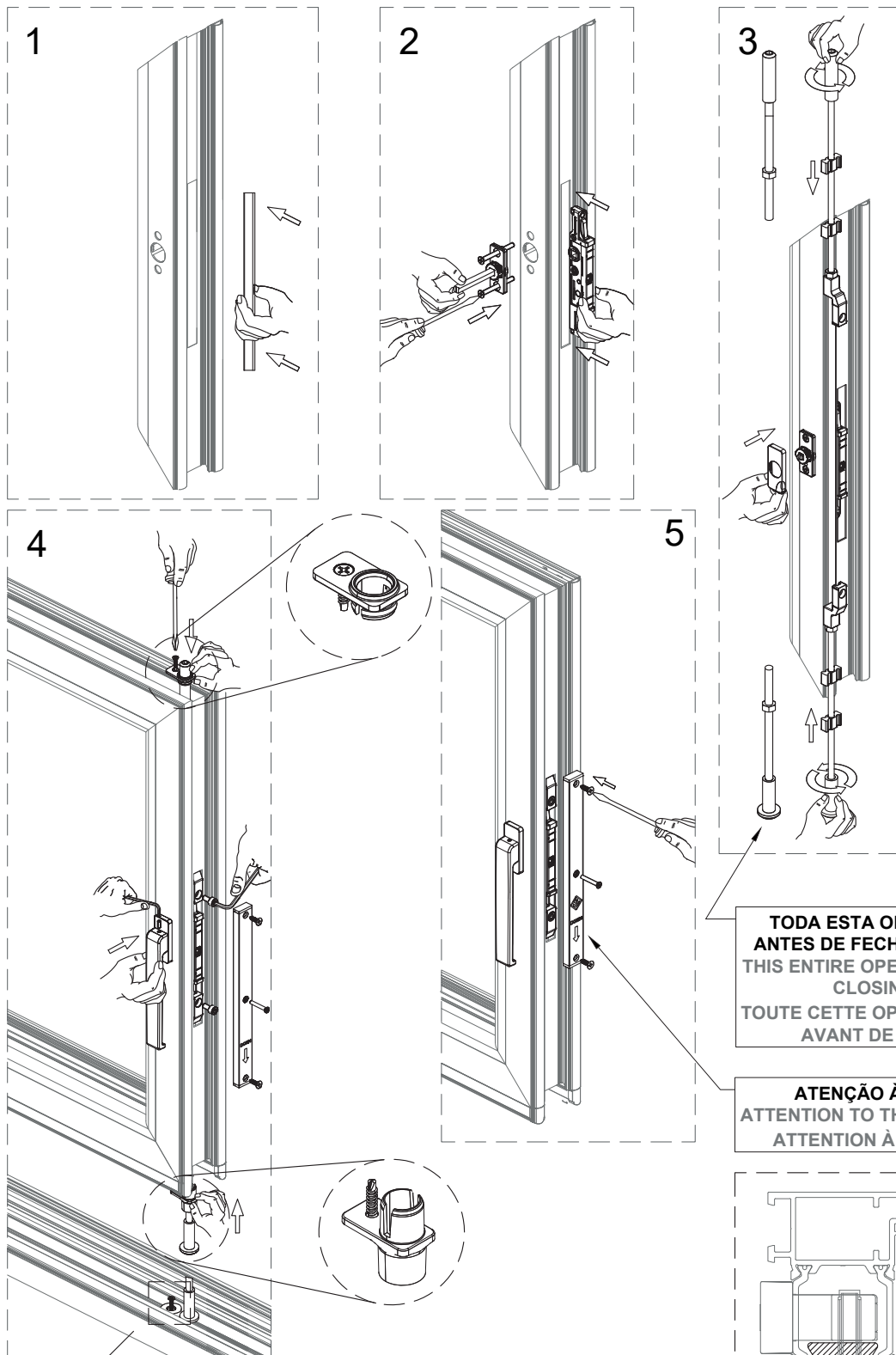
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

6 - Aplicação do Conj. Dobradiça+Rolamento Inf/Sup.  
Bottom/Top Hinge+Roller Kit application.  
Application du Kit de Paumelles+Roulement Inf/Sup.



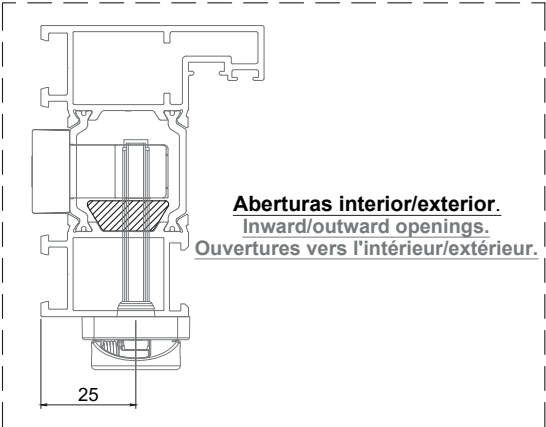
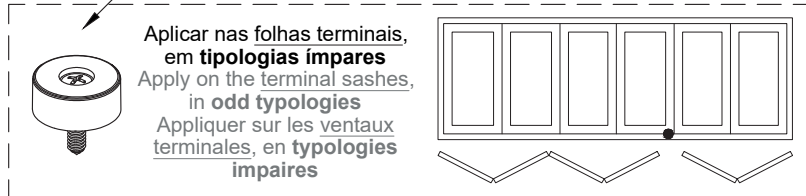
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

**7 - Aplicação do Conj. Mecanismo Bidirecional com calço e Manípulo Articulado.**  
Bidirectional Mechanism Kit with shim and Foldable System Handle application.  
Application du Kit de Mécanisme Bidirectionnel avec cale et Poignée pour système repliable.



**TODA ESTA OPERAÇÃO DEVERÁ SER FEITA ANTES DE FECHAR AS ESQUADRIAS DA FOLHA**  
**THIS ENTIRE OPERATION MUST BE DONE BEFORE CLOSING THE MOBILE FRAME**  
**TOUTE CETTE OPÉRATION DOIT ÊTRE EFFECTUÉE AVANT DE FERMER LES OUVRANTES**

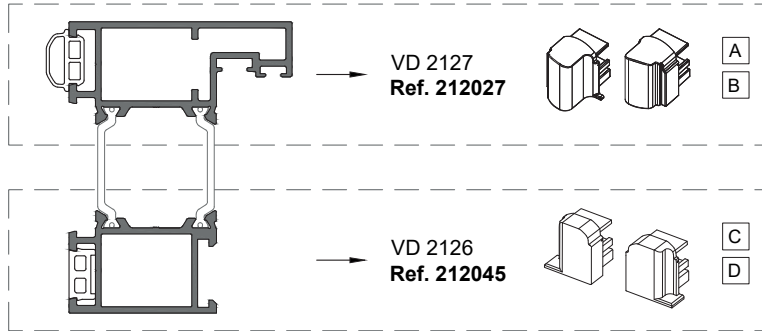
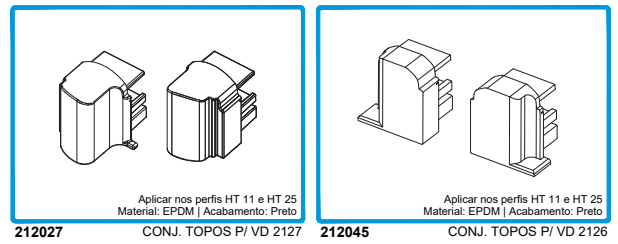
**ATENÇÃO À POSIÇÃO DO MECANISMO**  
**ATTENTION TO THE POSITION OF THE MECHANISM**  
**ATTENTION À LA POSITION DU MÉCANISME**



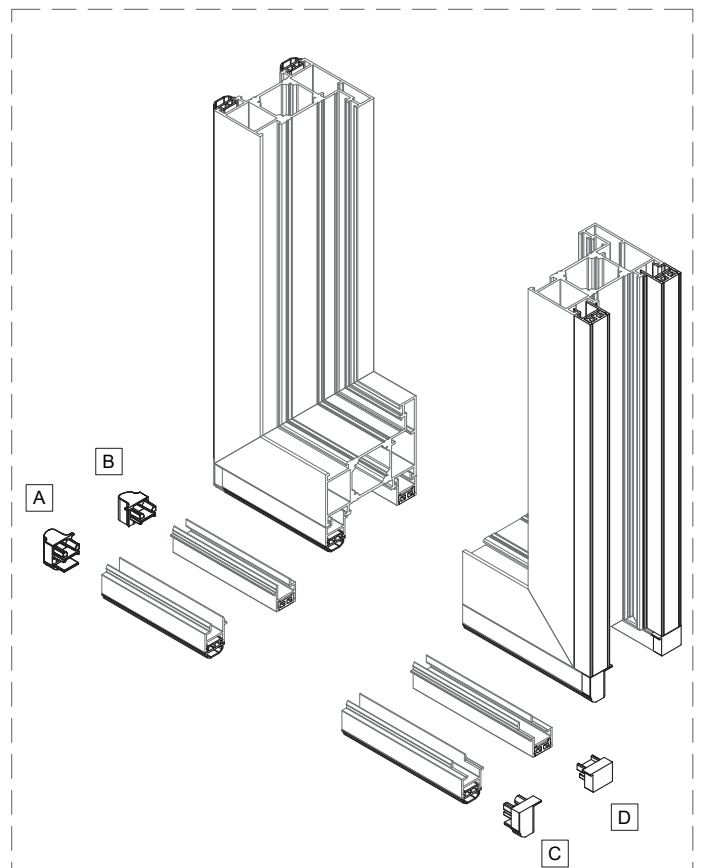
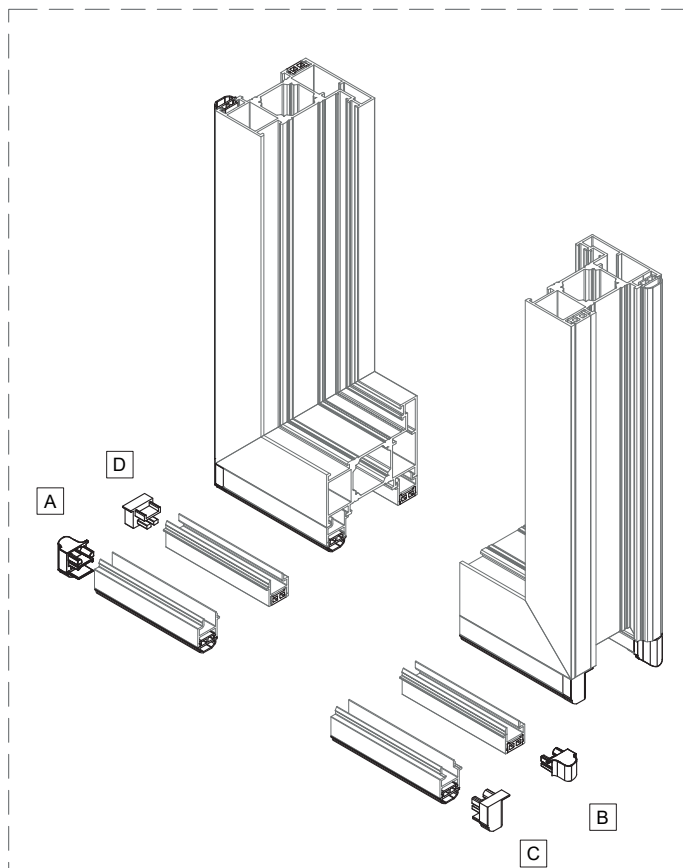
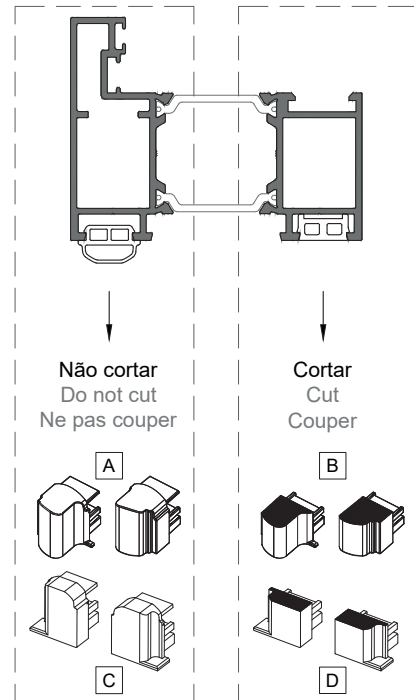
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

8 - Aplicação dos Conj. Topos p/ VD 2126 e 2127.  
2126 and 2127 Gasket End-caps Kit application.  
Application des Kits d'Embouts pour Joints 2126 et 2127.

A escolha do Topo a aplicar depende do vedante vertical:  
The choice of the End-cap to apply depends on the vertical gasket:  
Le choix d'Embout à appliquer dépend du joint vertical:

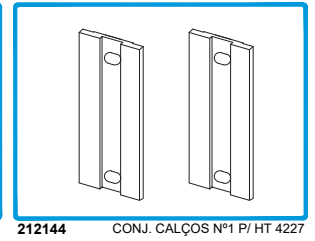
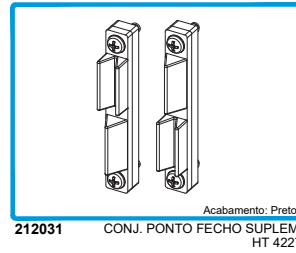


A necessidade de cortar o Topo depende do vedante horizontal:  
The need to cut the End-cap depends on the horizontal gasket:  
La nécessité de découper l'Embout dépend du joint horizontal:



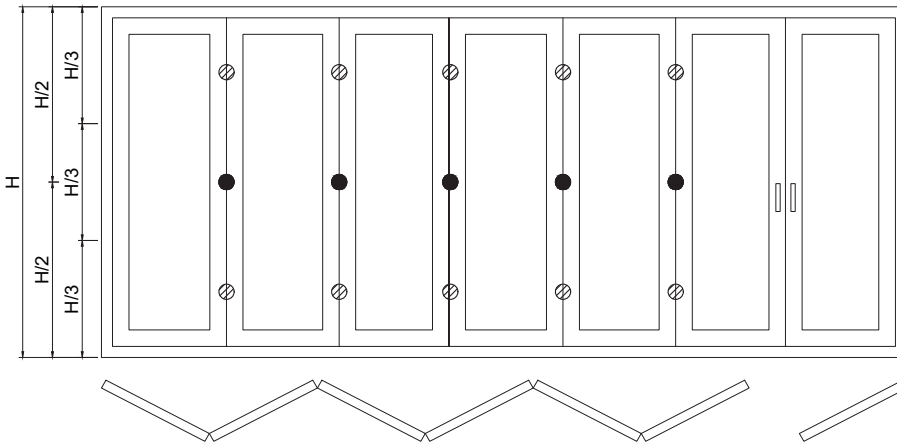
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

9 - Aplicação dos Conj. Ponto Fecho Suplem. 4227 HT e de Calços N° 1.  
Additional Closing Point and No. 1 Shim Kits application.  
Application des Kits de Point de Fermeture Supplémentaire et Cales N° 1.



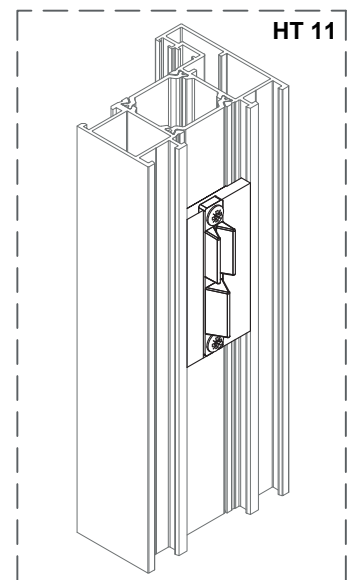
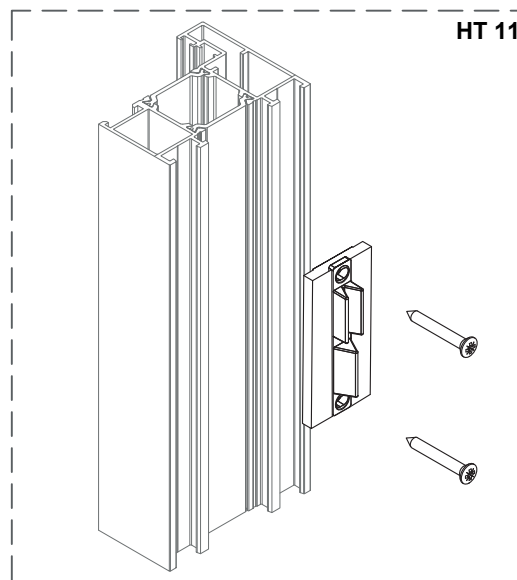
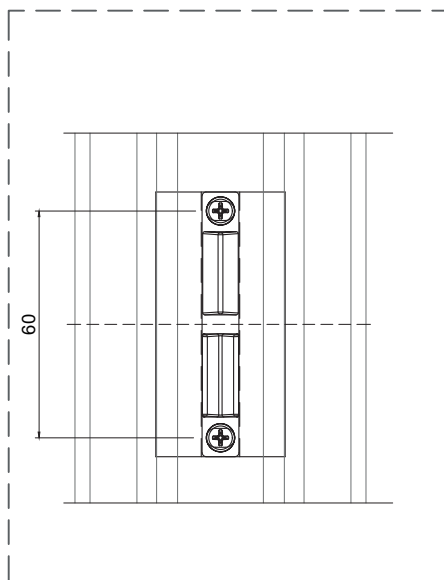
**EXEMPLO | EXAMPLE | EXEMPLE**

Tipologia 761 - abertura interior  
Typology 761 - inward opening | Typologie 761 - ouverture vers l'intérieure



● Posição de aplicação  
(para folhas com H<2200mm)  
Application position  
(for sashes with H<2200mm)  
Position d'application  
(pour vantaux avec H<2200mm)

⊘ Posição de aplicação  
(para folhas com H>2200mm)  
Application position  
(for sashes with H>2200mm)  
Position d'application  
(pour vantaux avec H>2200mm)

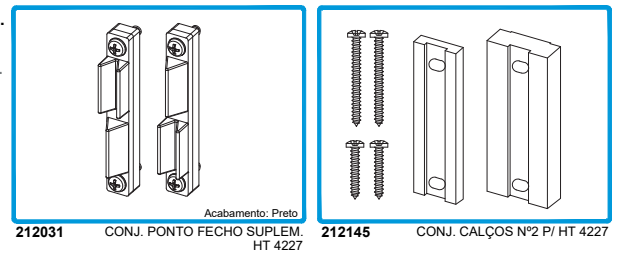


**NOTA | NOTE | REMARQUE:**

A aplicação do Conj. Calços N°1 p/ HT 4227 substitui a utilização do calço incluído no Conj. Ponto de Fecho suplementar HT 4227.  
The application of the No. 1 Shims Kit for 4227 HT replaces the use of the shim included in the HT 4227 Additional Closing Point Kit.  
L'application du Kit de cales N°1 pour HT 4227 remplace le cale incluse dans les Kits de Point de Fermeture Supplémentaire HT 4227.

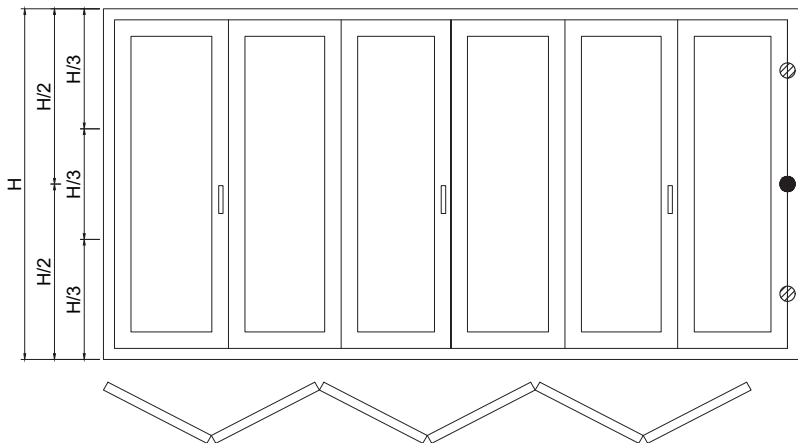
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

10 - Aplicação dos Conj. Ponto Fecho Suplem. 4227 HT e de Calços N° 2.  
Additional Closing Point and No. 2 Shim Kits application.  
Application des Kits de Point de Fermeture Supplémentaire et Cales N° 2.

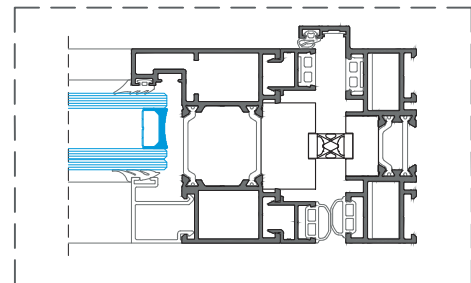


**EXEMPLO | EXAMPLE | EXEMPLE**

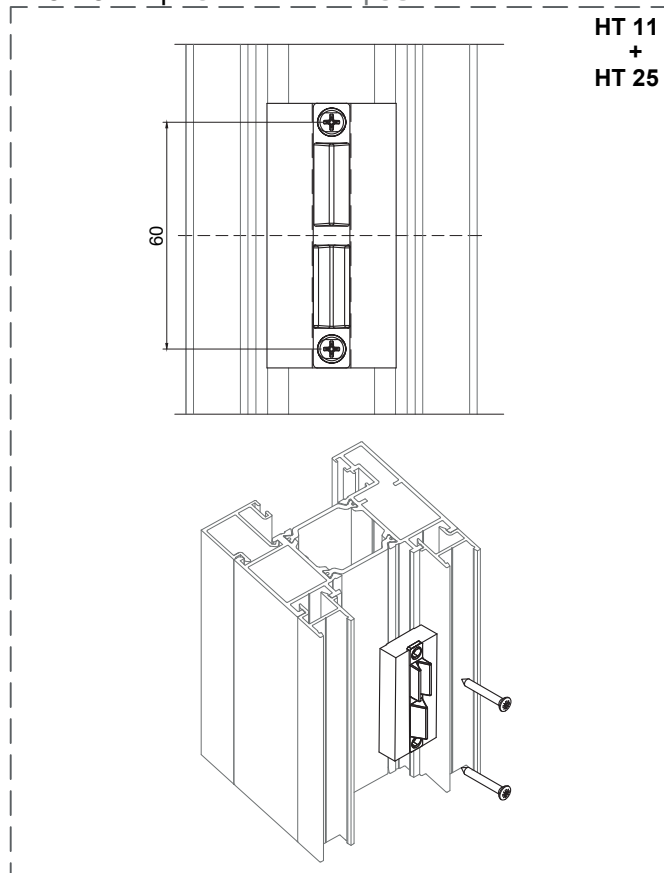
Tipologia 660 - abertura interior  
Typology 660 - inward opening | Typologie 660 - ouverture vers l'intérieure



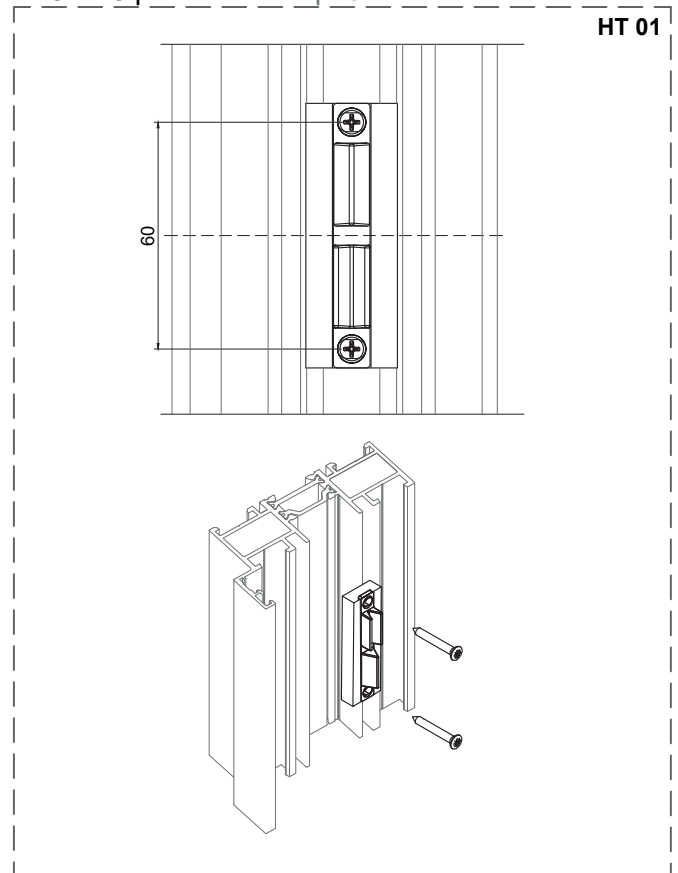
- Posição de aplicação (para folhas com H<2200mm)  
Application position (for sashes with H<2200mm)  
Position d'application (pour vantaux avec H<2200mm)
- ⊗ Posição de aplicação (para folhas com H>2200mm)  
Application position (for sashes with H>2200mm)  
Position d'application (pour vantaux avec H>2200mm)



**ARO MÓVEL | MOBILE FRAME | OUVRANT**



**ARO FIXO | FIXED FRAME | DORMANT**

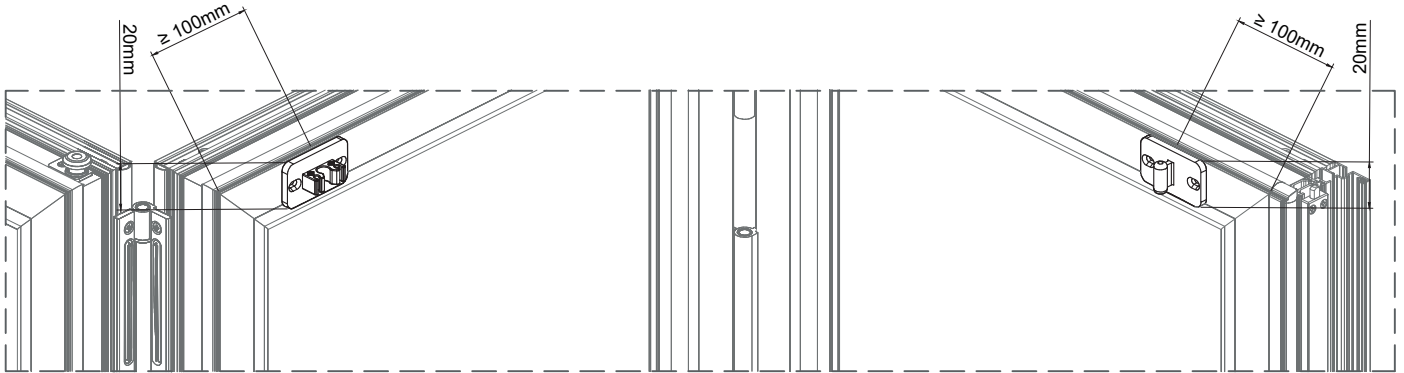
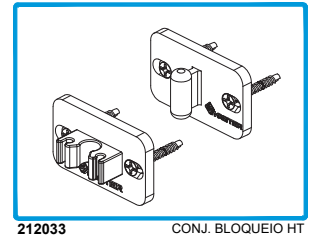


**NOTA | NOTE | REMARQUE:**

A aplicação do Conj. Calços N°2 p/ HT 4227 substitui a utilização do calço incluído no Conj. Ponto de Fecho suplementar HT 4227.  
The application of the No. 2 Shims Kit for 4227 HT replaces the use of the shim included in the HT 4227 Additional Closing Point Kit.  
L' application du Kit de cales N°2 pour HT 4227 remplace le cale incluse dans les Kits de Point de Fermeture Supplémentaire HT 4227.

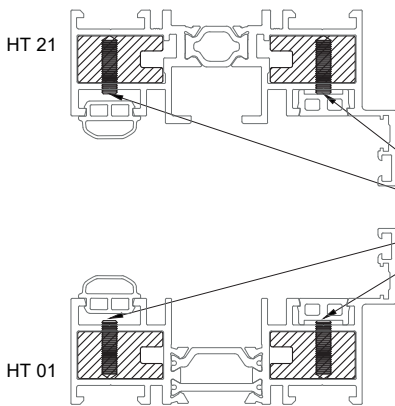
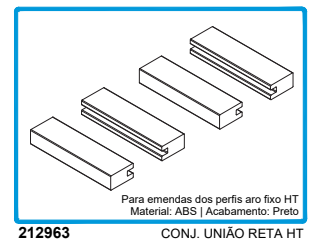
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

11 - Aplicação do Conj. Bloqueio HT.  
HT Locking Kit application.  
Application du Kit de Fermeture HT.

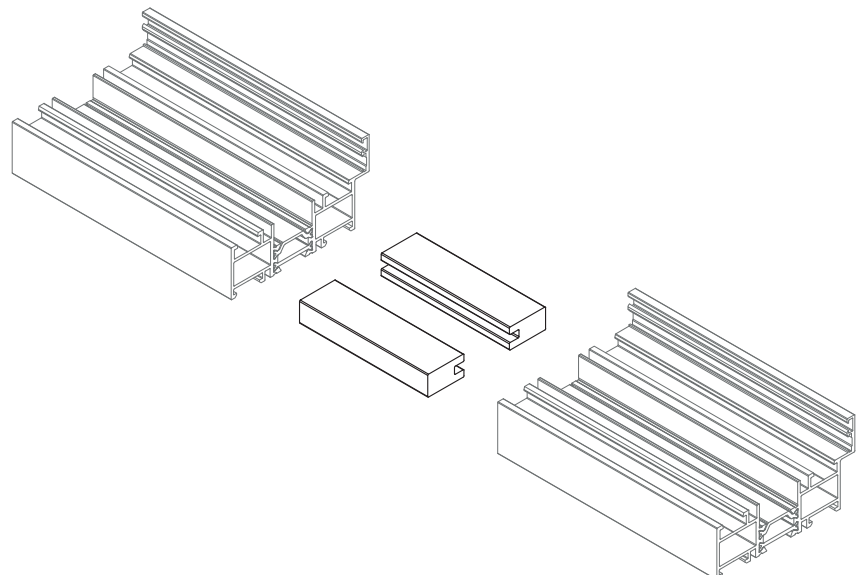
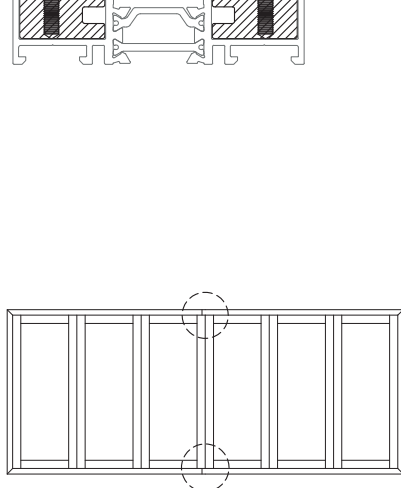


**NOTA: Aplicar em cima e em baixo em tipologias com H > 2,2m.**  
**NOTE: Apply on top and bottom in typologies with H > 2.2m.**  
**REMARQUE: Appliquer en haut et en bas dans les typologies avec H > 2,2 m.**

12 - Aplicação dos Conjunto união reta HT.  
Straight union kits application in fixed frames.  
Application des Kits d'union droit HT.



**PERNOS M4x16 (NÃO INCLUIDOS)**  
**STUDS M4x16 (NOT INCLUDED)**  
**BOULONS M4x16 (NON INCLUS)**





# VII

**ANOTAÇÕES**  
ANNOTATIONS | REMARQUES

<b>ATUALIZAÇÕES REALIZADAS NESTA VERSÃO</b> UPDATES DONE IN THIS VERSION   LES MISES À JOUR EFFECTUÉES DANS CETTE VERSION	
1	Removido diagrama de cargas e retificação das limitações para tipologias ímpares - Cap. Características Removed load diagram and rectification of limitations for odd typologies - Chapter Characteristics Suppression du diagramme de charge et rectification des limitations pour les typologies impaires - Chapitre Caractéristiques
2	Inserido o novo topo para VD 2126 (ref. 212045), nos Acessórios, Maquinações e Montagens Inserted the new end-cap for VD 2126 (ref. 212045), in Accessories, Machining and Assembly Insertion du nouveau end-cappour VD 2126 (réf. 212045), dans Accessoires, Usinage et Assemblage
3	Inserido o perfil HT 06 nos aros fixos, em tipologias **0 (ex: 220, 330, 440...) Inserted the HT 06 profile in the fixed frames, in **0 typologies (ex: 220, 330, 440...) Insertion du profilé HT 06 dans les cadres dormants, en **0 typologies (ex : 220, 330, 440...)
4	Removidas as dobradiças com puxador 8816.12 (ref. 202017) das tipologias de abertura exterior (são incompatíveis com a aplicação do perfil HT 06 no aro fixo) Removed the hinges with handle 8816.12 (ref. 202017) from the external opening typologies (they are incompatible with the application of the HT 06 profile on the fixed frame) Suppression des paumelles avec poignée 8816.12 (réf. 202017) des typologies d'ouverture extérieure (elles sont incompatibles avec l'application du profilé HT 06 sur le dormant)
5	Inserção das operações do Cortante Punching Tool operations inserted Insertion of Poinçon operations
6	Atualização das medidas dos rasgos R1 e R2 conforme Cortante Update of the measures of R1 and R2 cuts according to the Punching Tool Mise à jour des cotes des rainures R1 et R2 en fonction du Poinçon
7	Acrescentada maquinação da padieira HT 21 para aplicação das guias superiores (com o perfil HT 82 na lateral) Added machining of the HT 21 lintel to apply the upper guides (with the HT 82 profile on the lateral) Ajout d'un usinage du linteau HT 21 pour appliquer les guides supérieurs (avec le profilé HT 82 sur la latéral)
8	Atualização das medidas de corte, aplicação de acessórios e montagem dos perfis HT 25 Updating of cutting measures, application of accessories and assembly of HT 25 profiles Mise à jour des mesures de coupe, application des accessoires et montage des profilés HT 25
9	Atualização do diâmetro do furo para guiar o varão no aro móvel, de 16 para 17mm Updating the hole diameter to guide the rod in the mobile frame, from 16 to 17mm Mise à jour du diamètre du trou pour guider la tige dans l'ouvrant, de 16 à 17mm
10	Acrescentada montagem do perfil HT 06 no aro fixo lateral Added assembly of the HT 06 profile on the lateral fixed frame Ajout du montage du profilé HT 06 sur le dormant latéral
11	Reintroduzidas medidas de corte para tipologias 220, 321 e 330 sem perfil HT 82 nas laterais Reintroduced cutting measures for typologies 220, 321 and 330 without HT 82 profile on the lateral Mesures de coupe réintroduites pour les typologies 220, 321 et 330 sans profil HT 82 sur les côtés
12	Adicionada maquinação do perfil HT 11 para introdução de acessórios Added HT 11 profile machining for inserting accessories Ajout de l'usinage profilé HT 11 pour l'insertion d'accessoires

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