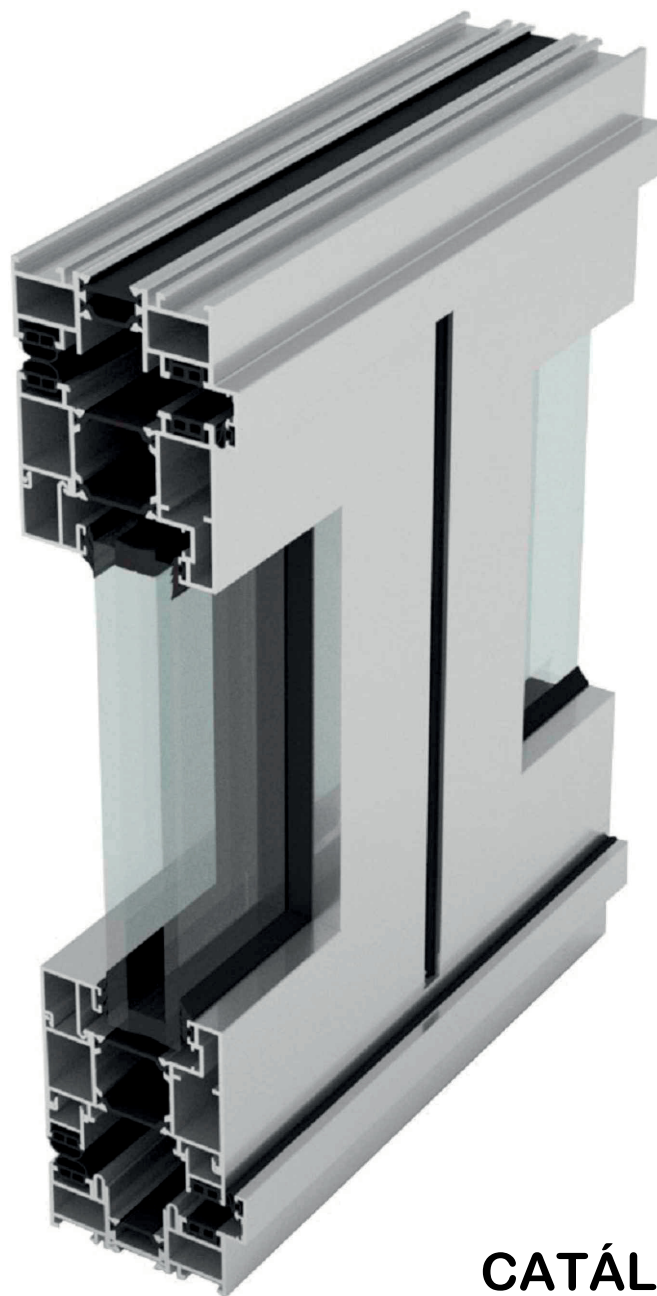


# HT

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



## 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 arquitetónicas, apresentando elevada robustez e facilidade de manuseamento.

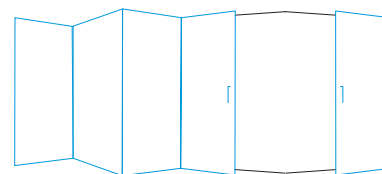
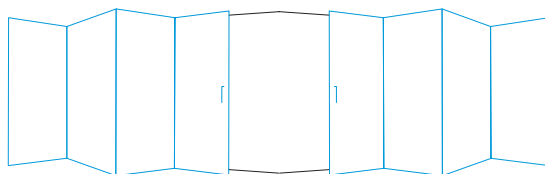
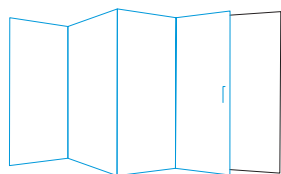
The HT folding system has great thermal capacity and a lot of potential for application in large spans, in which the main objective is to obtain the maximum free view when it is opened.

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	
aros fixos   fixed frames   cadre dormant	77mm
aros móveis   mobile frames   cadre ouvrant	77mm
<b>ENCHIMENTO</b> FILLING   REMPLISSAGE	De 17 a 50mm From 17 to 50mm   De 17 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>PESO MÁXIMO</b> MAXIMUM WEIGHT   POIDS MAXIMALE	120 Kg/folha   sash   vantail
<b>ÁREA MÁXIMA</b> MAXIMUM AREA   AIRE MAXIMALE	4,20 m <sup>2</sup> /folha   sash   vantail
<b>LARGURA MÍNIMA</b> MINIMUM LENGTH   LARGEUR MINIMALE	0,600 m (folhas sem o acessório 8811.1) (Sashes without accessory 8811.1   vantaux sans accessoire 8811.1) 0,651 m (folhas com o acessório 8811.1) (Sashes with accessory 8811.1   vantaux avec accessoire 8811.1)
<b>LARGURA MÁXIMA</b> MAXIMUM LENGTH   LARGEUR MAXIMALE	1,20 m/folha   sash   vantail
<b>ALTURA MÁXIMA</b> MAXIMUM HEIGHT   HAUTEUR MAXIMALE	3,50 m/folha   sash   vantail
<b>ACABAMENTOS</b> FINISHES   FINITIONS	Lacados   Anodizados   Bicolores Powder coated   Anodised   Bicolour Laqué   Anodisé   Bicouleur



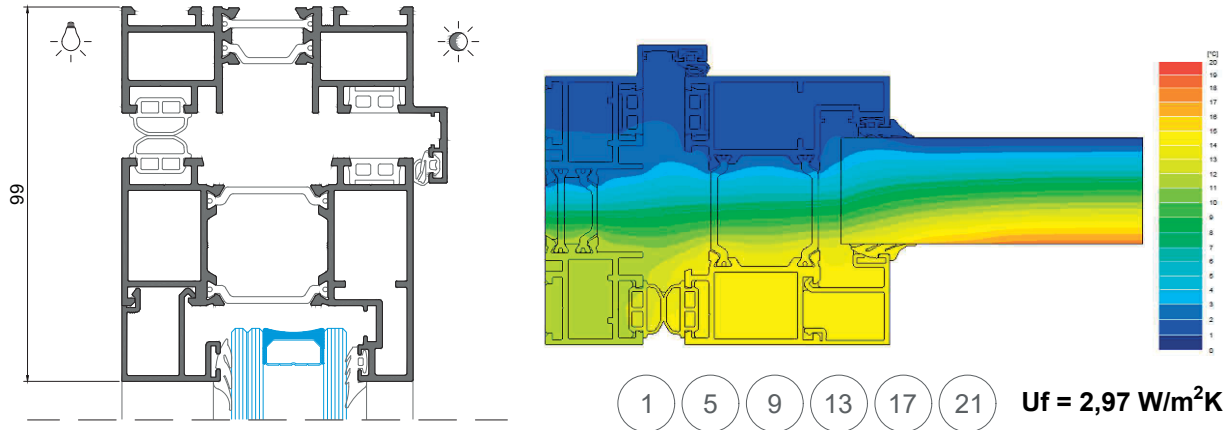
Todas as medidas são consideradas em mm, salvo as devidamente identificadas

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

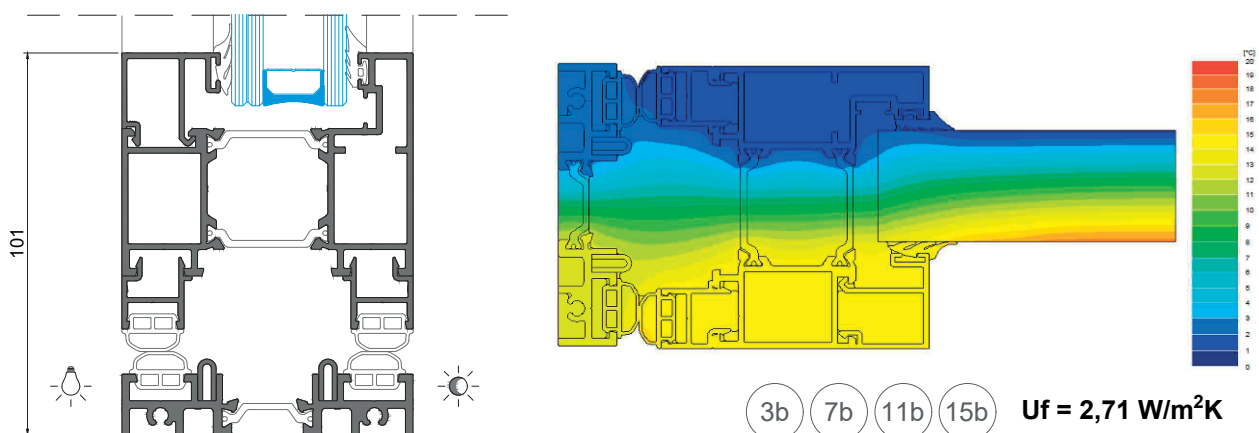
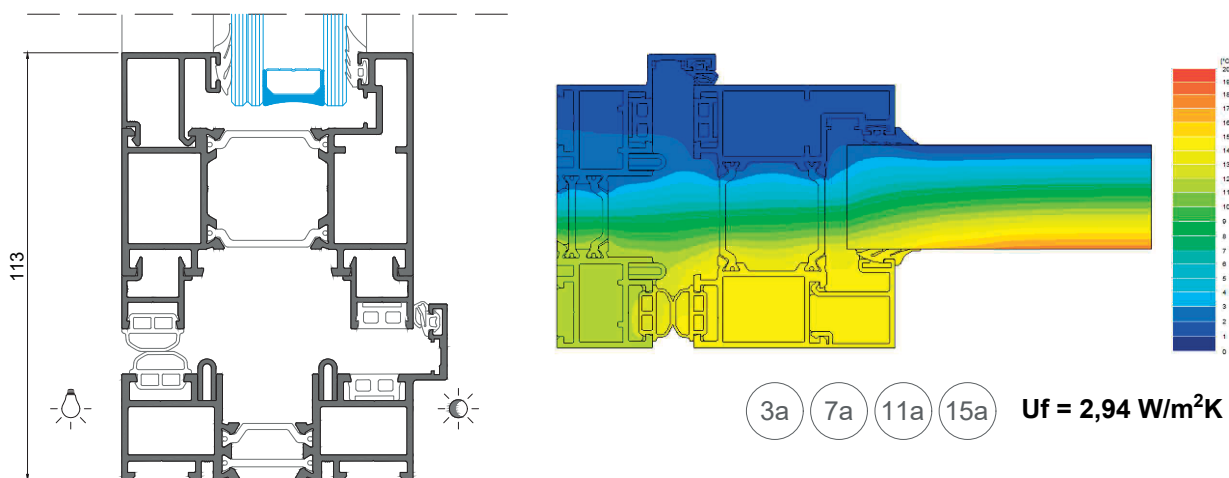
# DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

- Aro Superior | Top Frame | Cadre Supérieure



- Aro Inferior | Bottom Frame | Cadre Inférieur

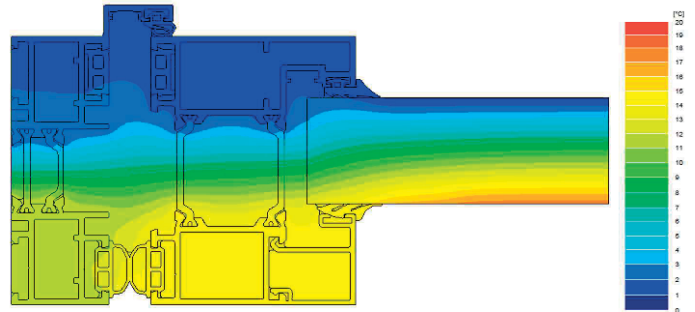
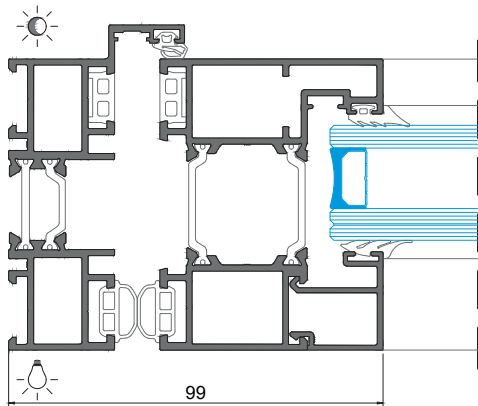




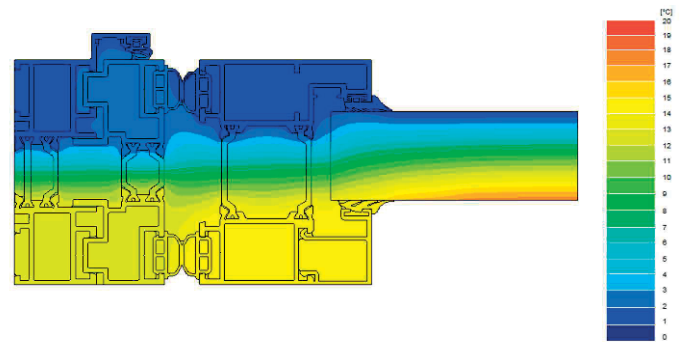
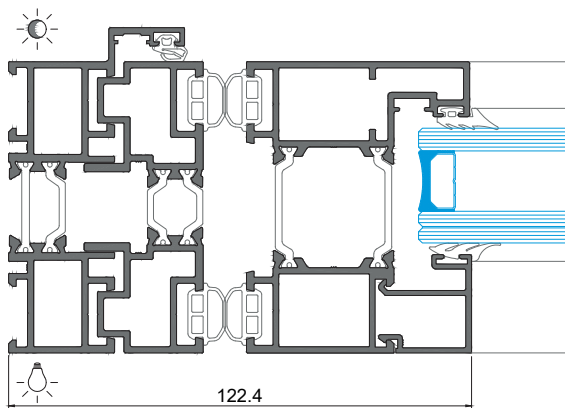
# DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

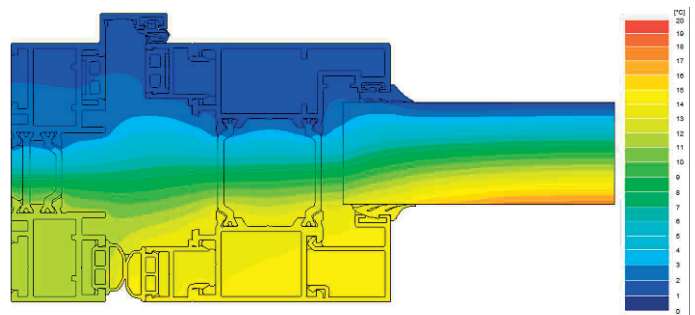
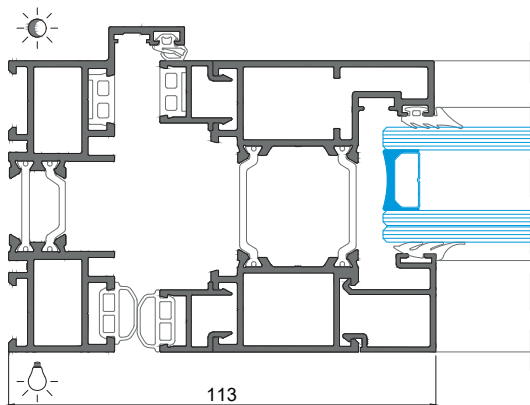
- Aro Lateral | Lateral Frame | Cadre Latéral



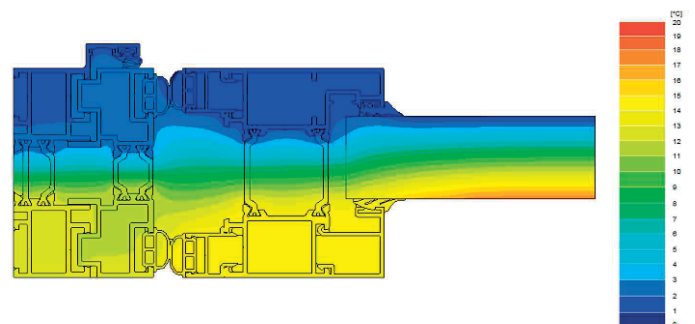
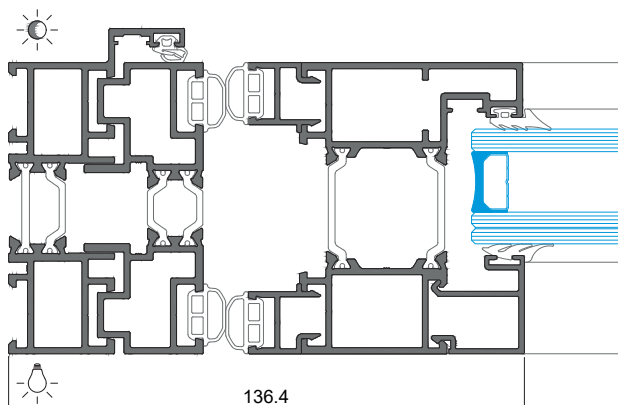
2a  $U_f = 2,97 \text{ W/m}^2\text{K}$



2b  $U_f = 2,79 \text{ W/m}^2\text{K}$



6a  $U_f = 2,99 \text{ W/m}^2\text{K}$

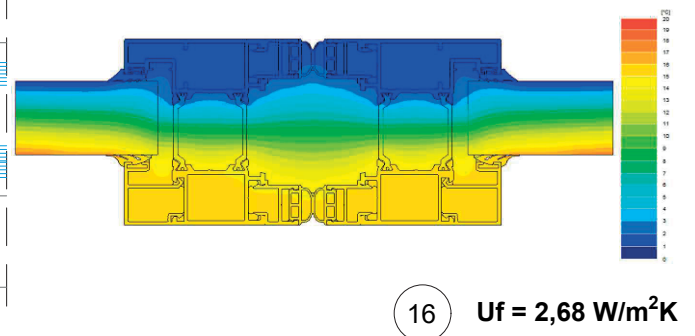
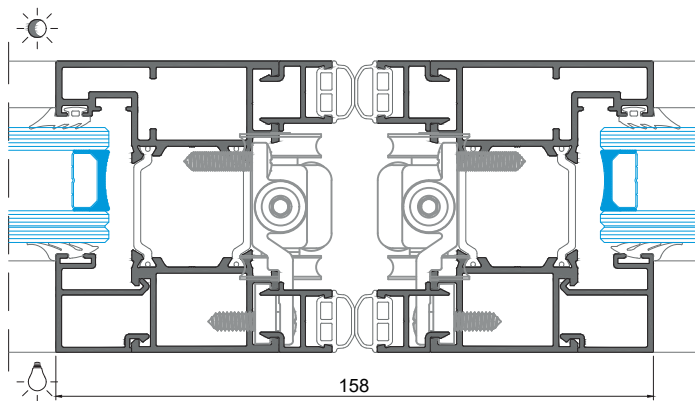
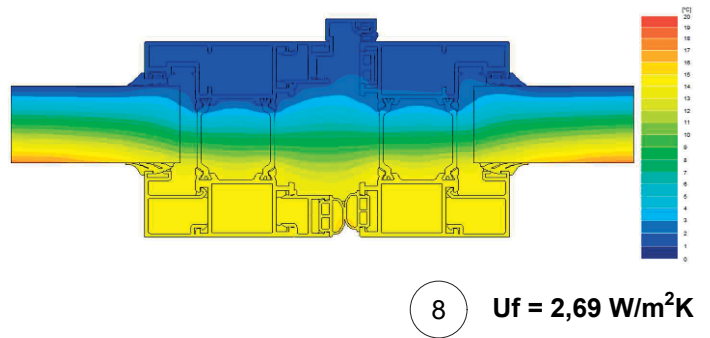
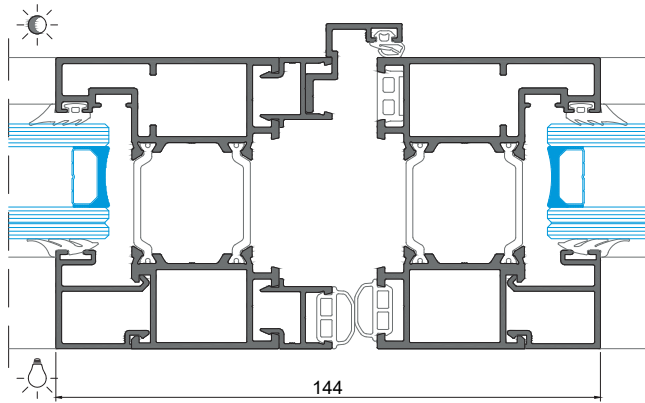
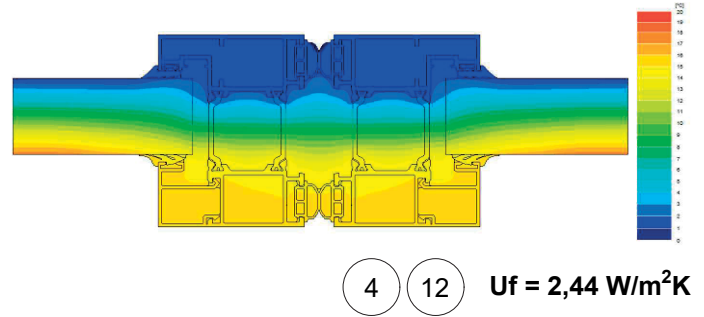
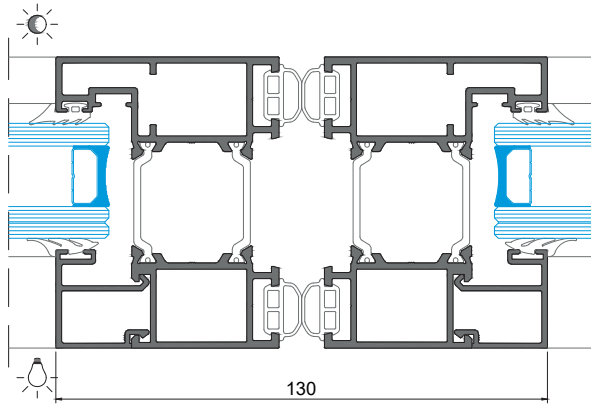


6b  $U_f = 2,81 \text{ W/m}^2\text{K}$

# DESEMPENHO TÉRMICO DO SISTEMA

thermal system performance | performance thermique du système

- Central | Central | Central



# DESEMPENHO ACÚSTICO DO SISTEMA

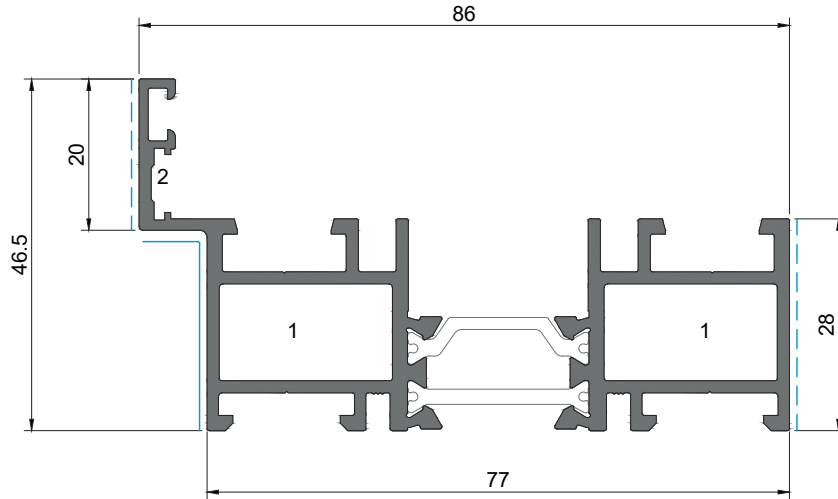
acoustic system performance | performance acoustique du système

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

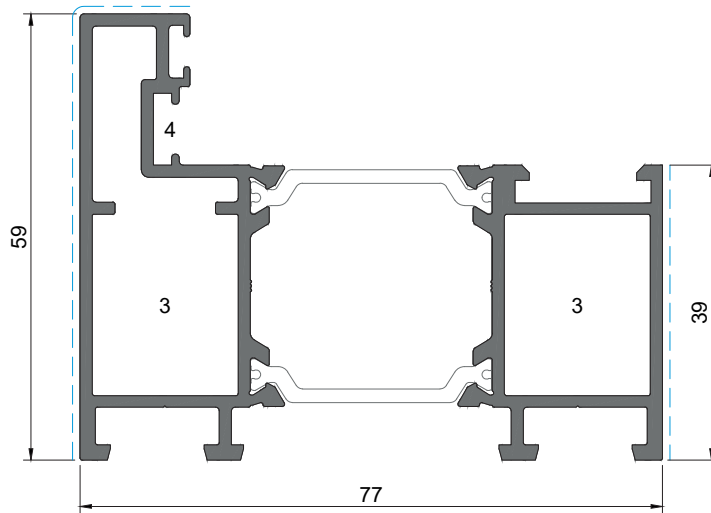
$R_w = 40 \text{ dB}$   
 $R_w (\text{IGU}) = 38 \text{ dB}$ , área | área  $\leq 2,70\text{m}^2$



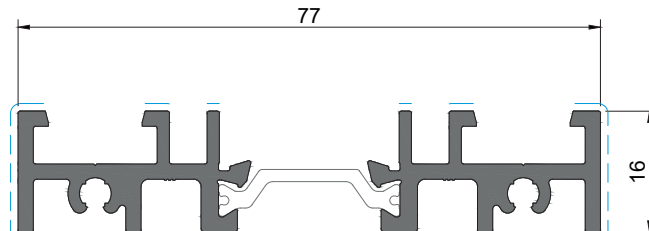
**LISTAGEM DE PERFIS**  
**PROFILES LIST | LISTE DES PROFILÉS**



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



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

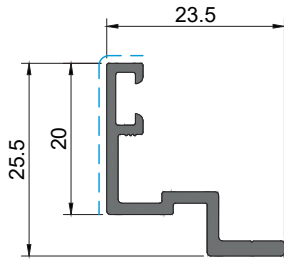


**HT 49**  
Soleira  
Sill | Seuil

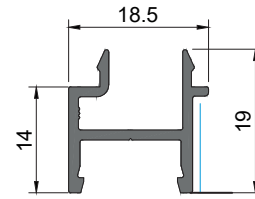
Treatmento de superfície | Surface treatment | Traitement de surface  
PB | PM | EF | EM PB | EF | EM  
Para mais informações, consultar Catálogo de Cores Anodizadas  
For further information, consult the Anodised Colours Catalogue | Pour plus d'informations, veuillez consulter le Catalogue des Couleurs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

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

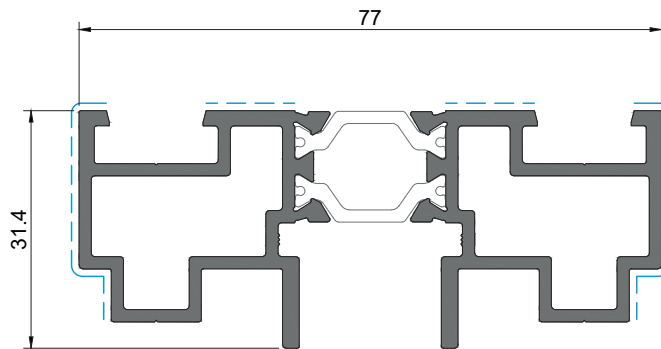
2 - CANTO DE ALINHAMENTO OS | ALIGNMENT ANGLE | COIN D'ALIGNEMENT  
4 - ESQUADRO DE ALINHAMENTO | ALIGNMENT BLOCKING BRACKET | EQUÉRRE D'ALIGNEMENT



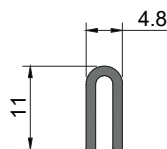
**HT 06**  
Perfil batente  
Jamb profile | Profilé battant



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

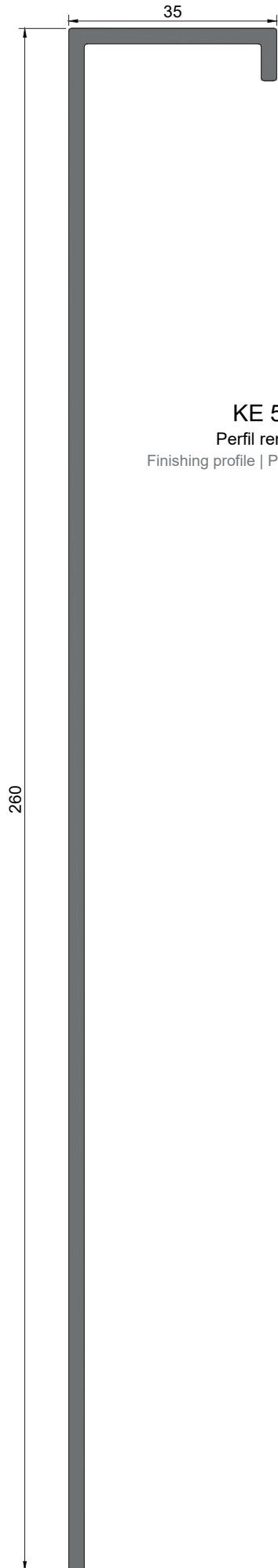


**HT 82**  
Perfil lateral de ajuste  
Adjustable jamb profile | Profilé de jambage réglable

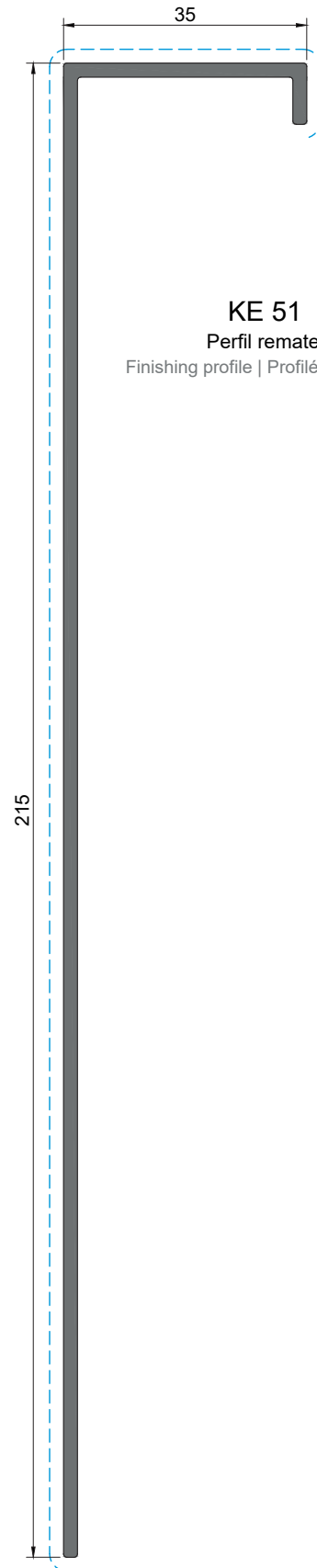


**HT 801**  
Guia inox  
Stainless steel guide | Guide en acier inoxydable

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

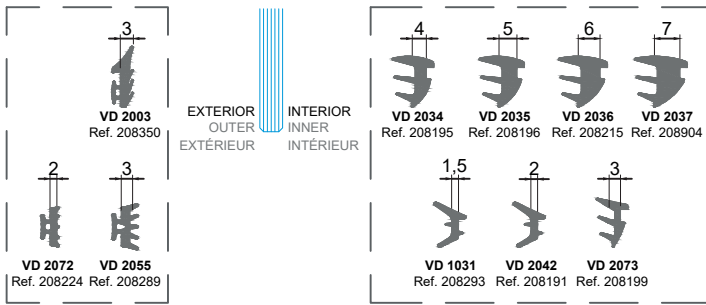


**KE 52**  
Perfil remate  
Finishing profile | Profilé de finition



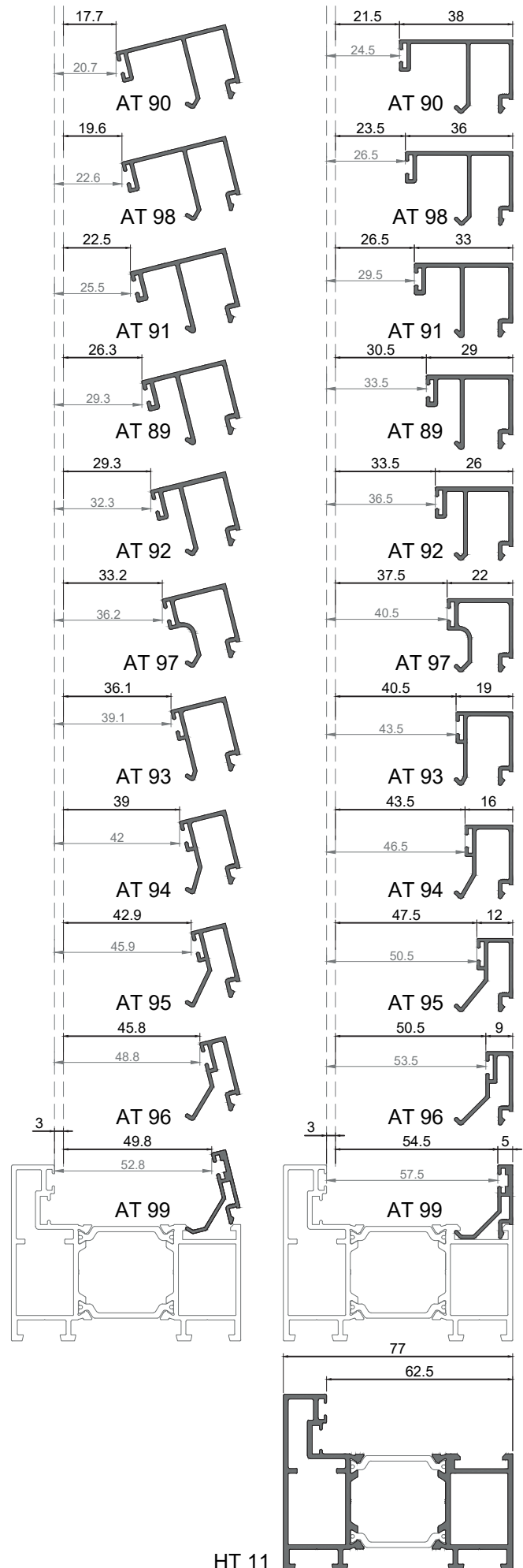
**KE 51**  
Perfil remate  
Finishing profile | Profilé de finition

**TABELA ORIENTATIVA DE BITES**  
GLAZING BREADS SCHEDULE  
TABLE DES PARCLOSES



**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 EXTÉRIEUR	ESPESSURA DO VIDRO GLASS THICKNESS ÉPAISSEUR DU VERRE	VEDANTE INTERIOR INNER GASKET JOINT INTÉRIEUR	BITES GLAZING BEADS PARCLOSES
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

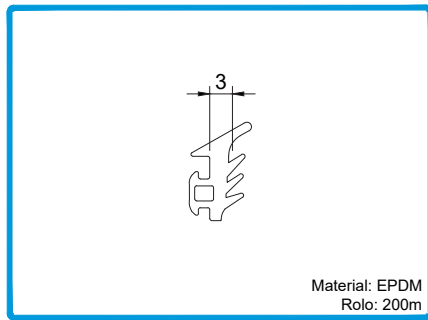




**LISTAGEM DE ACESSÓRIOS**  
**ACCESSORIES LIST | LIST D'ACCESSOIRES**

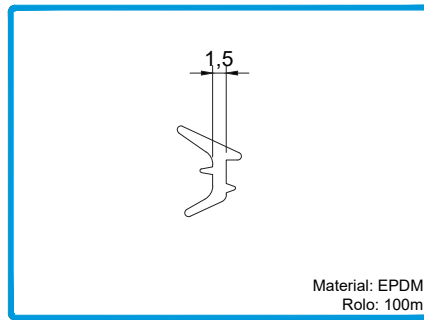


**VEDANTES**  
SEALS | JOINTS



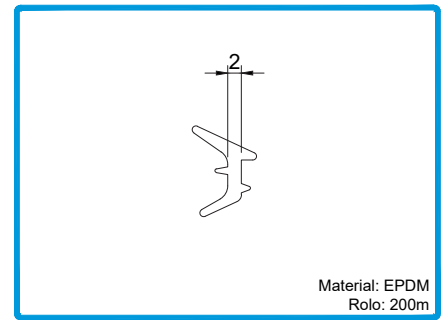
Material: EPDM  
Rolo: 200m

208350 JUNTA DE VEDAÇÃO EXTERIOR 2003



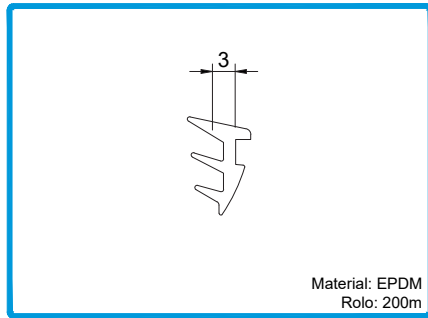
Material: EPDM  
Rolo: 100m

208223 JUNTA DE CUNHA 1031



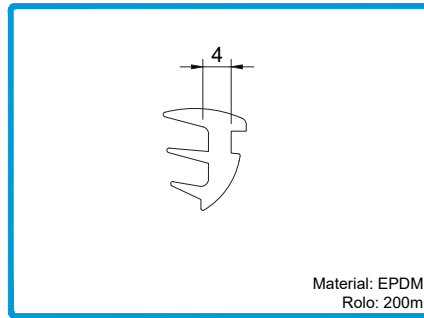
Material: EPDM  
Rolo: 200m

208191 JUNTA DE CUNHA 2042



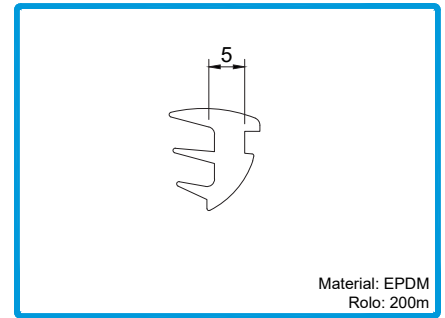
Material: EPDM  
Rolo: 200m

208199 JUNTA DE CUNHA 2073



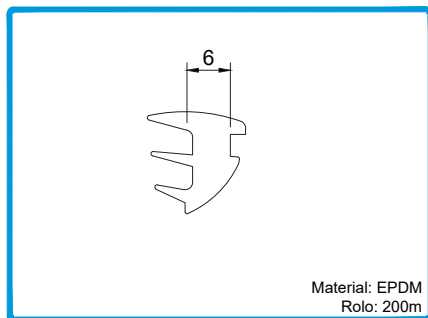
Material: EPDM  
Rolo: 200m

208195 JUNTA DE CUNHA 2034



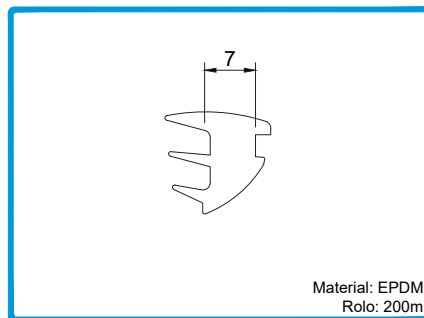
Material: EPDM  
Rolo: 200m

208196 JUNTA DE CUNHA 2035



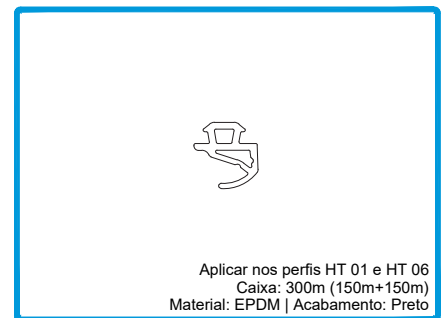
Material: EPDM  
Rolo: 200m

208215 JUNTA DE CUNHA 2036



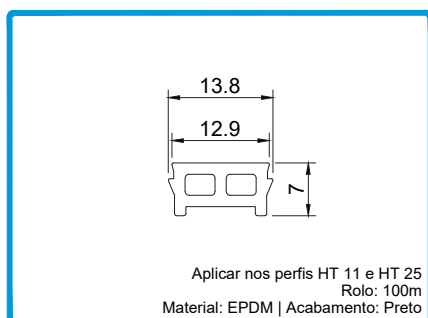
Material: EPDM  
Rolo: 200m

208904 JUNTA DE CUNHA 2037



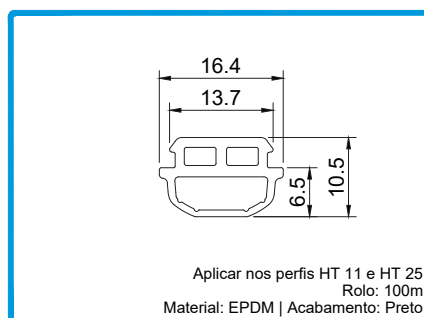
Aplicar nos perfis HT 01 e HT 06  
Caixa: 300m (150m+150m)  
Material: EPDM | Acabamento: Preto

208094 JUNTA VD 2128



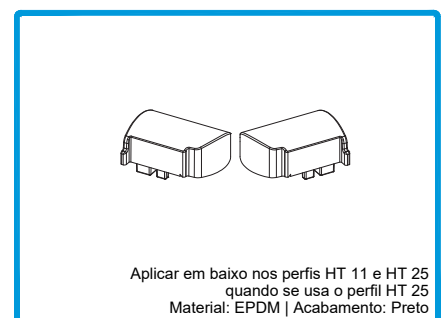
Aplicar nos perfis HT 11 e HT 25  
Rolo: 100m  
Material: EPDM | Acabamento: Preto

208092 JUNTA VD 2126



Aplicar nos perfis HT 11 e HT 25  
Rolo: 100m  
Material: EPDM | Acabamento: Preto

208093 JUNTA VD 2127

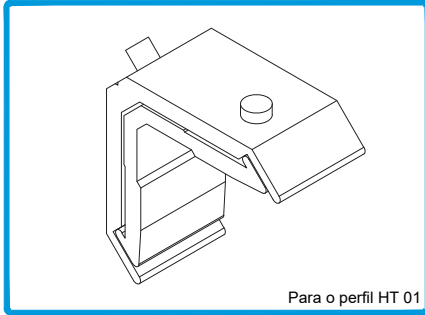


Aplicar em baixo nos perfis HT 11 e HT 25  
quando se usa o perfil HT 25  
Material: EPDM | Acabamento: Preto

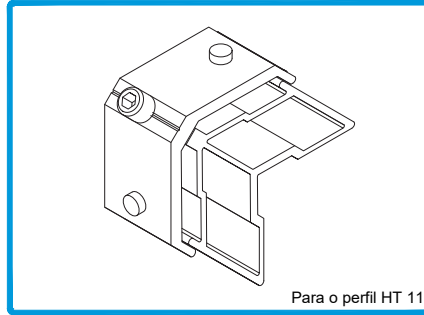
212027 CONJ. TOPOS P/ VD 2127

**ACESSÓRIOS PARA OS AROS**

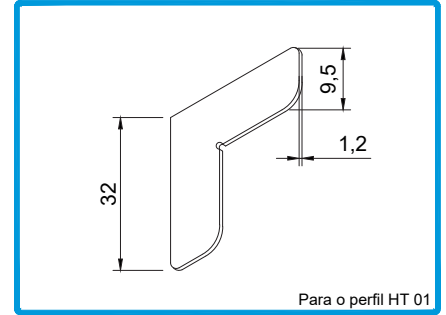
FRAME ACCESSORIES | ACCESSOIRES POUR LES CADRES



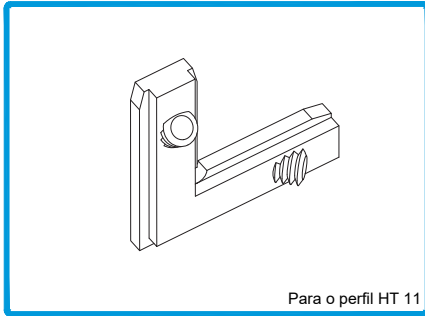
204016 ESQUADRO HT Nº1  
Para o perfil HT 01



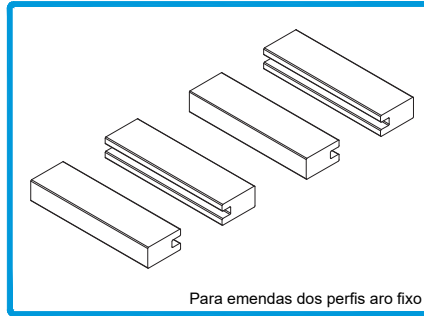
204017 ESQUADRO HT Nº2  
Para o perfil HT 11



213017 CANTO ALINHAMENTO OS  
Para o perfil HT 01



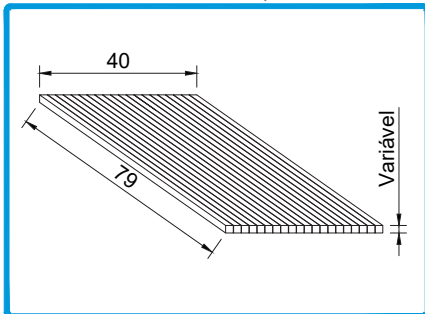
204131 ESQUADRO DE ALINH. C/ APERTO  
Para o perfil HT 11



212963 CONJ. UNIÃO RETA HT  
Para emendas dos perfis aro fixo

**ACESSÓRIOS PARA VIDRO**

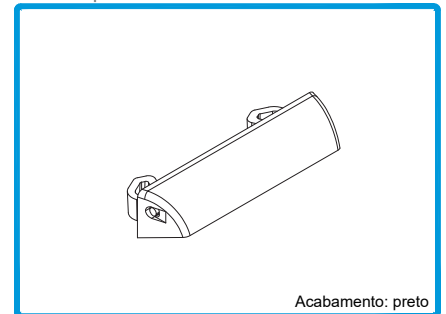
GLASS ACCESSORIES | ACCESSOIRES POUR VERRE



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

**GOTEIRAS**

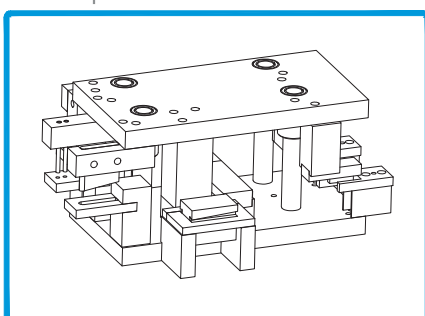
DRIPS | GOUTIÈRES



210268 GOTEIRA C/ VÁLV. SVE  
Acabamento: preto

**FERRAMENTAS**

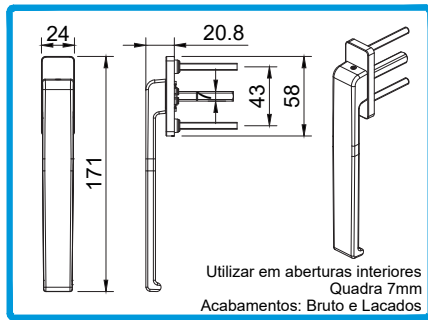
TOOLS | OUTILS



408026 CORTANTE HT Nº1

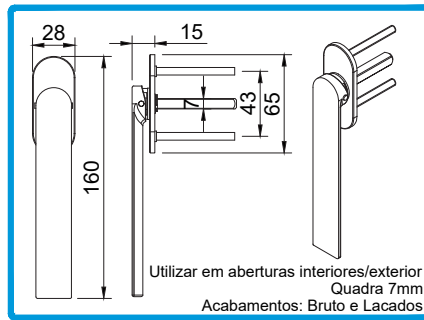
**SISTEMAS DE FECHO**

LOCKING SYSTEMS | SYSTÈMES DE FERMETURE



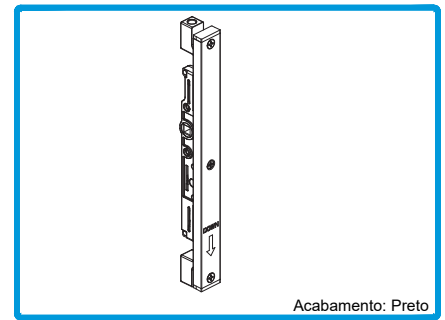
291010 MANÍPULO ARTIC. 3094.33 HT

Utilizar em aberturas interiores  
Quadra 7mm  
Acabamentos: Bruto e Lacados



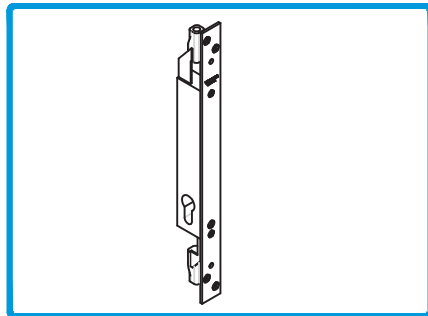
291011 MANÍPULO ARTIC. 3106.11 HT

Utilizar em aberturas interiores/externo  
Quadra 7mm  
Acabamentos: Bruto e Lacados

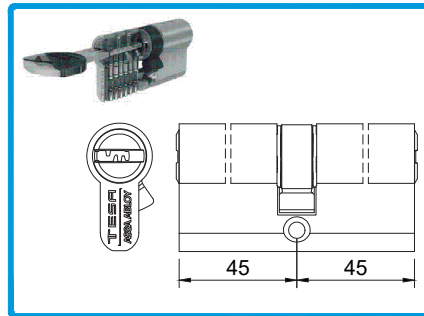


228002 MECANISMO BIDIR. HT LAC 905

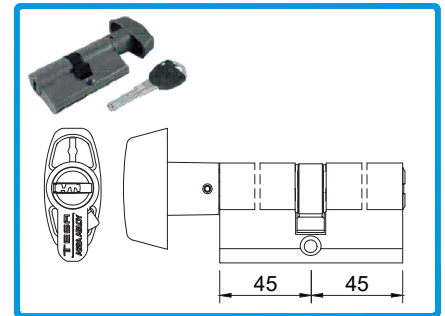
Acabamento: Preto



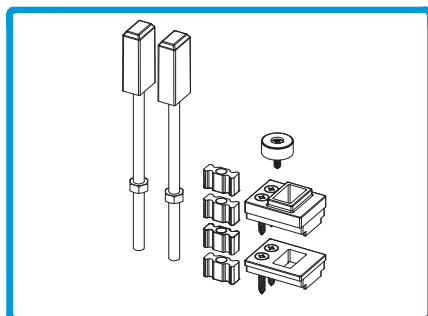
228003 MECANISMO BIDIR. C/ CHAVE HT



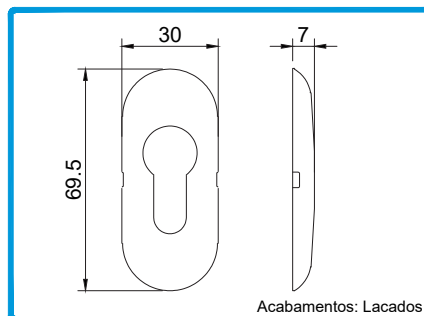
207407 CILINDRO ALTA SEGURANÇA 45/45



207409 CILINDRO ALTA SEGURANÇA COM BOTÃO 45B/45

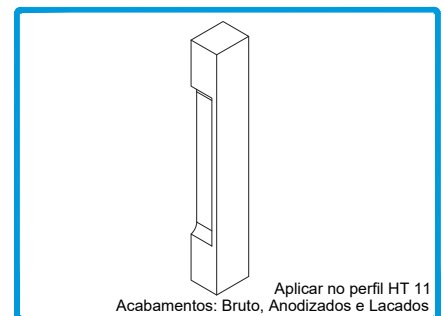


212081 CONJ. VARÕES 2M+TERM. P/ MEC. HT



220251 ESPELHO P/SEGREGDO 3500

Acabamentos: Lacados

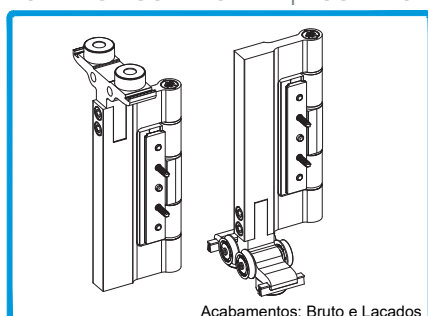


200056 PUXADOR FIXO SLIM

Aplicar no perfil HT 11  
Acabamentos: Bruto, Anodizados e Lacados

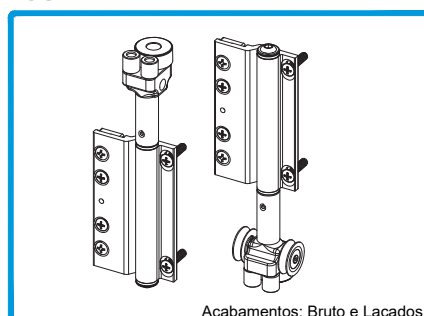
**ACESSÓRIOS HARMÓNIO**

FOLDING ACCESSORIES | ACCESSOIRES POUR REPLIABLES



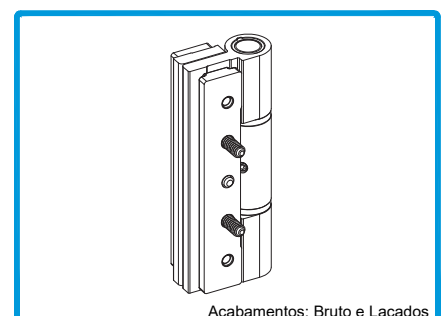
212043 CONJ. DOBR+ROLAMENTO INF/SUP HT 8810.1

Acabamentos: Bruto e Lacados



212044 CONJ. DOBR+GUIA INF/SUP HT 8811.1

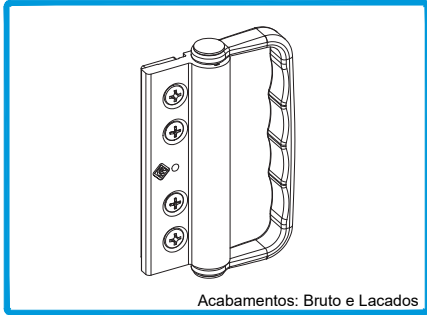
Acabamentos: Bruto e Lacados



202016 DOBRADIÇA 3 ABAS HT 8815.12

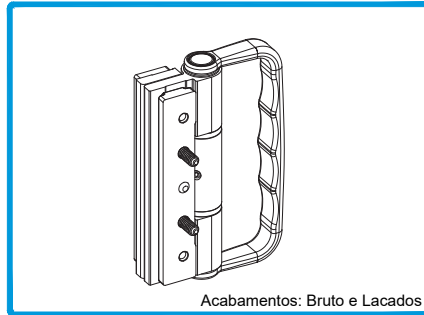
Acabamentos: Bruto e Lacados

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



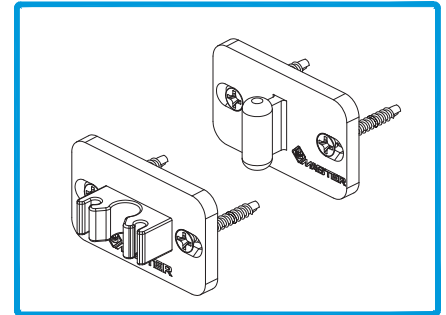
Acabamentos: Bruto e Lacados

202017 DOBRADIÇA C/ PUX. HT 8816.12

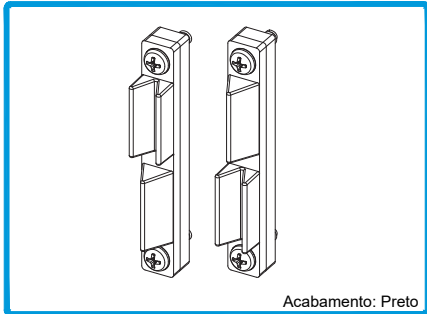


Acabamentos: Bruto e Lacados

202018 DOBR. 3 ABAS C/ PUX. HT 8816.14

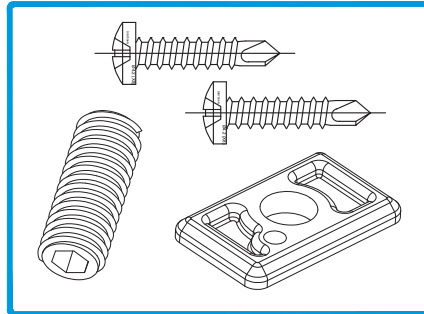


212033 CONJ. BLOQUEIO HT



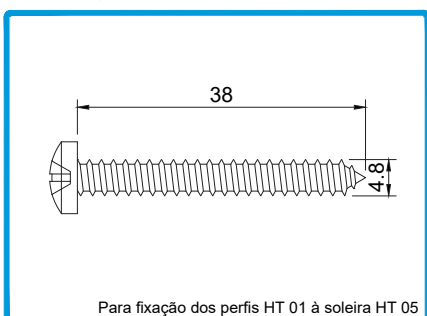
Acabamento: Preto

212031 CONJ. PONTO FECHO SUPLEM.  
HT 4227 PRT



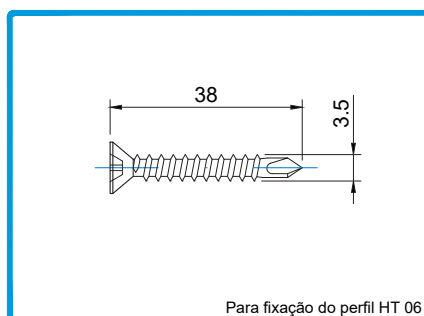
212964 CONJ. P/ AJUSTE HT 82

**DIVERSOS**  
DIVERS | DIVERS



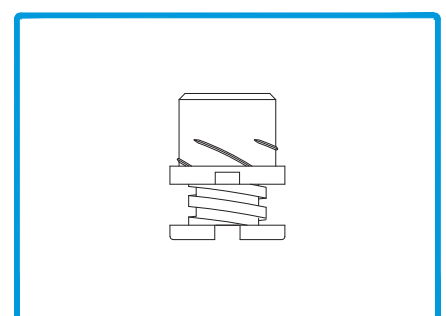
Para fixação dos perfis HT 01 à soleira HT 05

290158 PARAF PKI PH 1 1/2x10 CQ



Para fixação do perfil HT 06

290024 PF DIN 7504-P 3,5X25 INOX A2



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

DESIGNAÇÃO DESIGNATION NOMINATION	CÓDIGO CODE CODE	TIPOLOGIAS DE ABERTURA INTERIOR   INWARD OPENING TYPOLOGIES   TYPOLOGIES D'OUVERTURE INTÉRIEURE															
		2+0		2+1		2+2		4+0		4+1		4+2		6+0		6+1	
		4a	4b	4a/8a	4a/8b	4a/4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a	4a/4b	4a	4a/4b	4a/8a	4a/8b
MANÍPULO ARTIC. 3094.33 HT FOLDABLE SYSTEM HANDLE POIGNÉE POUR SYSTÈME REPLIABLE	291010	1	-	2	1	2	1	2	1	3	2	3	2	3	2	4	3
MECANISMO BIDIR. HT HT BIDIRECTIONAL MECHANISM MÉCANISME BIDIRECTIONNEL HT	228002	1	-	2	1	2	1	2	1	3	2	3	2	3	2	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
PUXADOR FIXO SLIM SLIM FIXED HANDLE POIGNÉE FIXE SLIM	200056	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
CILINDRO SEGURANÇA C/ BOTÃO 45B/45 CYLINDER CYLINDRE	207408	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
ESPELHO P/ SEGREDO 3500 CYLINDER COVER COUVERTURE POUR CYLINDRE	220251	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
CONJ. VARÕES 2M+TERM. P/ MEC. HT RODS+TERMINALS FOR HT MECHANISM KIT TIGES+BORNES POUR MÉCANISME HT	212081	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
DOBRADIÇA C/ PUX. HT 8816.12 PULLING HINGE PAUMELLE AVEC POIGNÉE	202017	1 *		1 *		2 *		2 *		2 *		3 *		3 *		3 *	
DOBR. 3 ABAS HT 8815.12 3 FLAPS HINGE PAUMELLE DE 3 LAMES	202016	6 <sup>(a)</sup> 8 <sup>(b)</sup> 10 <sup>(c)</sup>		9 <sup>(a)</sup> 12 <sup>(b)</sup> 15 <sup>(c)</sup>		12 <sup>(a)</sup> 16 <sup>(b)</sup> 20 <sup>(c)</sup>		10 <sup>(a)</sup> 14 <sup>(b)</sup> 18 <sup>(c)</sup>		13 <sup>(a)</sup> 18 <sup>(b)</sup> 23 <sup>(c)</sup>		16 <sup>(a)</sup> 22 <sup>(b)</sup> 28 <sup>(c)</sup>		14 <sup>(a)</sup> 20 <sup>(b)</sup> 26 <sup>(c)</sup>		17 <sup>(a)</sup> 24 <sup>(b)</sup> 31 <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		2		2	
CONJ. DOBR.+GUIA INF/SUP HT 8811.1 BOTTOM/TOP HINGE+GUIDE KIT KIT DE PAUMELLE+GUIDE INF/SUP	212044	1		1		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 **		3 **		3 **		4 **		5 **		5 **	
CONJ. TOPOS P/ VD 2127 2127 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2127	212027	4		6		8		8		10		12		12		14	
ESQUADRO HT Nº1 BLOCKING BRACKET ÉQUERRE	204016	8		8		8		8		8		8		8		8	
ESQUADRO HT Nº2 BLOCKING BRACKET ÉQUERRE	204017	16		24		32		32		40		48		48		56	
CANTO ALINHAMENTO OS ANGLE ANGLE	213017	4		4		4		4		4		4		4		4	
ESQUADRO DE ALINHAM. C/ APERTO ANGLE ANGLE	204131	8		12		16		16		20		24		24		28	
CONJ. P/ AJUSTE HT 82 HT 82 ADJUSTABLE KIT KIT POUR LE RÉGLAGE HT 82	212964	3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>	



OPÇÃO DE FECHO 1  
CLOSING OPTION 1  
OPTION DE FERMETURE 1



OPÇÃO DE FECHO 2  
CLOSING OPTION 2  
OPTION DE FERMETURE 2



DEPENDE DA UTILIZAÇÃO DO HT 82  
IT DEPENDS ON THE USE OF THE HT 82  
IL DEPEND DE L'UTILISATION DU HT 82

\* ADICIONAR 1 DOBRADIÇA CENTRAL - COM OU SEM PUXADOR - SE O PESO DA FOLHA FOR SUPERIOR A 90KG.  
ADD 1 CENTRAL HINGE - WITH OR WITHOUT HANDLE - IF THE SASH WEIGHT IS OVER 90KG. | AJOUTER 1 CHARNIÈRE CENTRALE - AVEC OU SANS POIGNÉE - SI LE POID DU VANTAIL DÉPASSÉ 90KG.

(a) H < 2200mm (b) 2200mm < H < 3000mm (c) 3000mm < H < 3500mm

\*\* DUPLICAR A QUANTIDADE SE A ALTURA DA FOLHA FOR SUPERIOR A 2200MM.  
DOUBLE THE AMOUNT IF THE SHEET HEIGHT IS GREATER THAN 2200MM. | DOUBLER LA QUANTITÉ SI LA HAUTEUR DE LA FEUILLE EST SUPÉRIEURE À 2200MM.

DESIGNAÇÃO DESIGNATION NOMINATION	CÓDIGO CODE CODE	TIPOLOGIAS DE ABERTURA EXTERIOR   OUTWARD OPENING TYPOLOGIES   TYPOLOGIES D'OUVERTURE EXTÉRIEURE															
		2+0		2+1		2+2		4+0		4+1		4+2		6+0		6+1	
		4a	4b	4a/8a	4a/8b	4a/4a	4a/4b	4a	4a/4b	4a/8a	4a/8b	4a	4a/4b	4a	4a/4b	4a/8a	4a/8b
MANÍPULO ARTIC. 3106.11 HT FOLDABLE SYSTEM HANDLE POIGNÉE POUR SYSTÈME REPLIABLE	291011	1	-	2	1	2	1	2	1	3	2	3	2	3	2	4	3
MECANISMO BIDIR. HT HT BIDIRECTIONAL MECHANISM MÉCANISME BIDIRECTIONNEL HT	228002	1	-	2	1	2	1	2	1	3	2	3	2	3	2	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
PUXADOR FIXO SLIM SLIM FIXED HANDLE POIGNÉE FIXE SLIM	200056	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
CILINDRO SEGURANÇA C/ BOTÃO 45B/45 CYLINDER CYLINDRE	207408	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
ESPELHO P/ SEGREDO 3500 CYLINDER COVER COUVERTURE POUR CYLINDRE	220251	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1
CONJ. VARÕES 2M+TERM. P/ MEC. HT RODS+TERMINALS FOR HT MECHANISM KIT TIGES+BORNES POUR MÉCANISME HT	212081	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4
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> 7 <sup>(b)</sup> 9 <sup>(c)</sup>		8 <sup>(a)</sup> 11 <sup>(b)</sup> 14 <sup>(c)</sup>		10 <sup>(a)</sup> 14 <sup>(b)</sup> 18 <sup>(c)</sup>		8 <sup>(a)</sup> 12 <sup>(b)</sup> 16 <sup>(c)</sup>		11 <sup>(a)</sup> 16 <sup>(b)</sup> 21 <sup>(c)</sup>		13 <sup>(a)</sup> 19 <sup>(b)</sup> 25 <sup>(c)</sup>		11 <sup>(a)</sup> 17 <sup>(b)</sup> 23 <sup>(c)</sup>		14 <sup>(a)</sup> 21 <sup>(b)</sup> 28 <sup>(c)</sup>	
DOBR. 3 ABAS C/ PUX. HT 8816.14 3 FLAPS PULLING HINGE PAUMELLE DE 3 LAMES AVEC POIGNÉE	202018	1 *		1 *		2 *		2 *		2 *		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		2		2	
CONJ. DOBR.+GUIA INF/SUP HT 8811.1 BOTTOM/TOP HINGE+GUIDE KIT KIT DE PAUMELLE+GUIDE INF/SUP	212044	1		1		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 **		3 **		3 **		4 **		5 **		5 **	
CONJ. TOPOS P/ VD 2127 2127 GASKET END-CAPS KIT KIT D'EMBOUTS POUR JOINT 2127	212027	4		6		8		8		10		12		12		14	
ESQUADRO HT Nº1 BLOCKING BRACKET ÉQUERRE	204016	8		8		8		8		8		8		8		8	
ESQUADRO HT Nº2 BLOCKING BRACKET ÉQUERRE	204017	16		24		32		32		40		48		48		56	
CANTO ALINHAMENTO OS ANGLE ANGLE	213017	4		4		4		4		4		4		4		4	
ESQUADRO DE ALINHAM. C/ APERTO ANGLE ANGLE	204131	8		12		16		16		20		24		24		28	
CONJ. P/ AJUSTE HT 82 HT 82 ADJUSTABLE KIT KIT POUR LE RÉGLAGE HT 82	212964	3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>		3 <sup>(a)</sup> 4 <sup>(b)</sup> 5 <sup>(c)</sup>	



OPÇÃO DE FECHO 1  
CLOSING OPTION 1  
OPTION DE FERMETURE 1



OPÇÃO DE FECHO 2  
CLOSING OPTION 2  
OPTION DE FERMETURE 2



DEPENDE DA UTILIZAÇÃO DO HT 82  
IT DEPENDS ON THE USE OF THE HT 82  
IL DEPEND DE L'UTILISATION DU HT 82

\* ADICIONAR 1 DOBRADIÇA CENTRAL - COM OU SEM PUXADOR - SE O PESO DA FOLHA FOR SUPERIOR A 90KG.  
ADD 1 CENTRAL HINGE - WITH OR WITHOUT HANDLE - IF THE SASH WEIGHT IS OVER 90KG. | AJOUTER 1 CHARNIÈRE CENTRALE - AVEC OU SANS POIGNÉE - SI LE POID DU VANTAIL DÉPASSÉ 90KG

(a) H < 2200mm (b) 2200mm < H < 3000mm (c) 3000mm < H < 3500mm

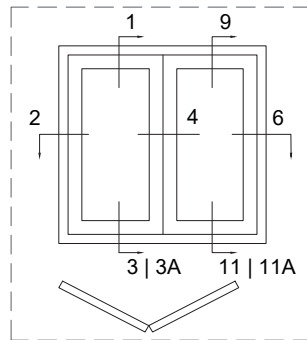
\*\* DUPLICAR A QUANTIDADE SE A ALTURA DA FOLHA FOR SUPERIOR A 2200MM.  
DOUBLE THE AMOUNT IF THE SHEET HEIGHT IS GREATER THAN 2200MM. | DOUBLER LA QUANTITÉ SI LA HAUTEUR DE LA FEUILLE EST SUPÉRIEURE À 2200MM.

# IV

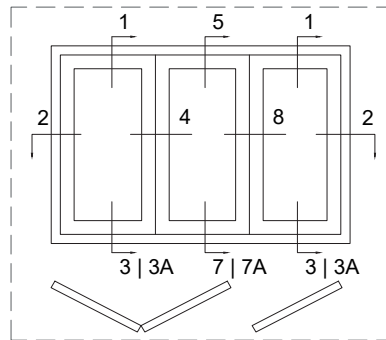
**TIPOLOGIAS E MAPA DE QUANTIDADES**  
**TYPOLOGIES AND QUANTITY MAPS**  
**TYPOLOGIES ET CARTES DE QUANTITÉS**

**PORMENORES DE ACORDO COM AS TIPOLOGIAS**  
DETAILS ACCORDING TO TYPOLOGIES  
DÉTAILS SELON LES TYPOLOGIES

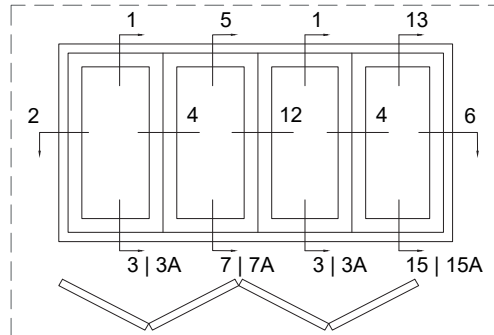
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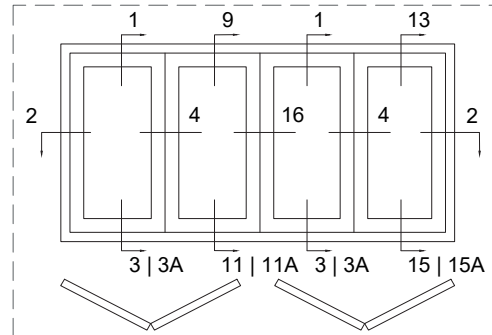
**321**



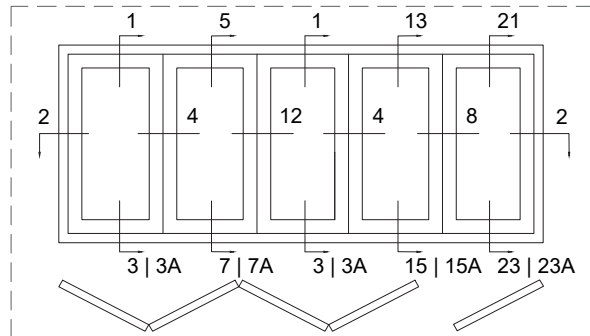
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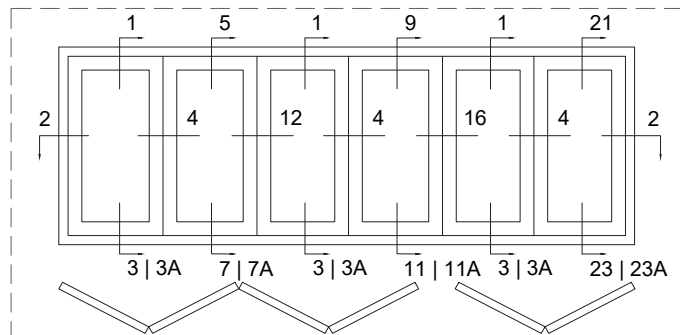
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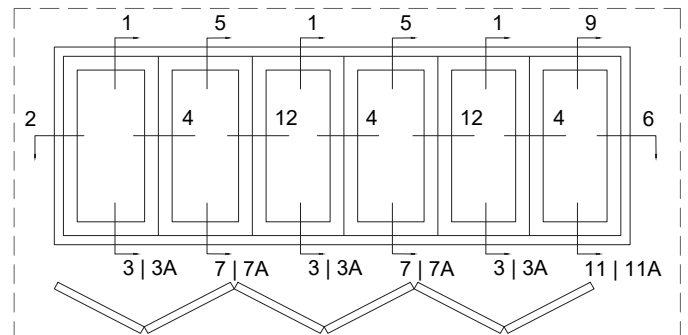
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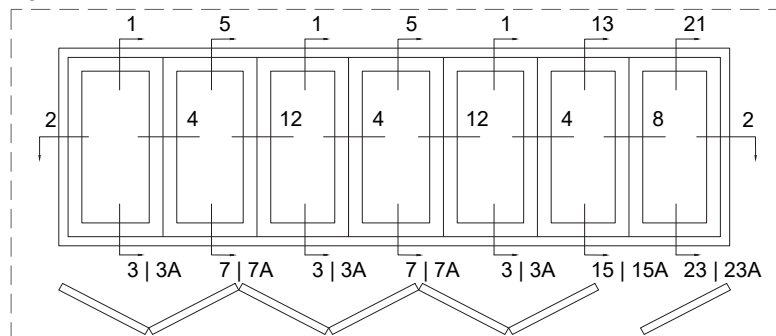
**642**



**660**



**761**

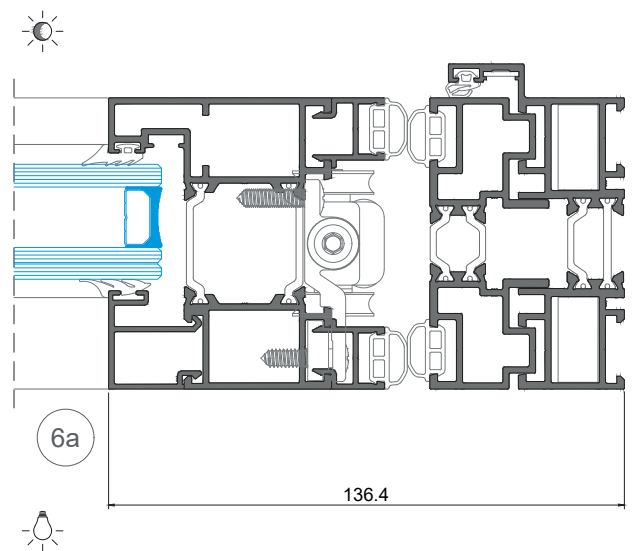
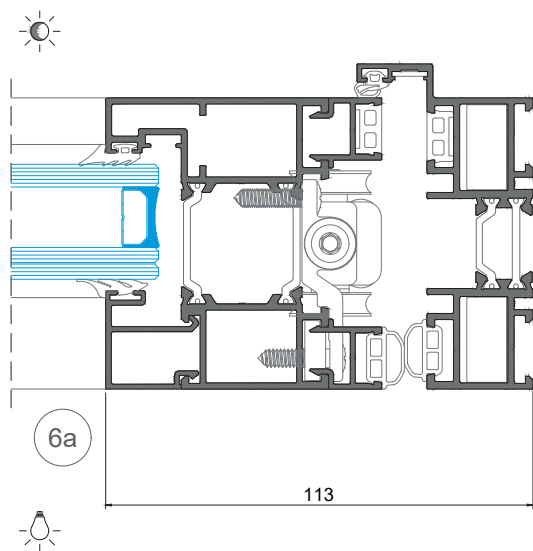
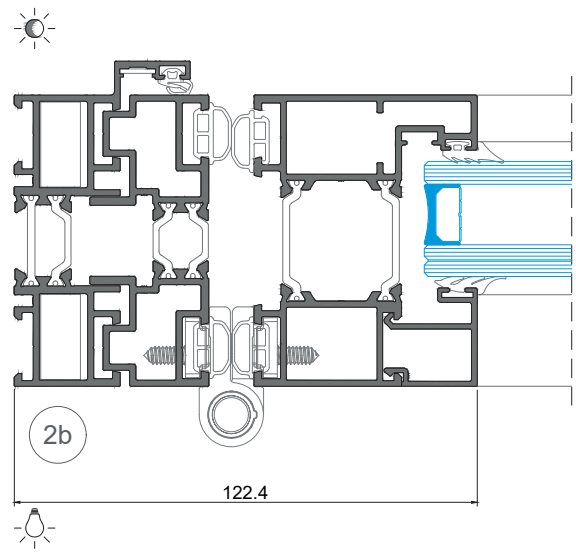
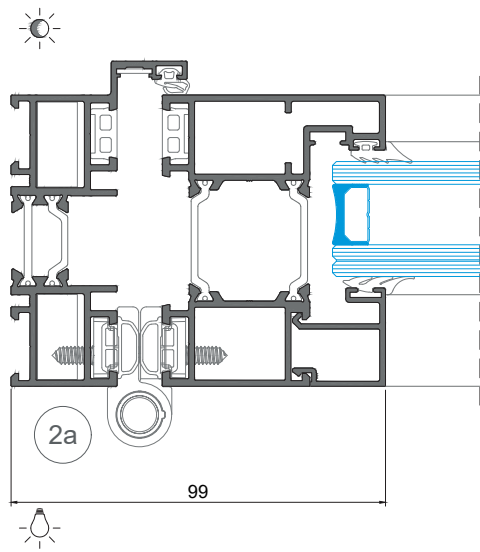




**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

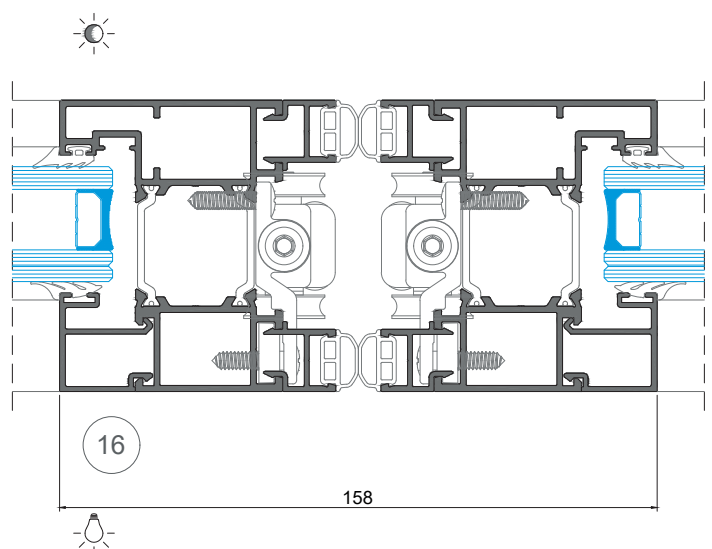
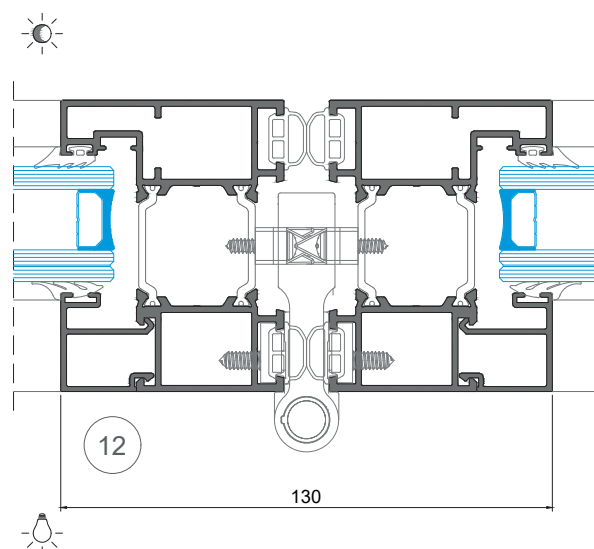
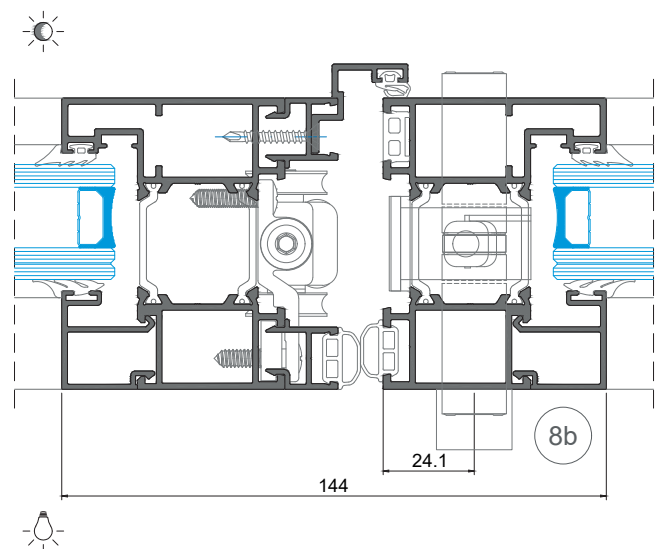
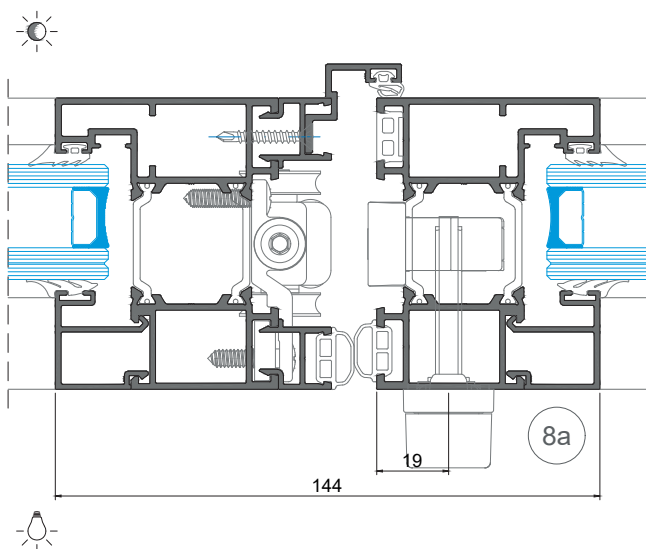
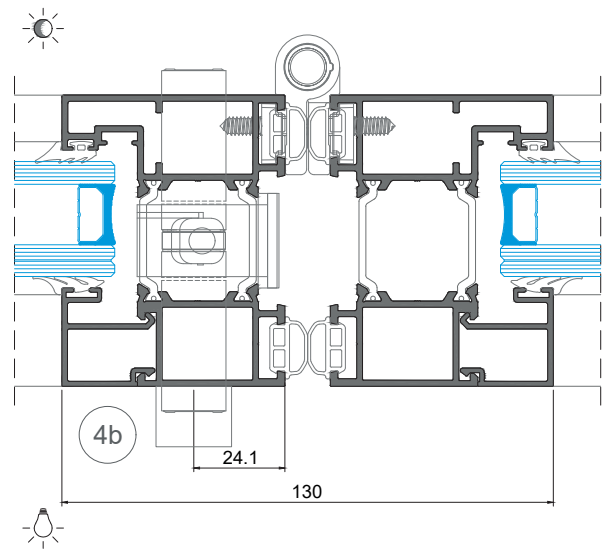
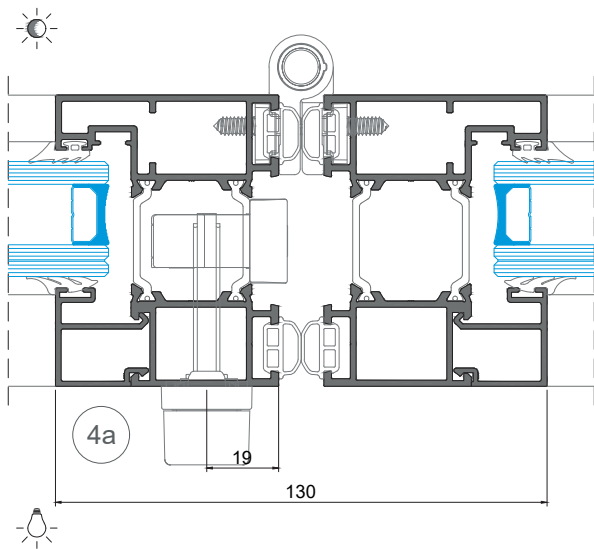
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



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

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

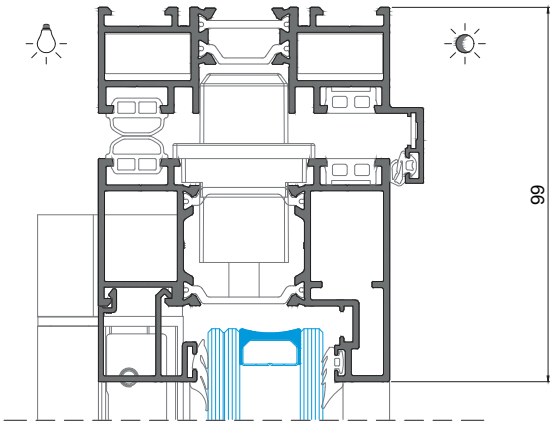
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



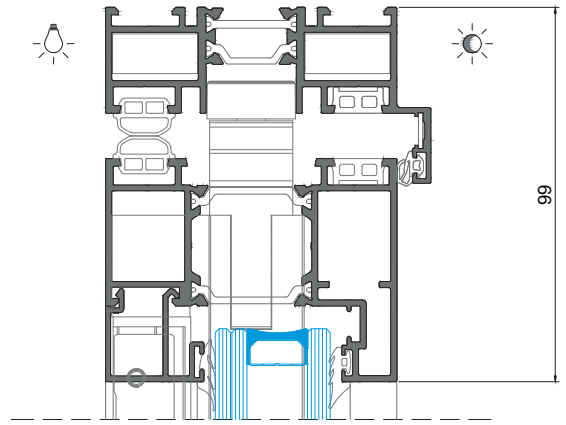
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DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

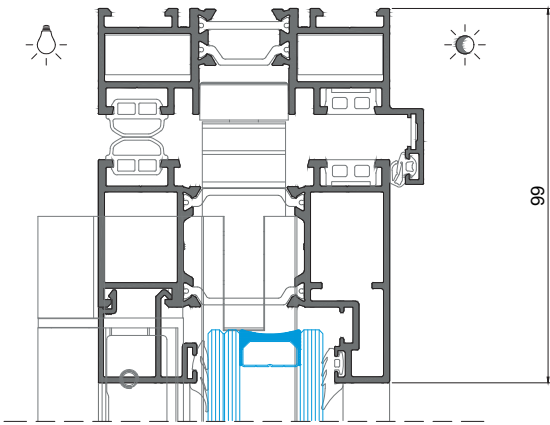
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



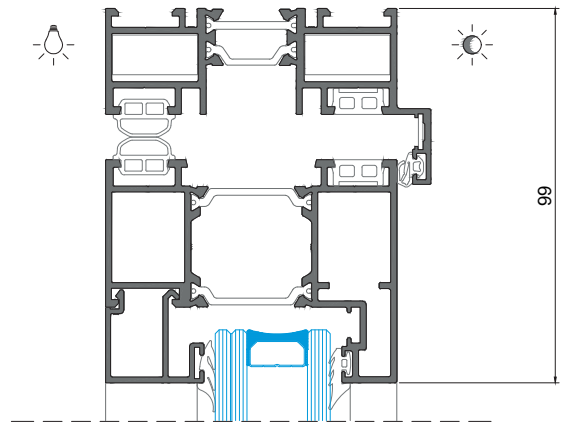
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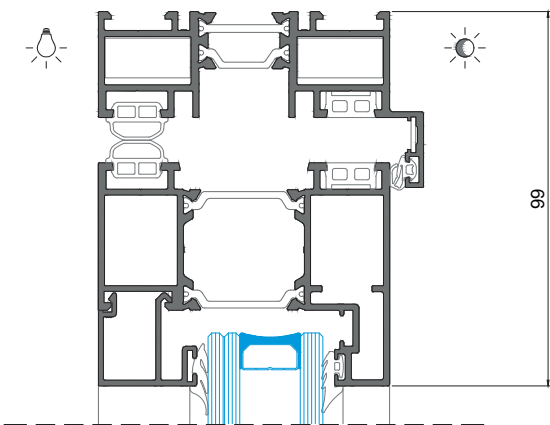
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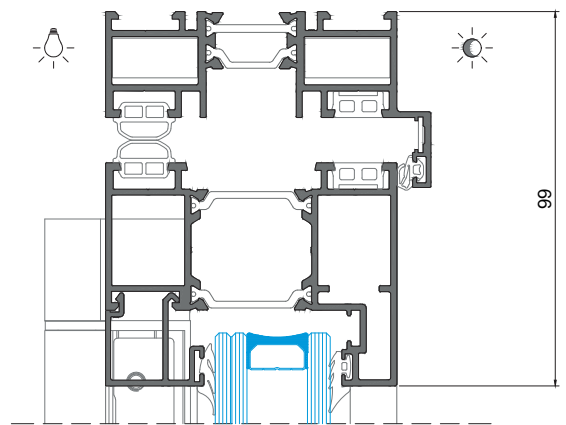
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13



17

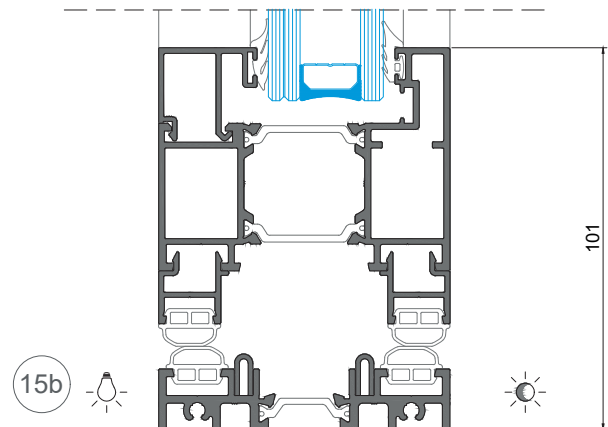
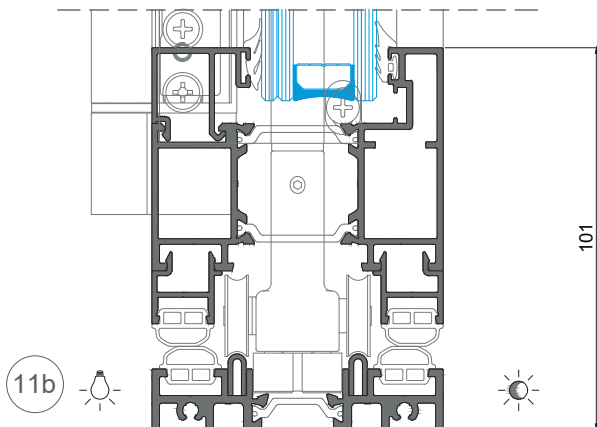
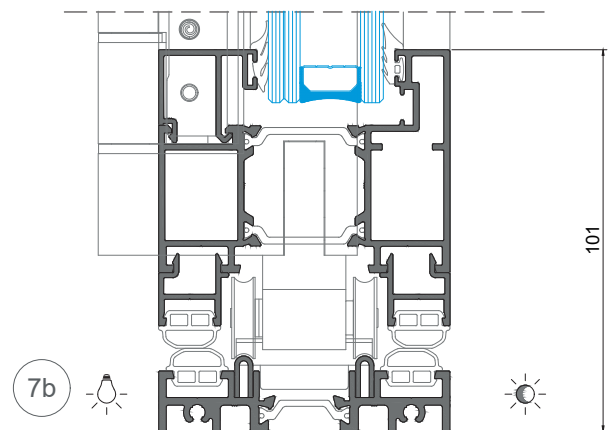
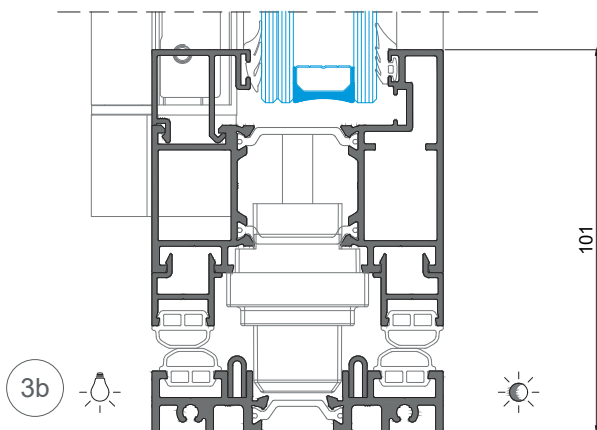
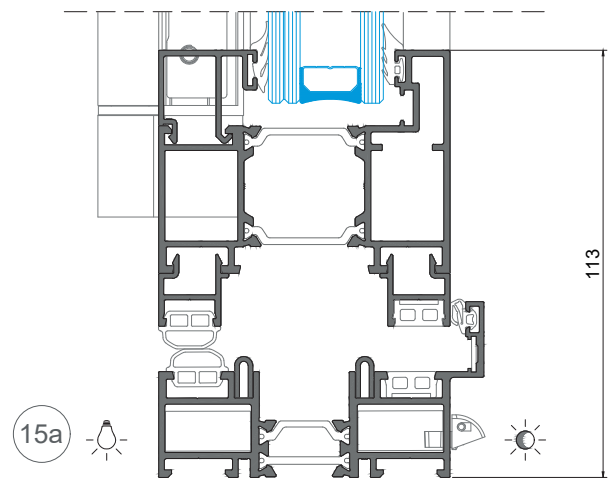
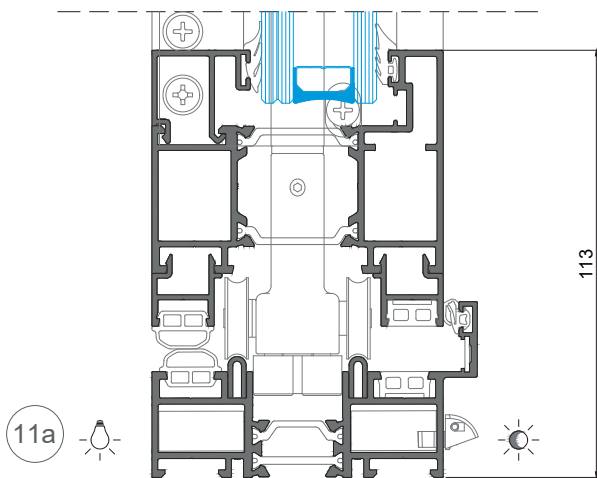
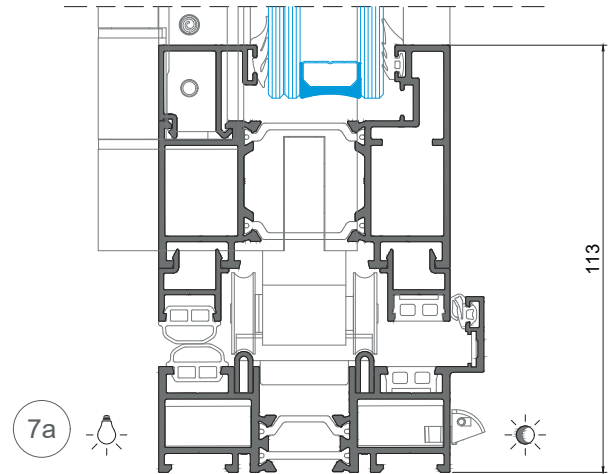
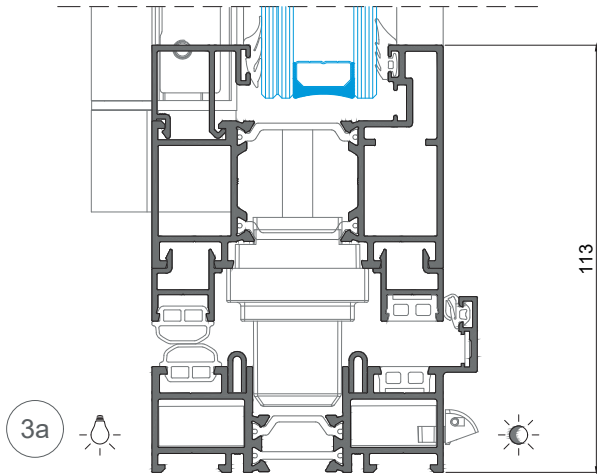


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**PORMENORES DE ACORDO COM AS TIPOLOGIAS - ABERTURA INTERIOR**

DETAILS ACCORDING TO TYPOLOGIES - INWARD OPENING

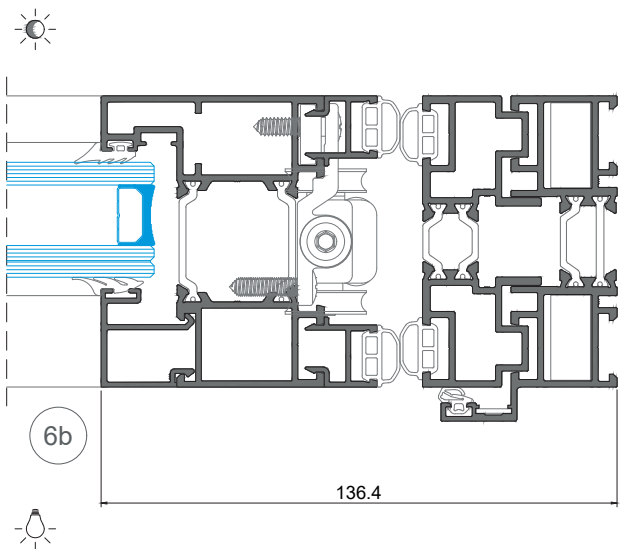
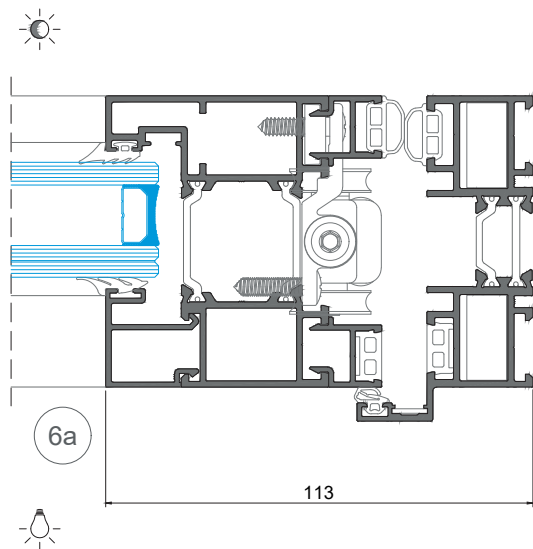
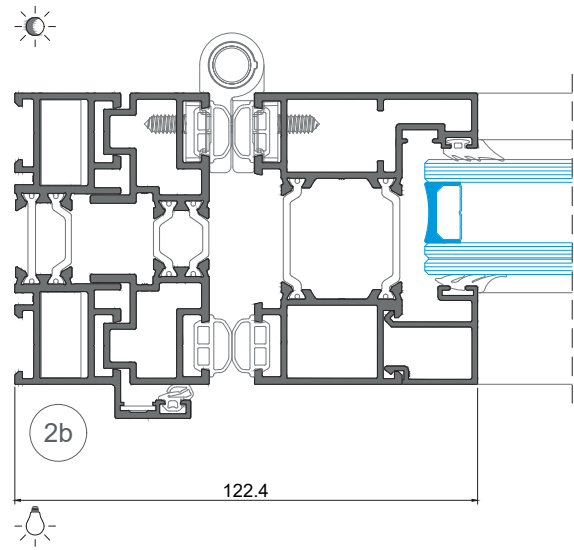
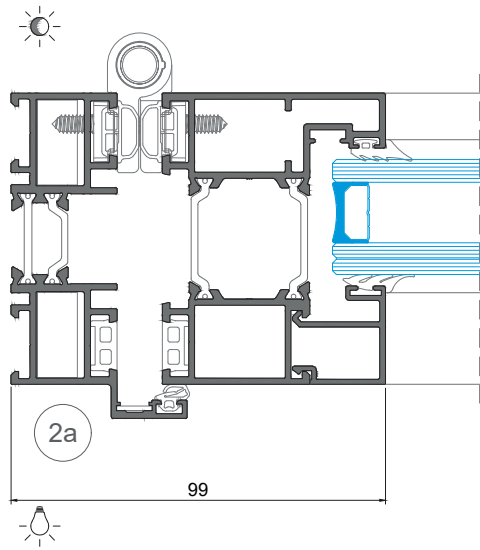
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'INTÉRIEUR



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

DETAILS ACCORDING TO TYPOLOGIES - OUWARD OPENING

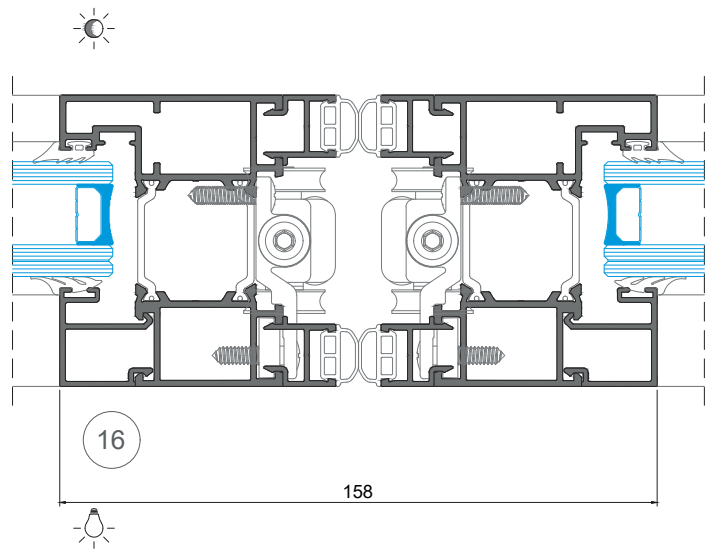
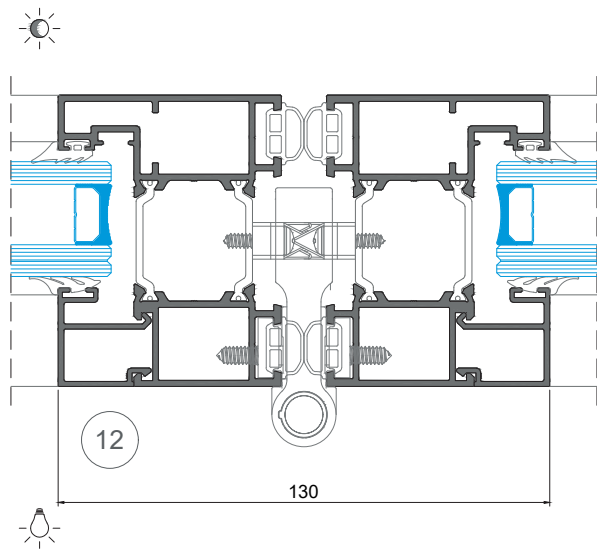
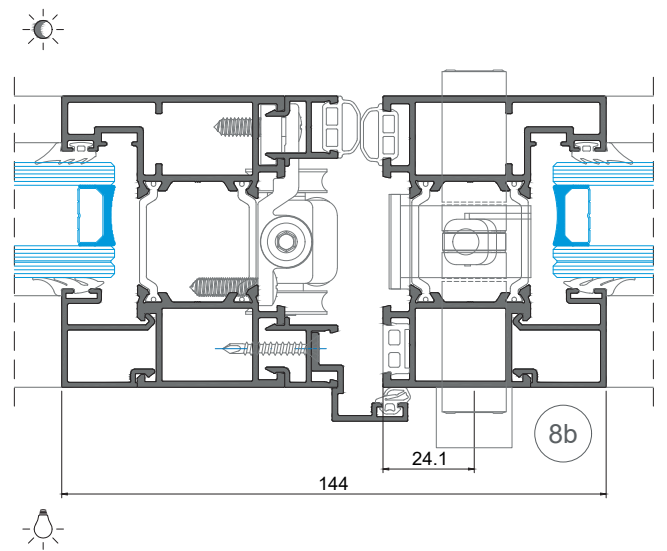
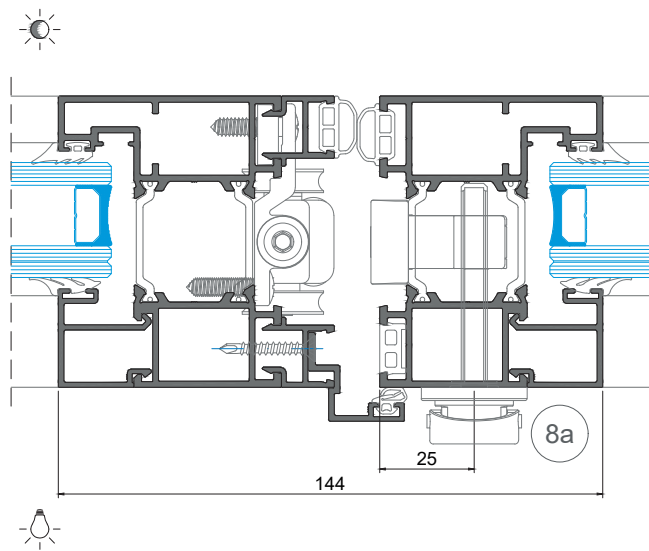
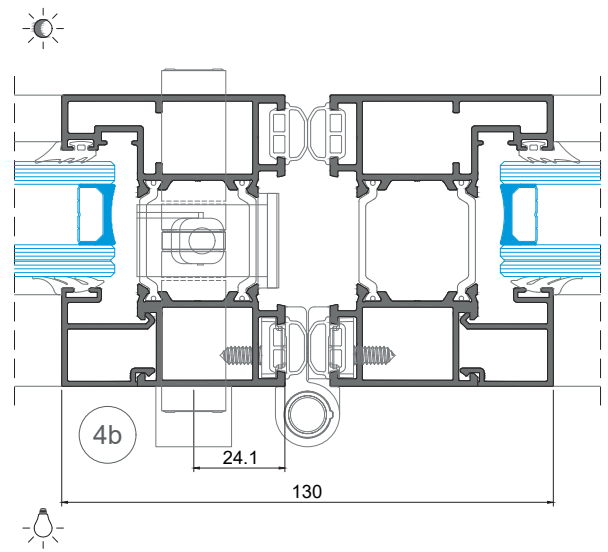
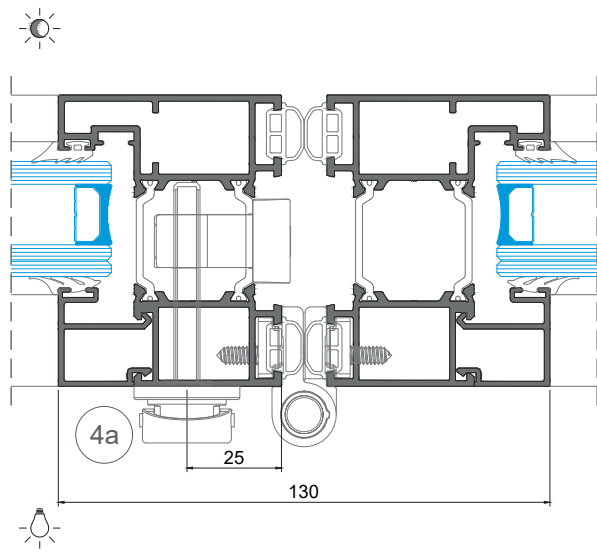
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



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

DETAILS ACCORDING TO TYPOLOGIES - OUWARD OPENING

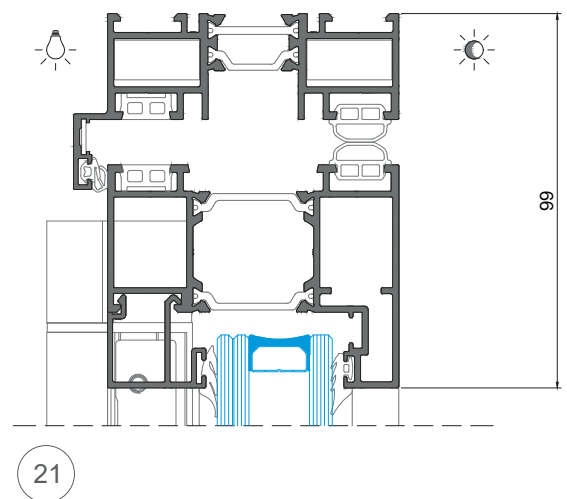
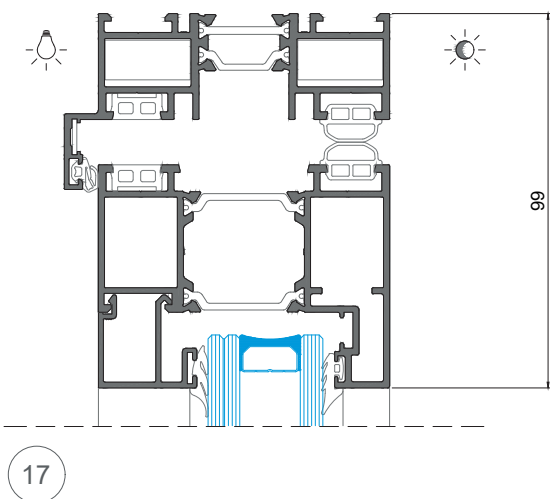
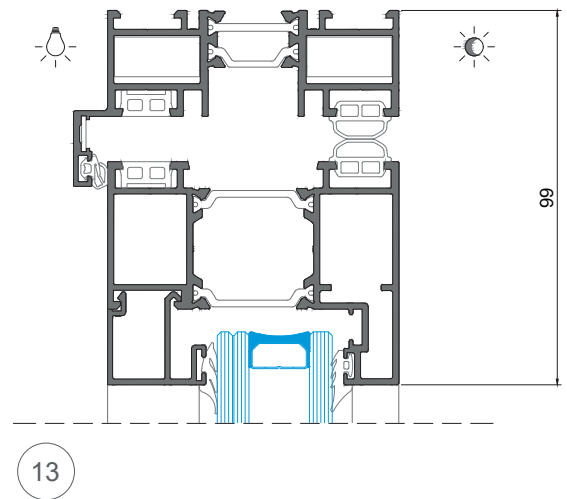
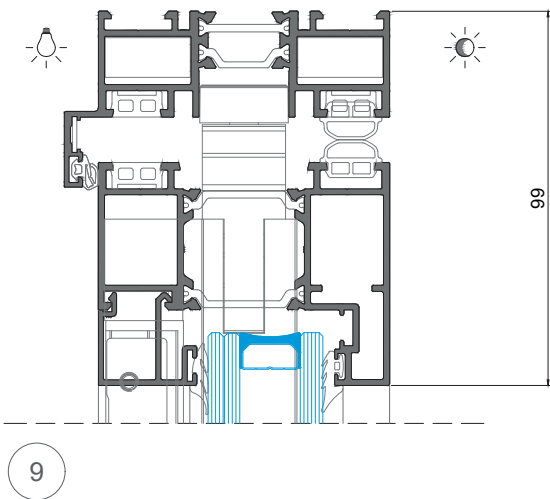
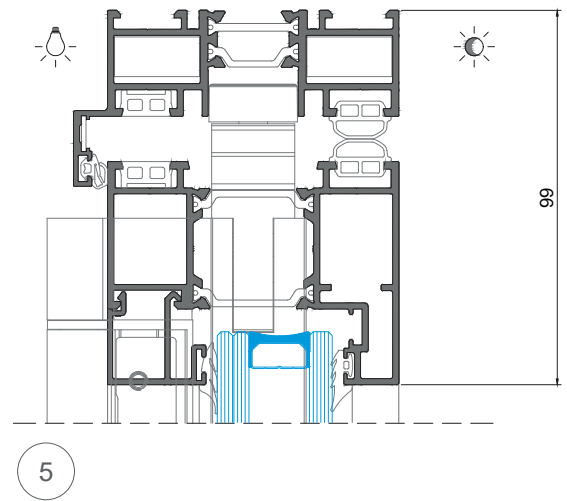
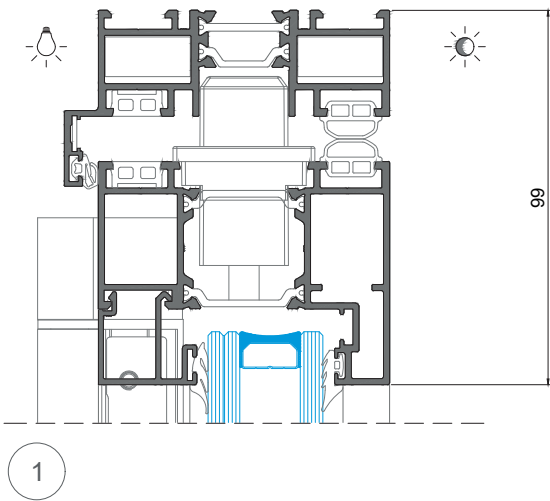
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



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

DETAILS ACCORDING TO TYPOLOGIES - OUWARD OPENING

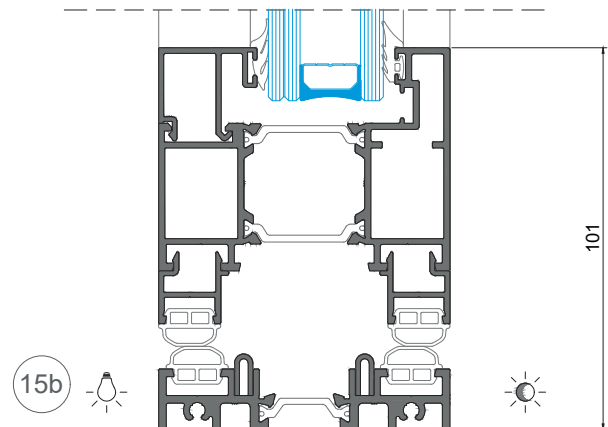
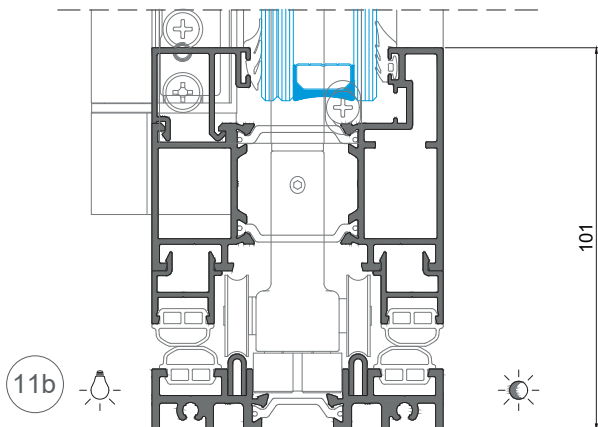
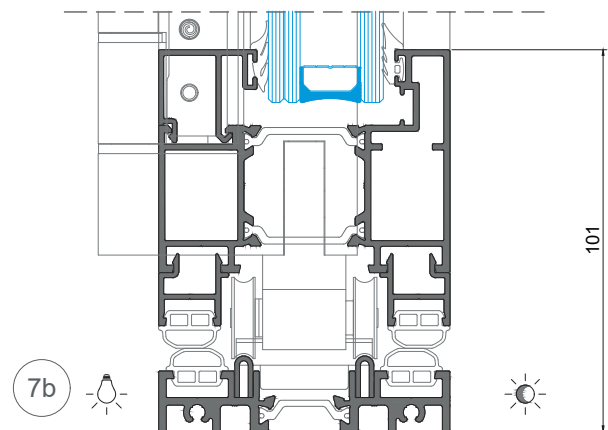
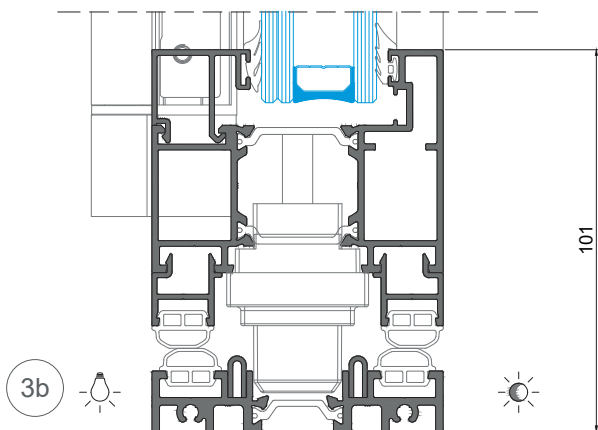
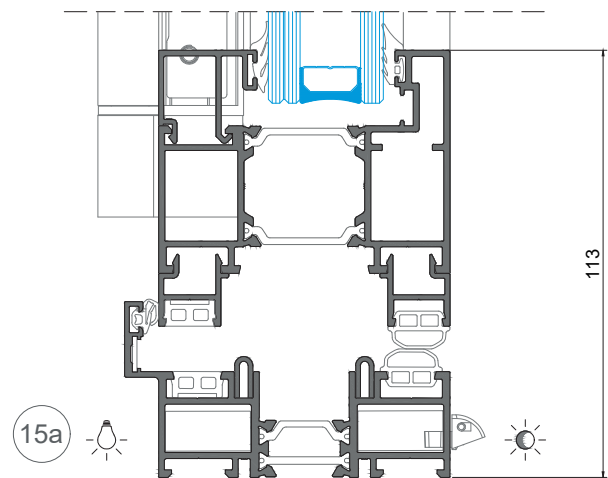
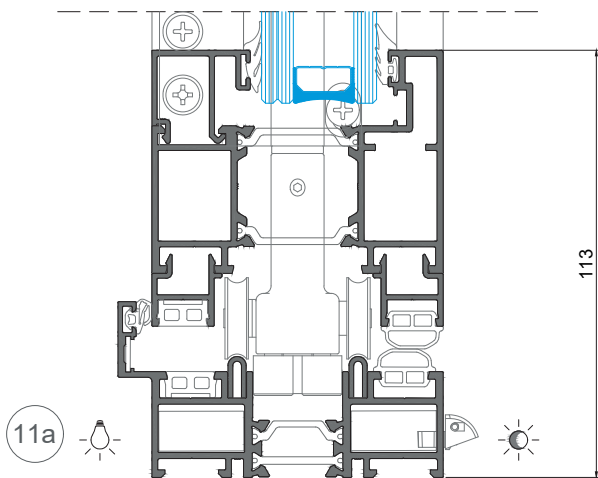
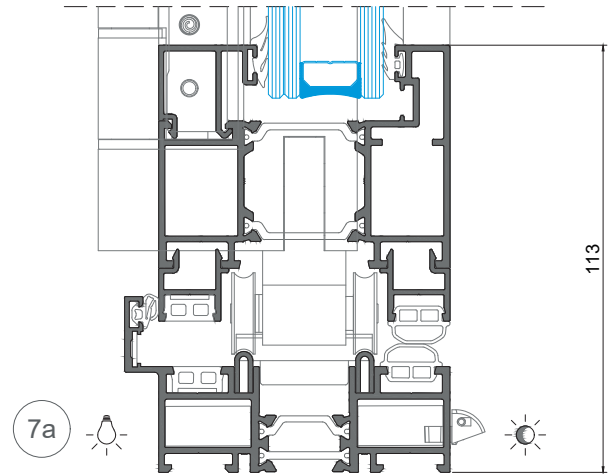
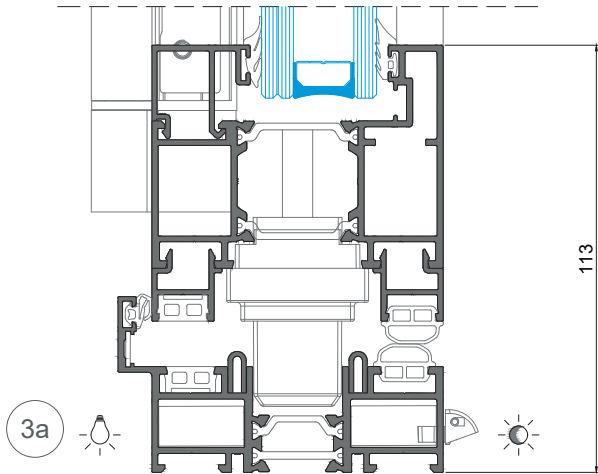
DÉTAILS SELON LES TYPOLOGIES - OUVERTURE VERS L'EXTÉRIEUR



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

DETAILS ACCORDING TO TYPOLOGIES - OUWARD OPENING

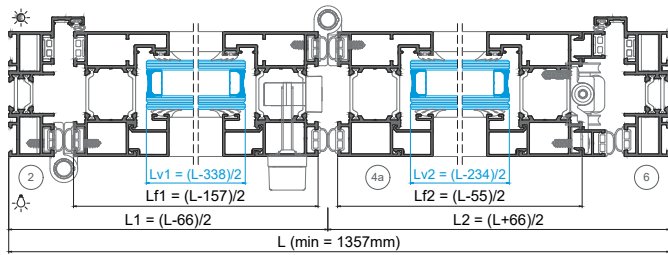
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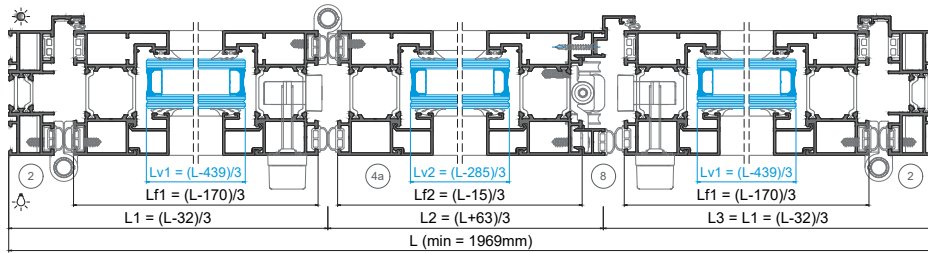


PORMENORES DE ACORDO COM AS TIPOLOGIAS  
 DETAILS ACCORDING TO TYPOLOGIES  
 DÉTAILS SELON LES TYPOLOGIES

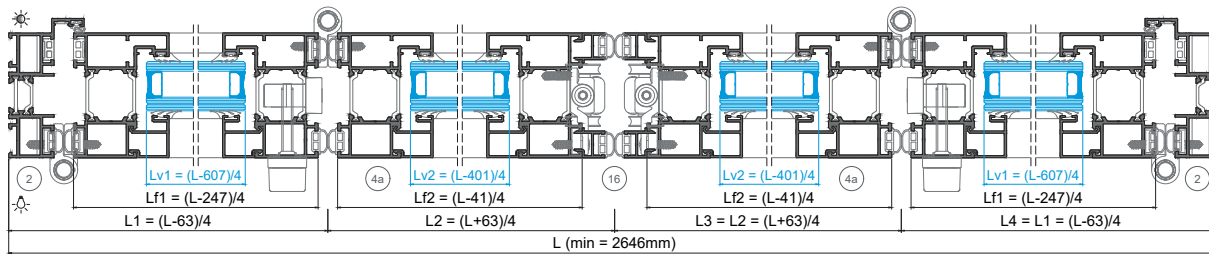
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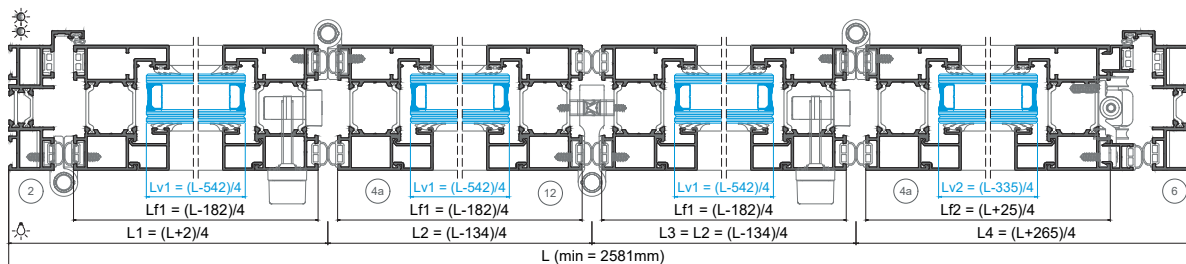
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• 422

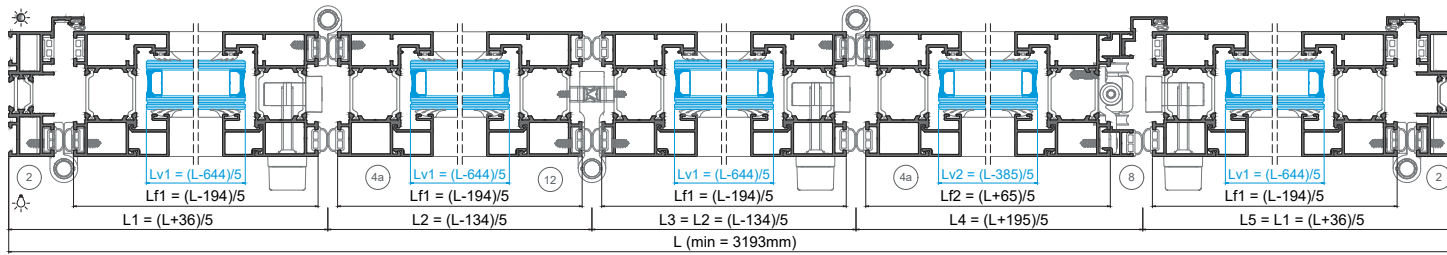


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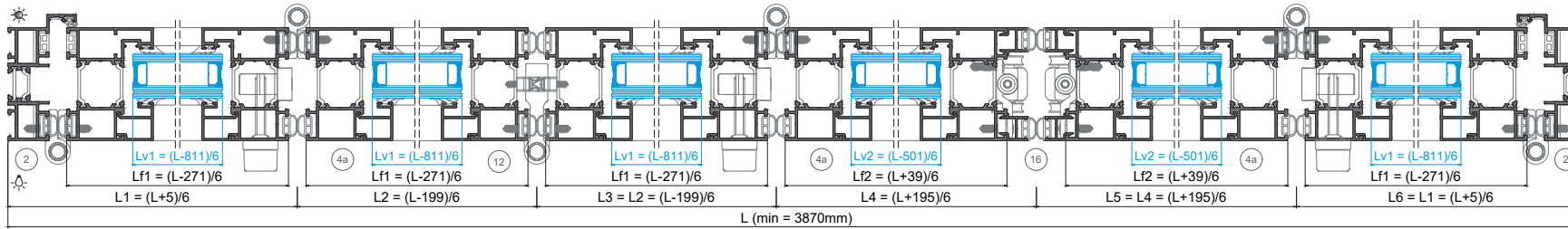


PORMENORES DE ACORDO COM AS TIPOLOGIAS  
 DETAILS ACCORDING TO TYPOLOGIES  
 DÉTAILS SELON LES TYPOLOGIES

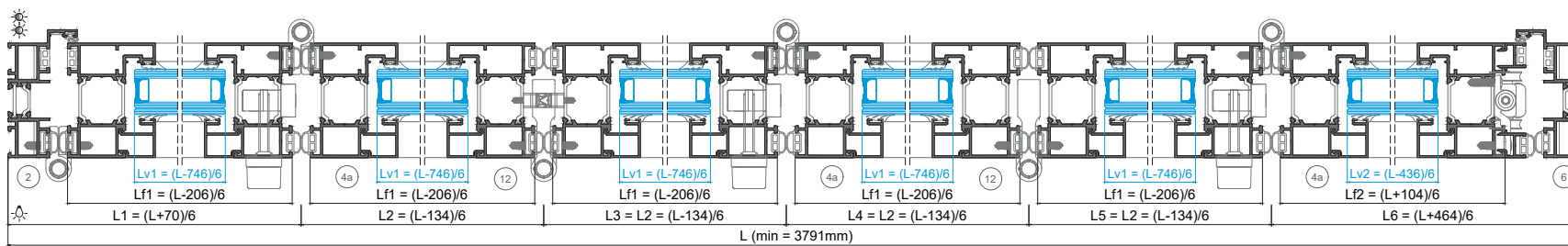
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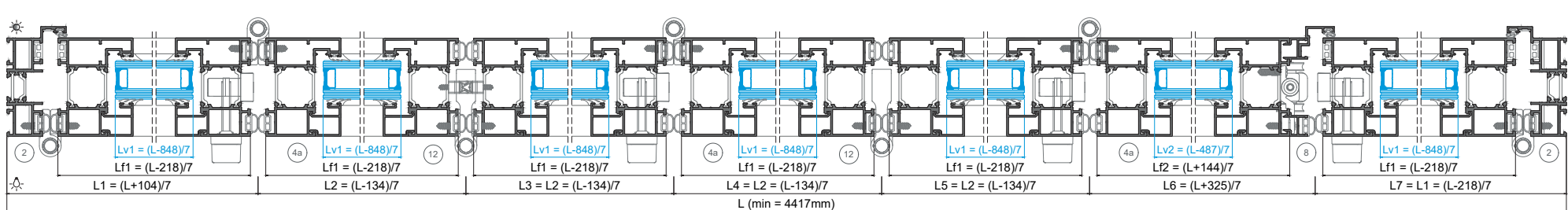
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• 660

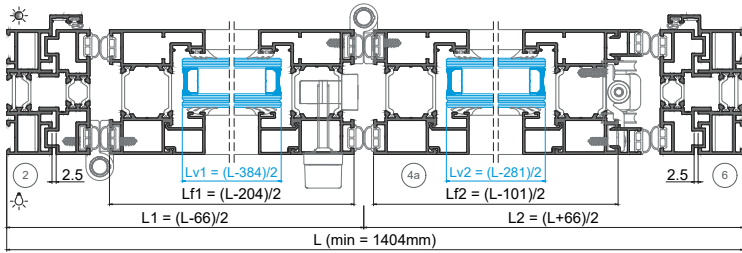


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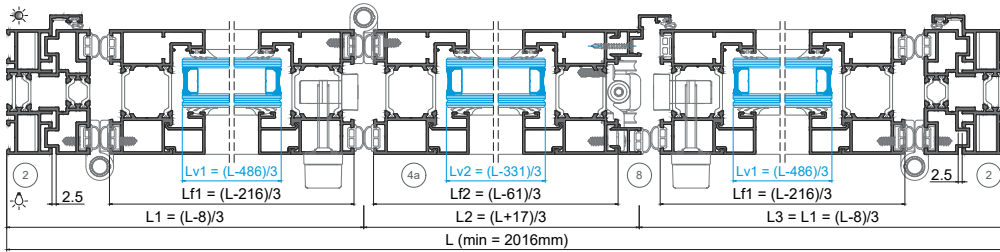


PORMENORES DE ACORDO COM AS TIPOLOGIAS  
 DETAILS ACCORDING TO TYPOLOGIES  
 DÉTAILS SELON LES TYPOLOGIES

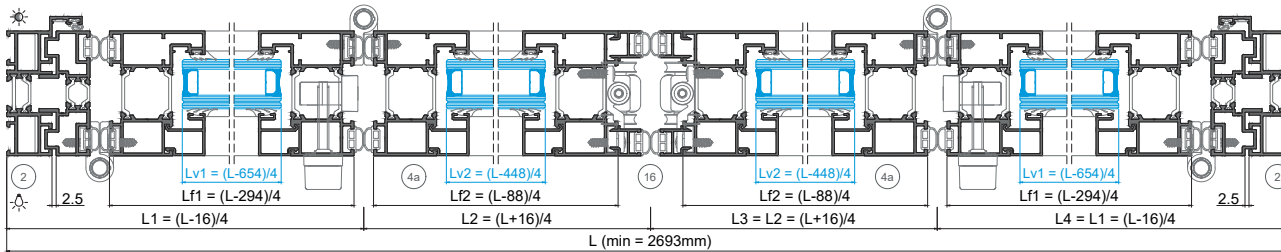
• 220 com | with | avec HT 82



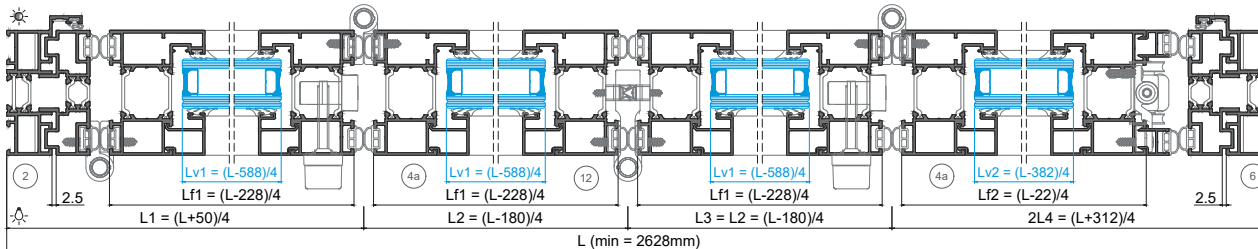
• 321 com | with | avec HT 82



• 422 com | with | avec HT 82

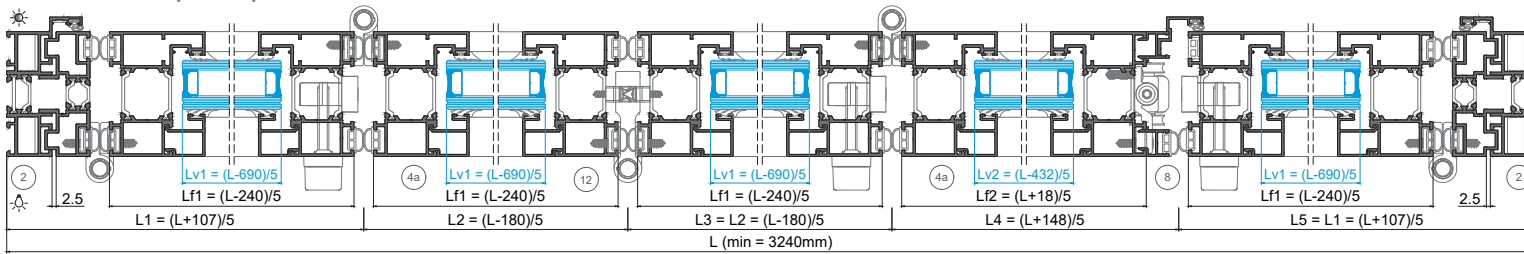


• 440 com | with | avec HT 82

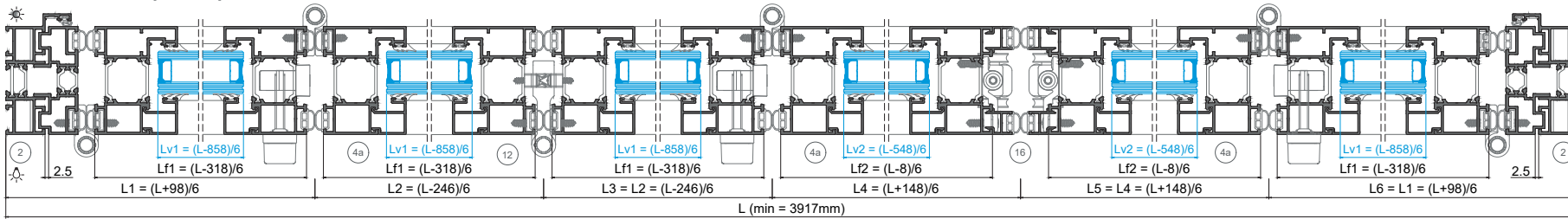


PORMENORES DE ACORDO COM AS TIPOLOGIAS  
 DETAILS ACCORDING TO TYPOLOGIES  
 DÉTAILS SELON LES TYPOLOGIES

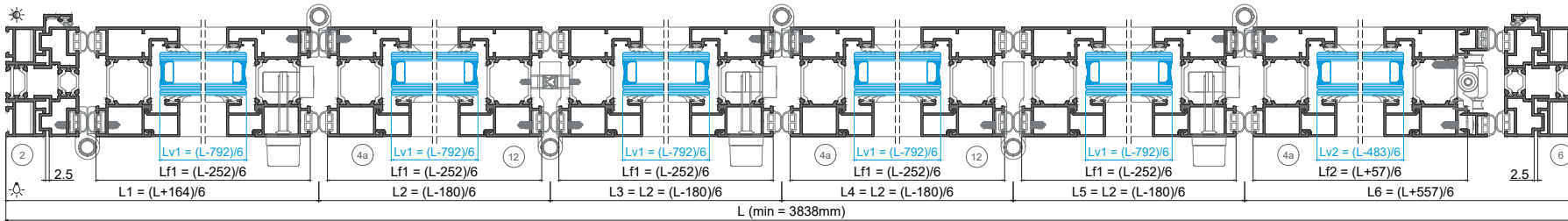
• 541 com | with | avec HT 82



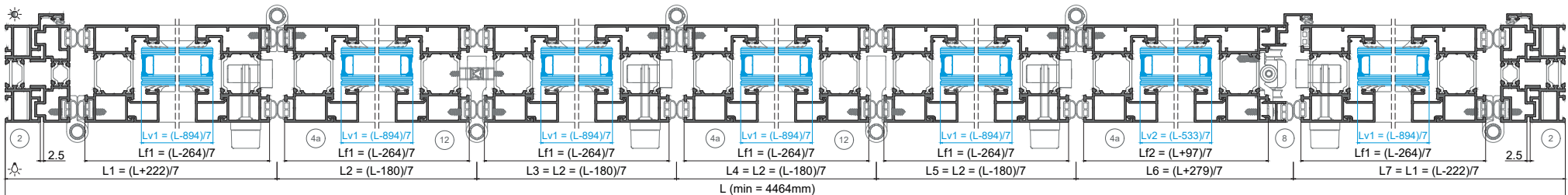
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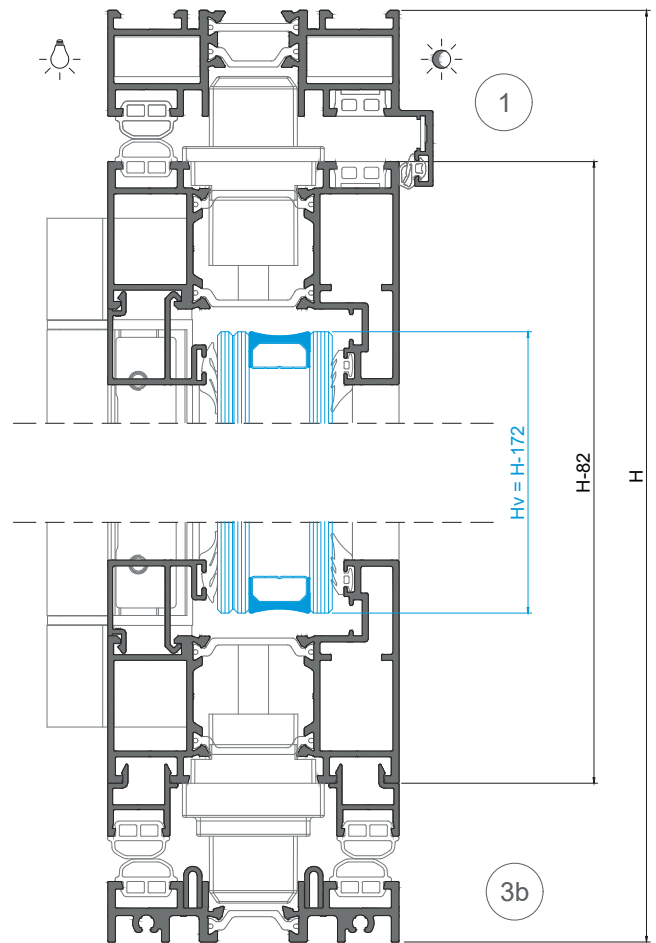
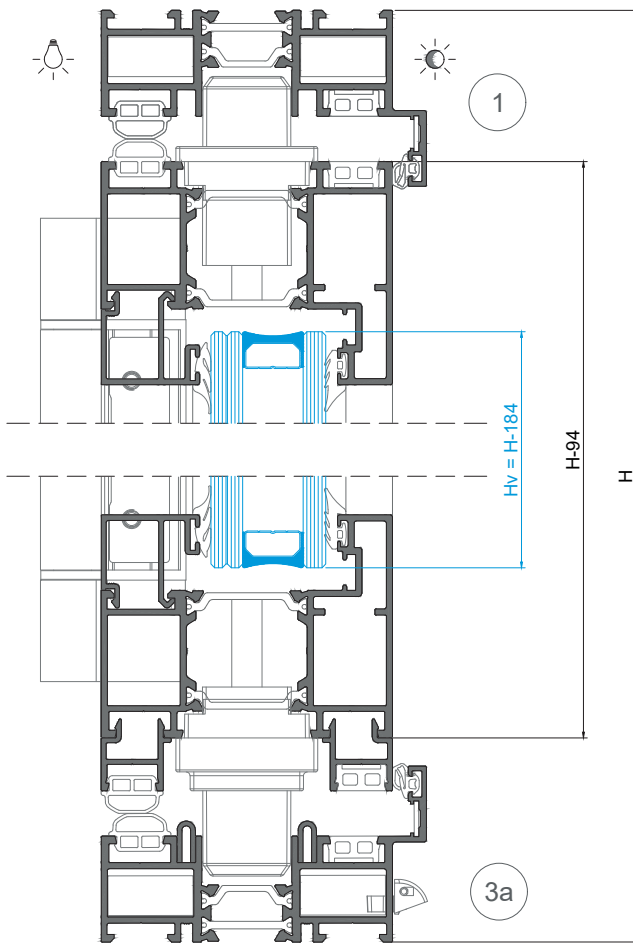
• 660 com | with | avec HT 82



• 761 com | with | avec HT 82



**PORMENORES DE ACORDO COM AS TIPOLOGIAS**  
DETAILS ACCORDING TO TYPOLOGIES  
DÉTAILS SELON LES TYPOLOGIES



# V

## MAQUINAÇÃO DOS PERFIS PROFILES MACHINING USINAGE DES PROFILÉS

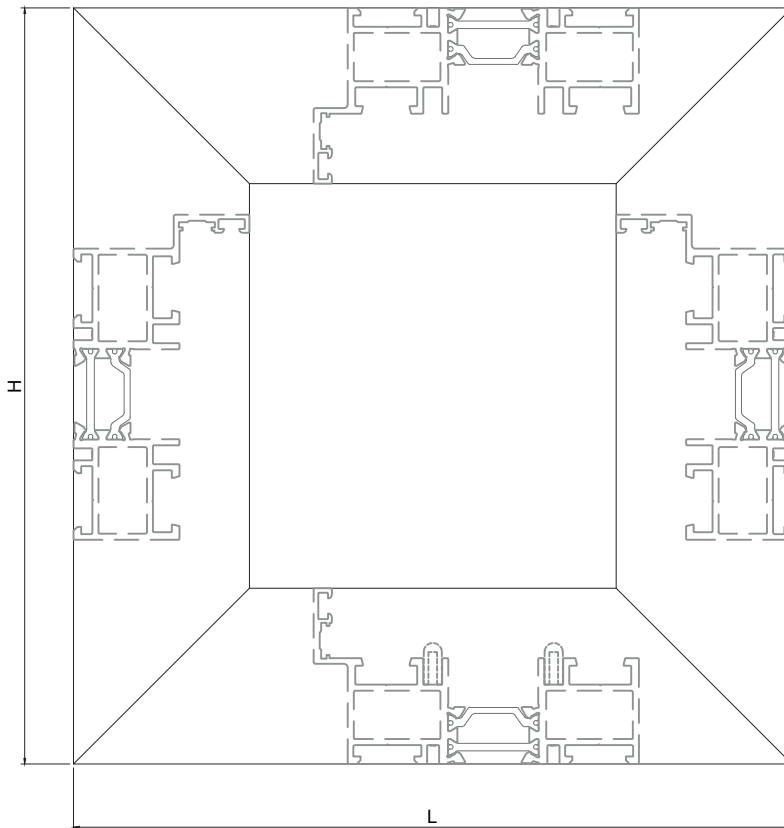
MAQUINAÇÕES DOS PERFIS ARO FIXO FIXED FRAME PROFILES MACHINING USINAGE DES PROFILÉS DORMANT	V.1
DRENAGENS DRAINAGE DRAINAGES	V.2
MAQUINAÇÕES DOS PERFIS ARO MÓVEL MOBILE FRAME PROFILES MACHINING USINAGE DES PROFILÉS OUVRANT	V.3
MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS PROFILES MACHINING FOR ACCESSORIES ASSEMBLY USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES	V.4

**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.

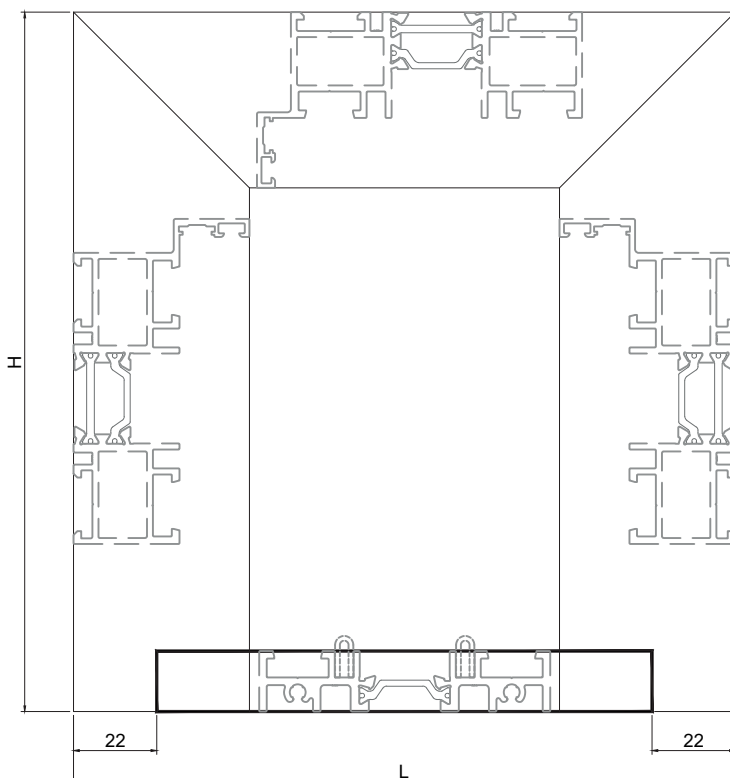


PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT COUPE HORIZ.	CORTE VERT. VERTICAL CUT COUPE VERTICALE	QUANT. QUANTITY	CORTE CUT
HT 01	ARO FIXO FIXED FRAME   CADRE DORMANT	L	-	2	
HT 801	GUIA INOX GUIDE   GUIDE	-	H	2	
		L-42	-	2	

**2 - Medidas de corte - Aro fixo com soleira inferior.**

Cut measures - Fixed frame with bottom sill.

Mesures de coupe - Cadre dormant avec seuil inférieur.



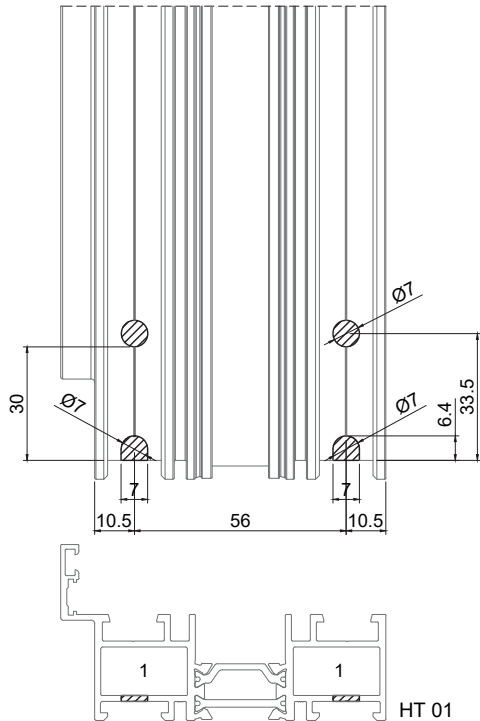
PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE   CODE	DESIGNAÇÃO DESIGNATION   NOMINATION	CORTE HORIZ. HORIZONTAL CUT COUPE HORIZ.	CORTE VERT. VERTICAL CUT COUPE VERTICALE	QUANT. QUANTITY	CORTE CUT
HT 01	ARO FIXO FIXED FRAME   CADRE DORMANT	L	-	1	
		-	H	2	
HT 49	SOLEIRA SILL PROFILE   PROFILÉ SEUIL	L-44	-	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.

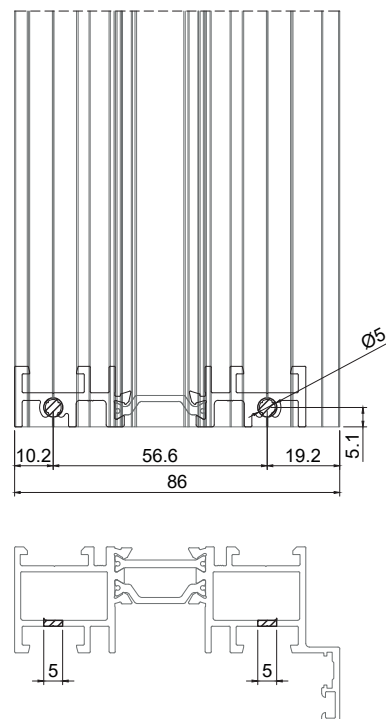
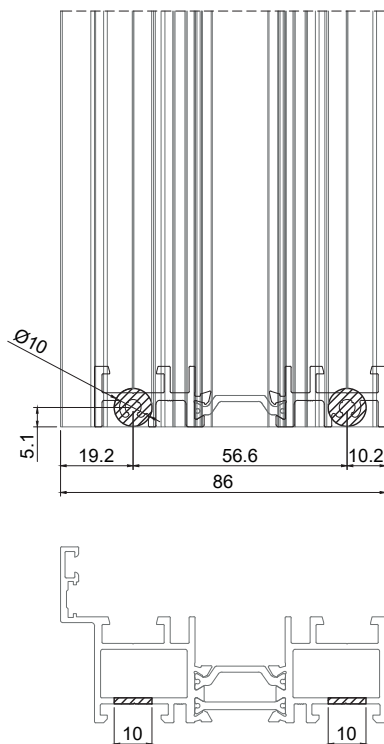
Usinage des profilés de cadre dormant pour l'application de équerres.



**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.



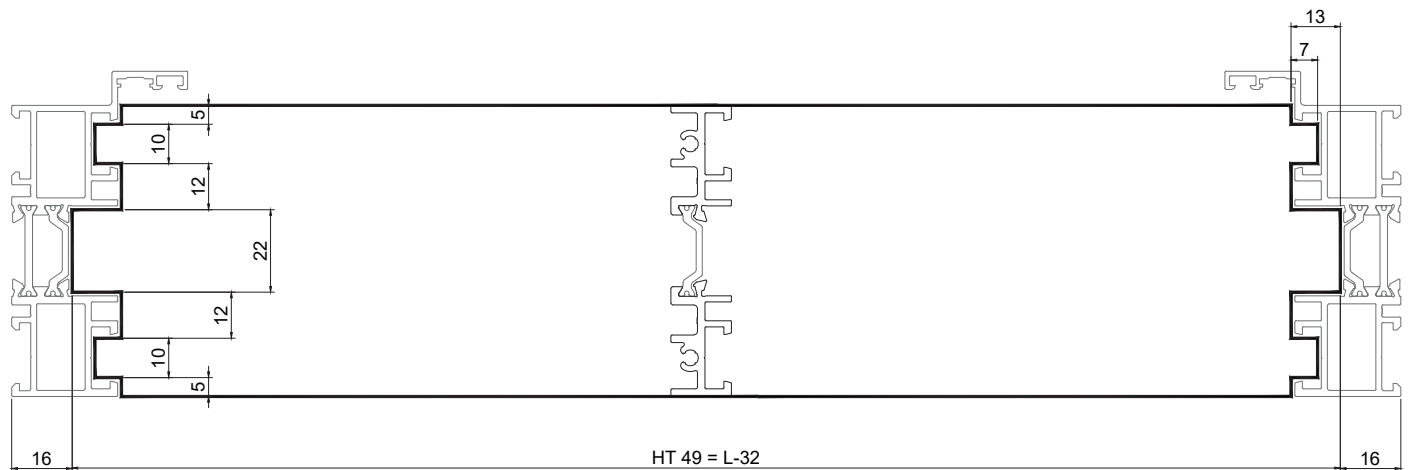


**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

**5 - Maquinação do perfil soleira HT 49.**

HT 49 sill profile machining.

Usinage du profilé de seuil HT 49.

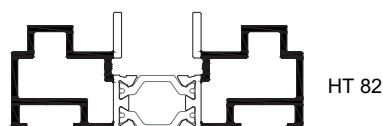
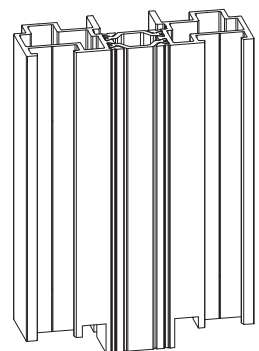
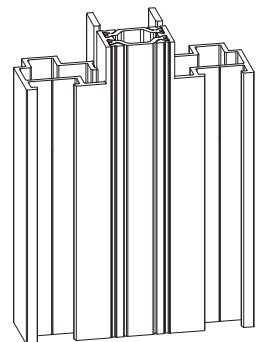
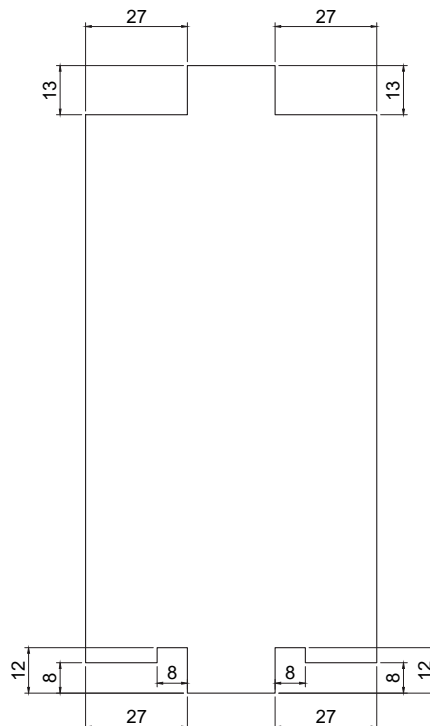
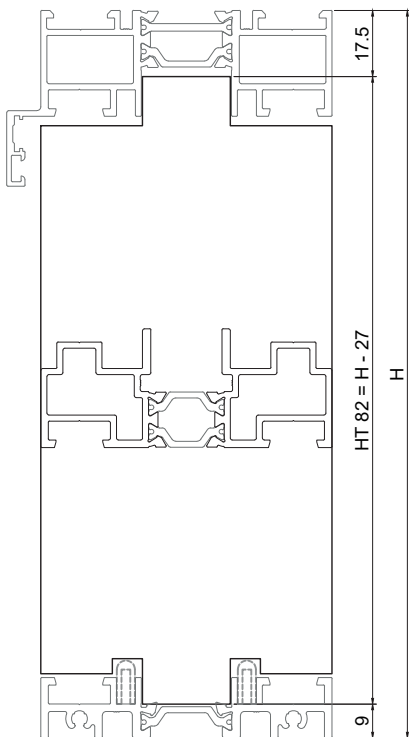
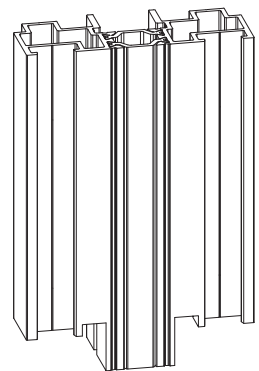
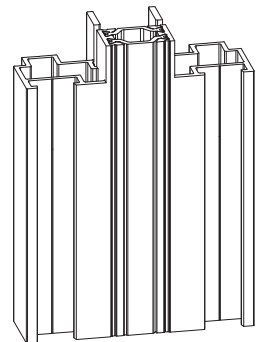
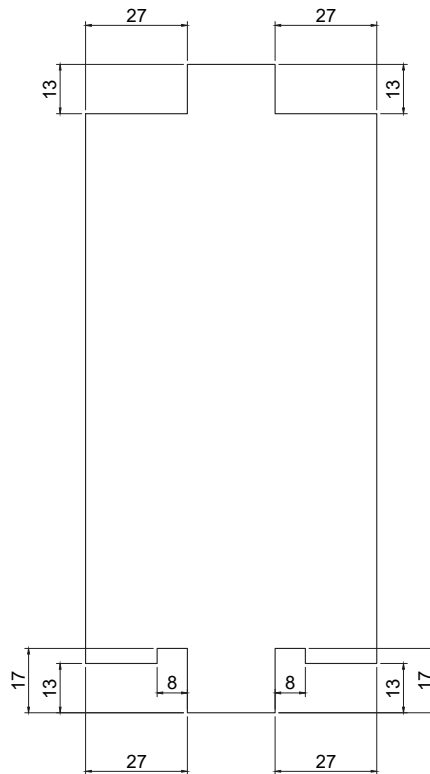
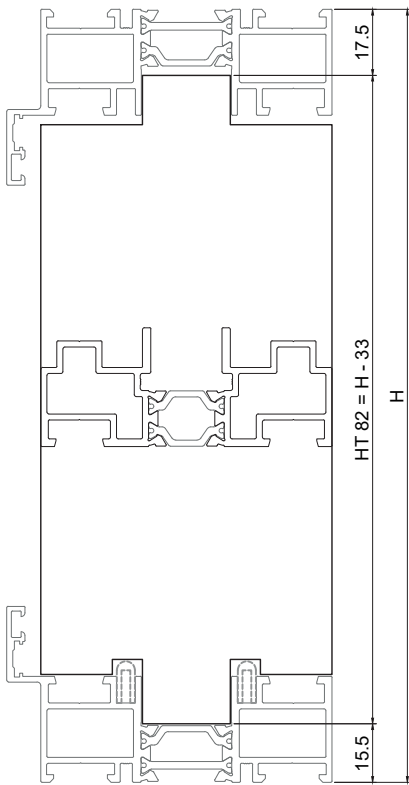


**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

**6 - Maquinação do perfil lateral de ajuste HT 82.**

HT 82 adjustable jamb profile machining.

Usinage du profilé de jambage réglable HT 82.

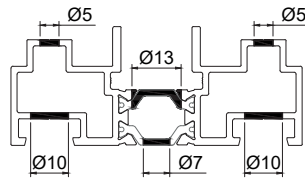
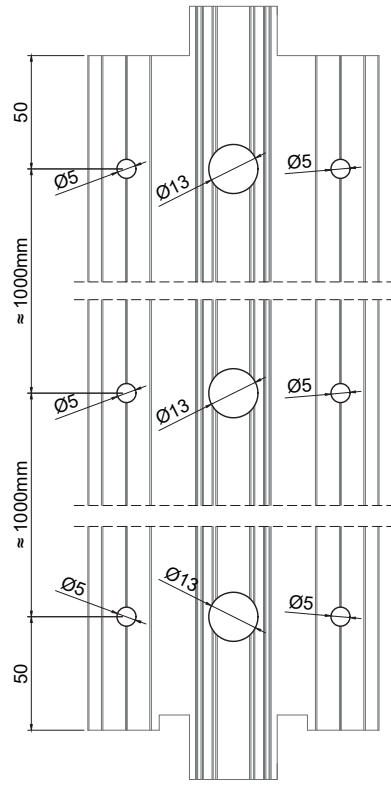


**MAQUINAÇÕES DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE DORMANT

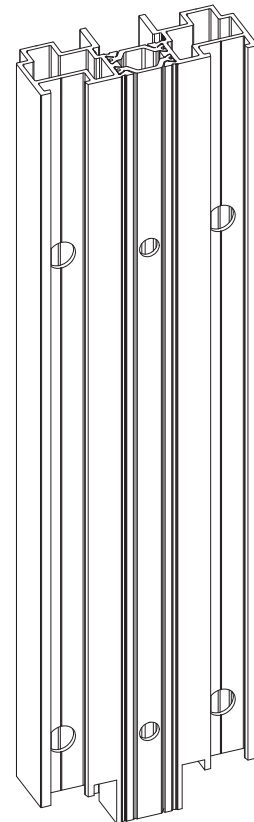
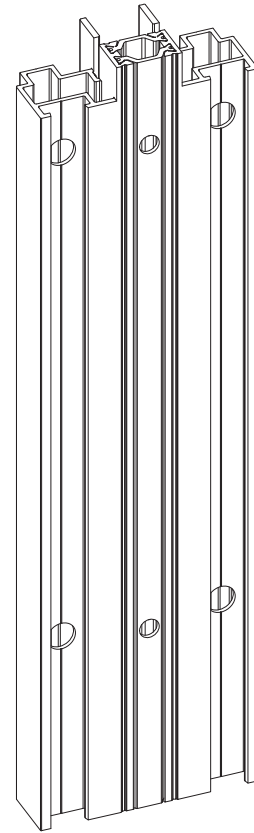
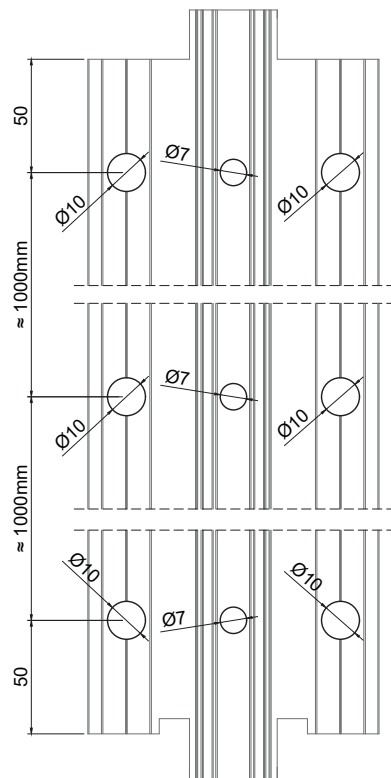
**6 - Maquinação do perfil lateral de ajuste HT 82.**

HT 82 adjustable jamb profile machining.

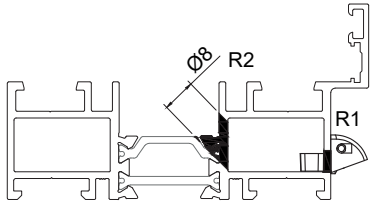
Usinage du profilé de jambage réglable HT 82.



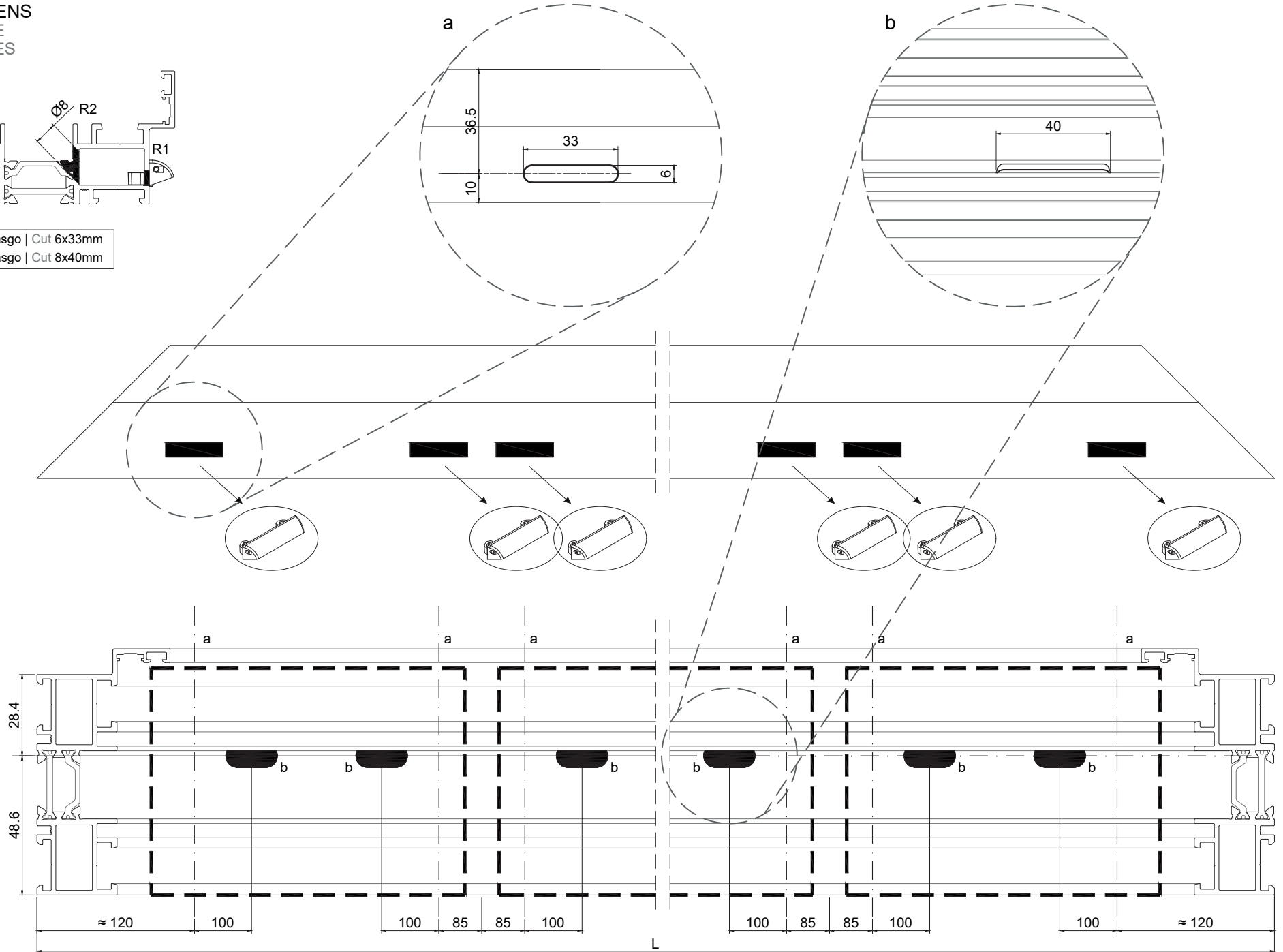
HT 82



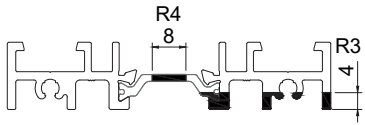
DRENAGENS  
DRAINAGE  
DRAINAGES



R1: Rasgo | Cut 6x33mm  
R2: Rasgo | Cut 8x40mm

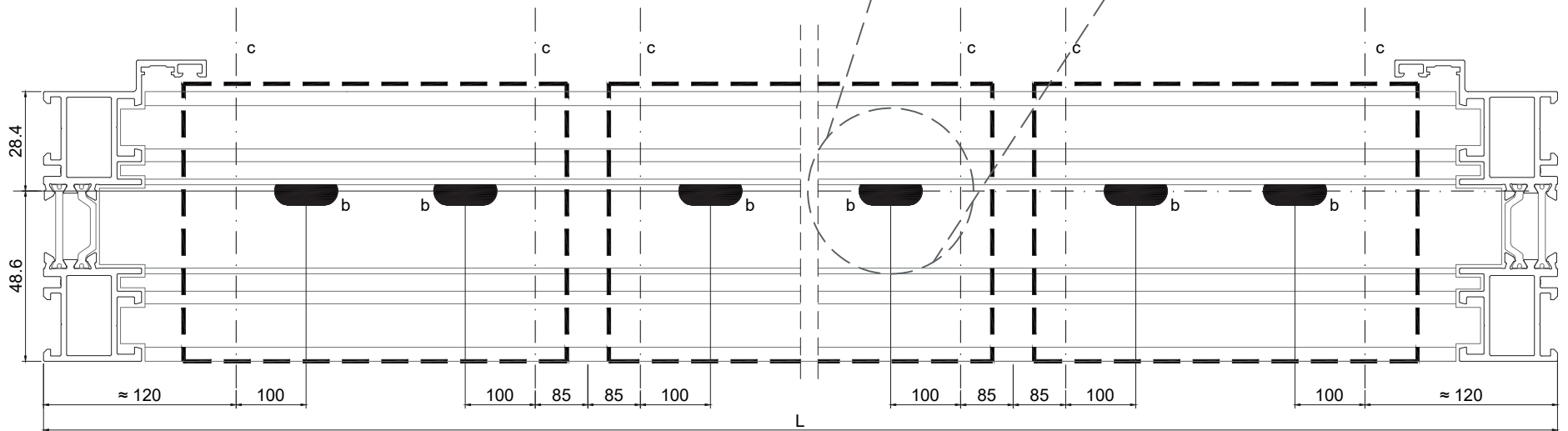
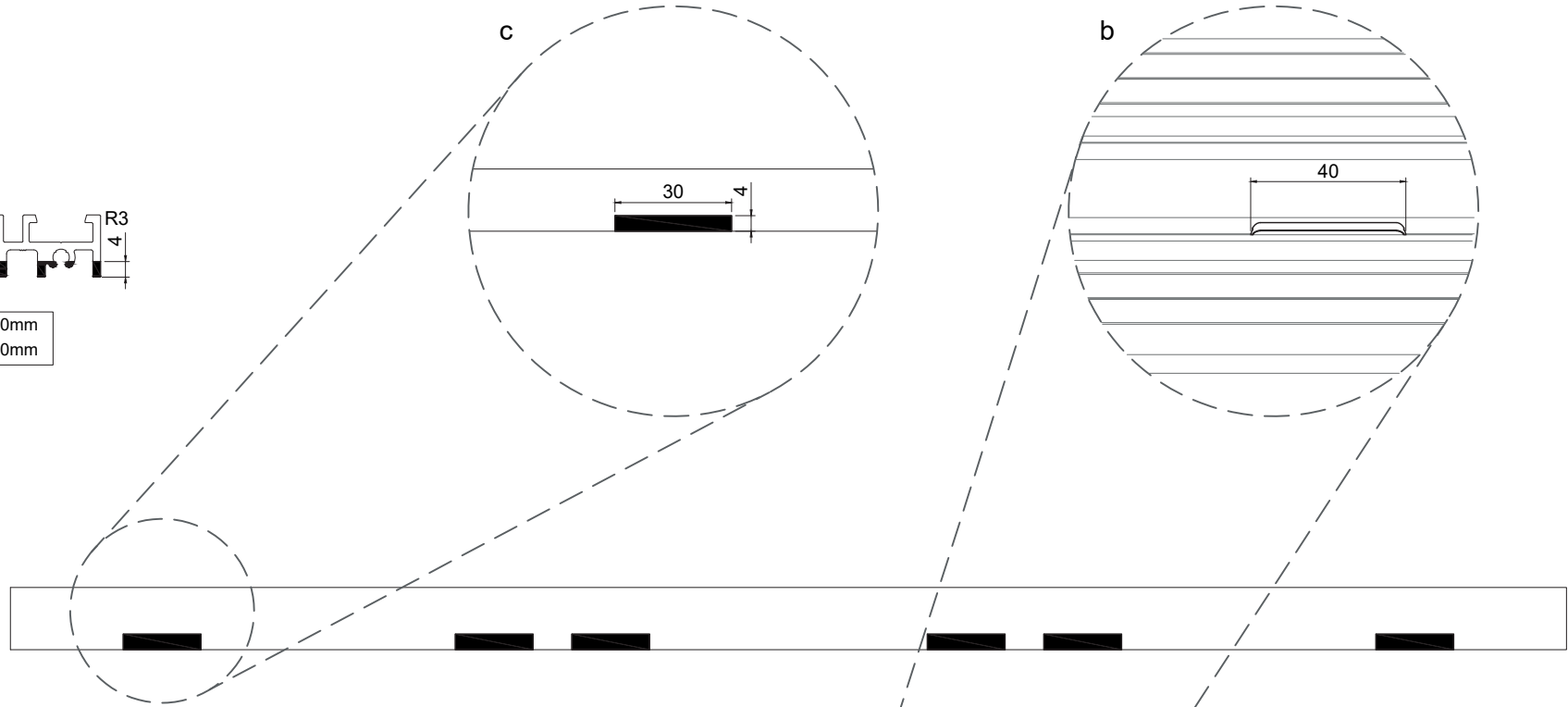


DRENAGENS  
DRAINAGE  
DRAINAGES



R3: Rasgo | Cut 4x30mm

R4: Rasgo | Cut 8x40mm

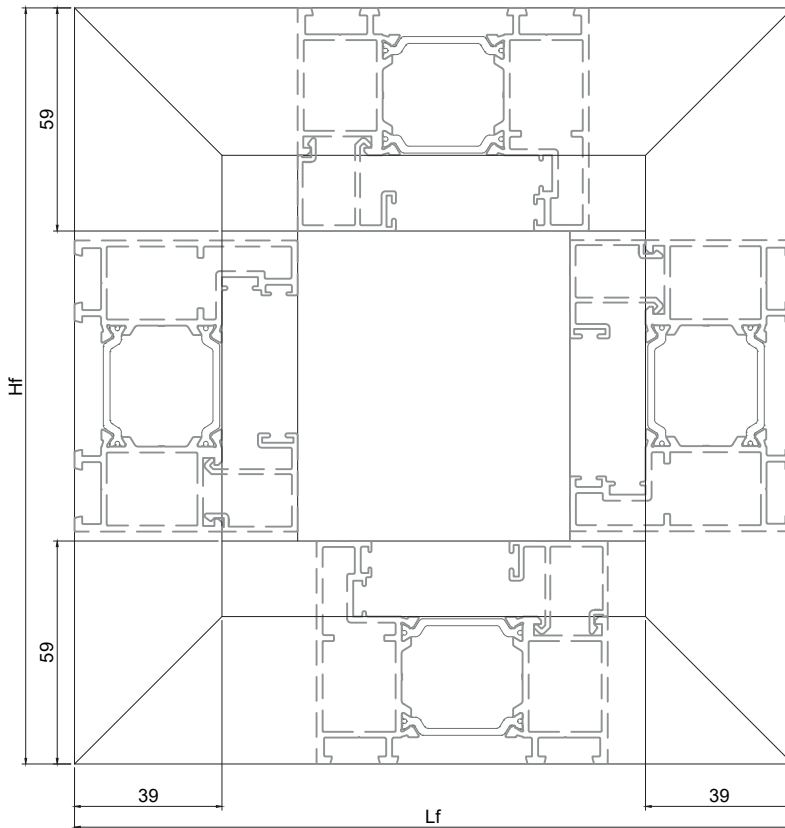


**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

**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 CORDE HORIZ.	CORTE VERT. VERTICAL CUT CORDE VERTICALE	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.**

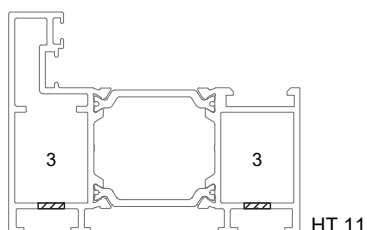
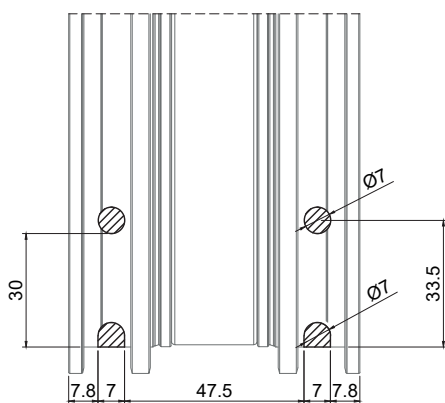
Mobile frame profiles machining.

Usinage des profilés cadre ouvrant.

**2.1- Para aplicação de esquadros.**

For corner cleat application.

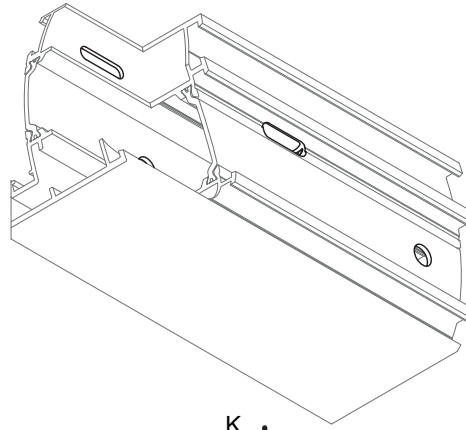
Pour l'application de équerres.



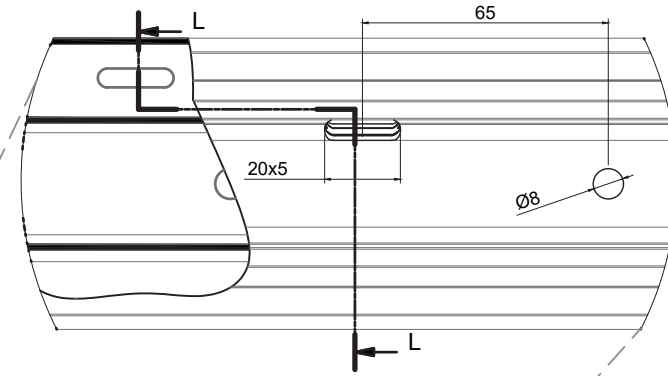
**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
 MOBILE FRAME PROFILES MACHINING  
 USINAGE DES PROFILÉS DE CADRE OUVRANT

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

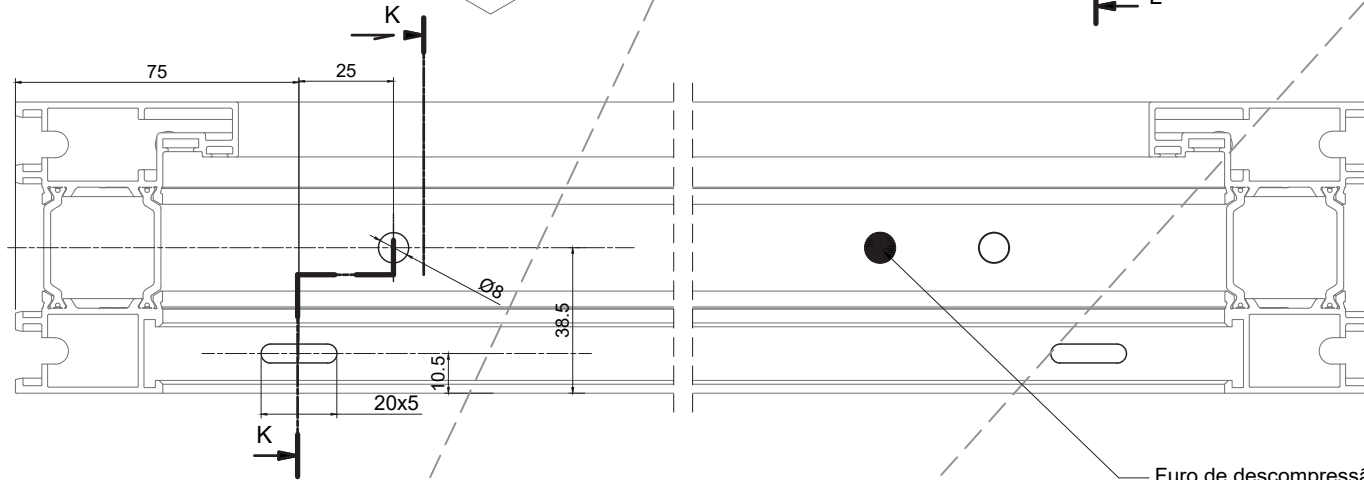
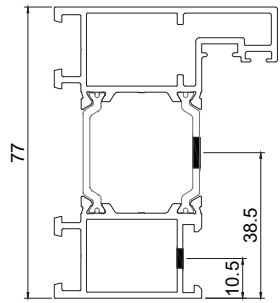
2.2- Drenagem e descompressão.  
 Drainage and decompression.  
 Drainage et décompression.



Detalhe | Detail | Détail H

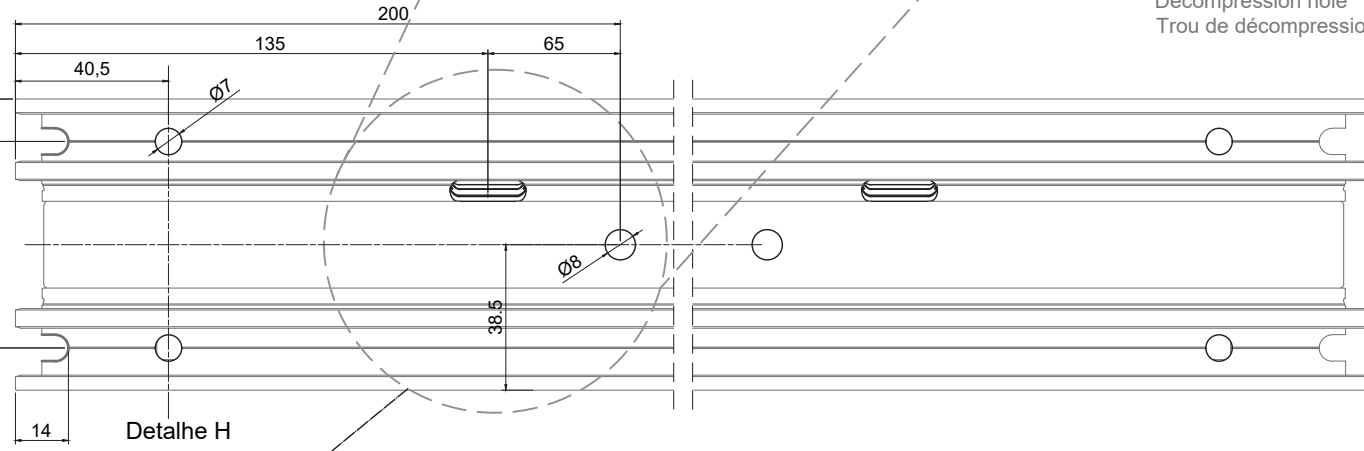
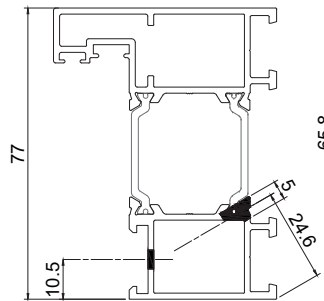


Corte | Cut | Coupe K-K



Furo de descompressão  
 Decompression hole  
 Trou de décompression

Corte | Cut | Coupe L-L



Detalhe H

**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.

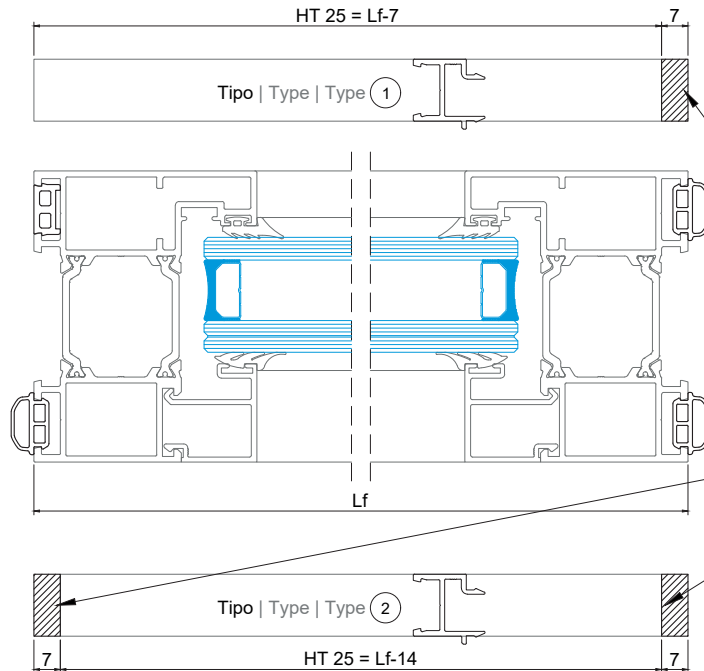
Mesures de coupe du profilé horizontale HT 25.

**3.1 - Opção | Option | Option A:**

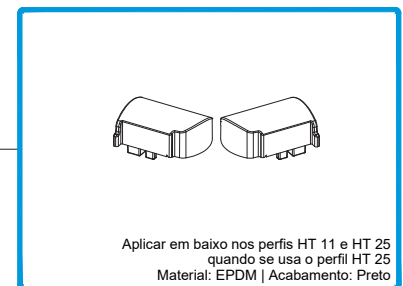
**Sem perfis verticais HT 25.**

Without HT 25 vertical profiles.

Sans profilés verticaux HT 25.



PERFIS   PROFILES   PROFILÉS						
CÓDIGO CODE / CODE	DESIGNAÇÃO DESIGNATION / NOMINATION	CORTE HORIZ. HORIZONTAL CUT COUPE HORIZ.	CORTE VERT. VERTICAL CUT COUPE VERTICALE	QUANT. QUANTITE	CORTE CUT	
HT 25	PERFIL COMPL. MÓVEL MOBILE COMPLEM. PROFILE PROFILÉ COMPLEM. OUVRANT	1	Lf-7	-	Variável Variable	■
		2	Lf-14	-	Variável Variable	■



212027

CONJ. TOPOS P/ VD 2127



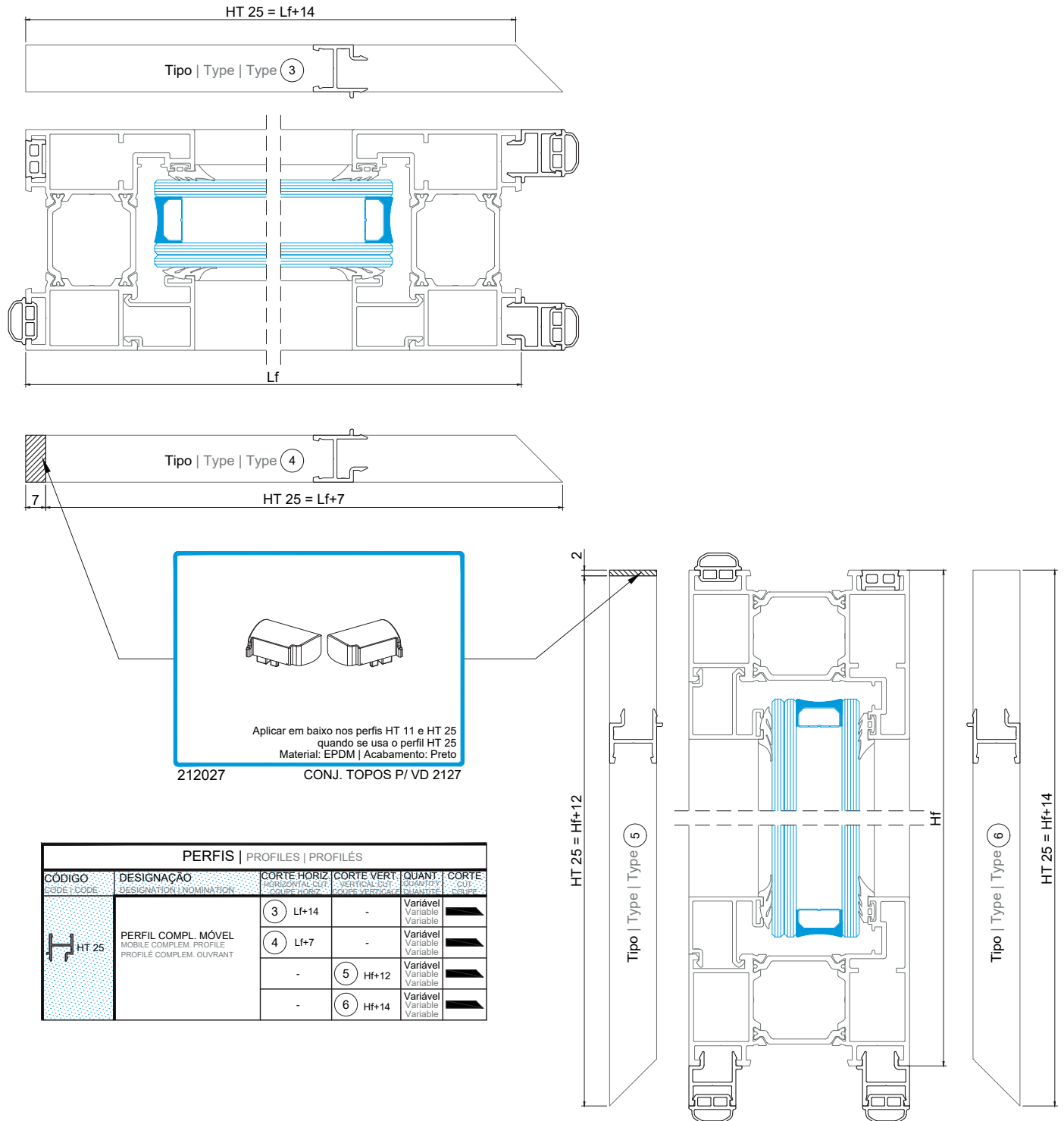
**MAQUINAÇÕES DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES MACHINING  
USINAGE DES PROFILÉS DE CADRE OUVRANT

**3 - Medidas de corte do perfil horizontal HT 25.**

HT 25 horizontal profile cut measures.  
Mesures de coupe du profilé horizontale HT 25.

**3.2 - Opção | Option | Option B:**

**Com perfis verticais HT 25.**  
With HT 25 vertical profiles.  
Avec profilés verticaux HT 25.



Nota | Note | Note:

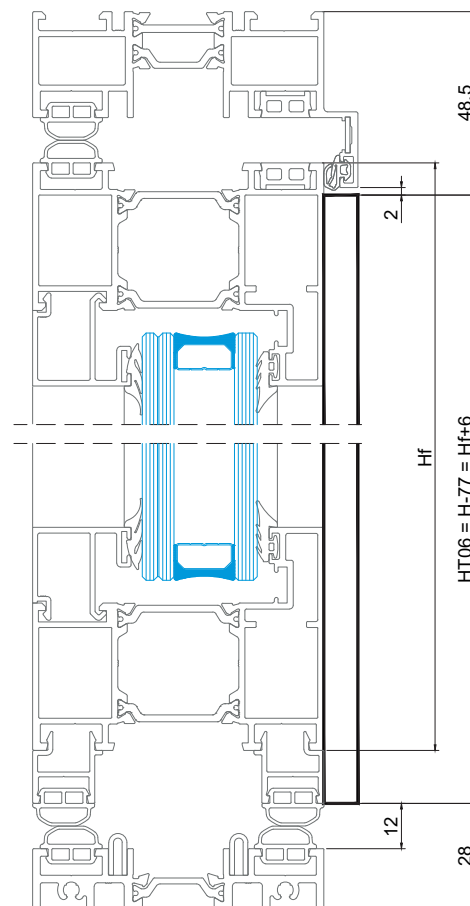
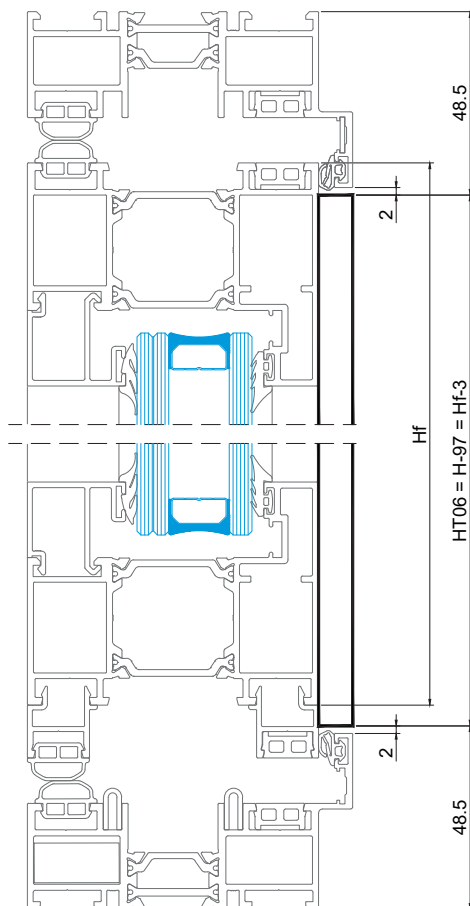
As cotas de maquinações dos perfis para aplicação dos acessórios encontram-se nas respetivas páginas.  
The machining dimensions of the profiles for the application of accessories can be found on the respective pages.  
Les dimensions d'usinage des profilés pour l'application d'accessoires se trouvent sur les pages respectives.

**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 / COUPE HORIZ.	CORTE VERT. VERTICAL CUT / COUPE VERTICALE	QUANT. QUANTITY	CORTE CUT / COUPE
HT 06	PERFIL BATENTE CASEMENT PROF. / PROF. BATTANT	-	H-97 = Hf-3	1	■

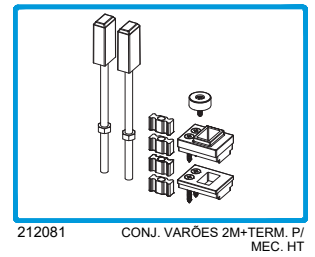
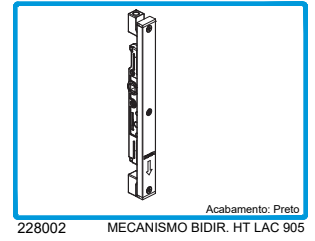
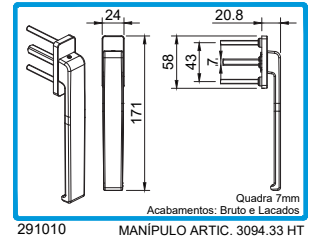
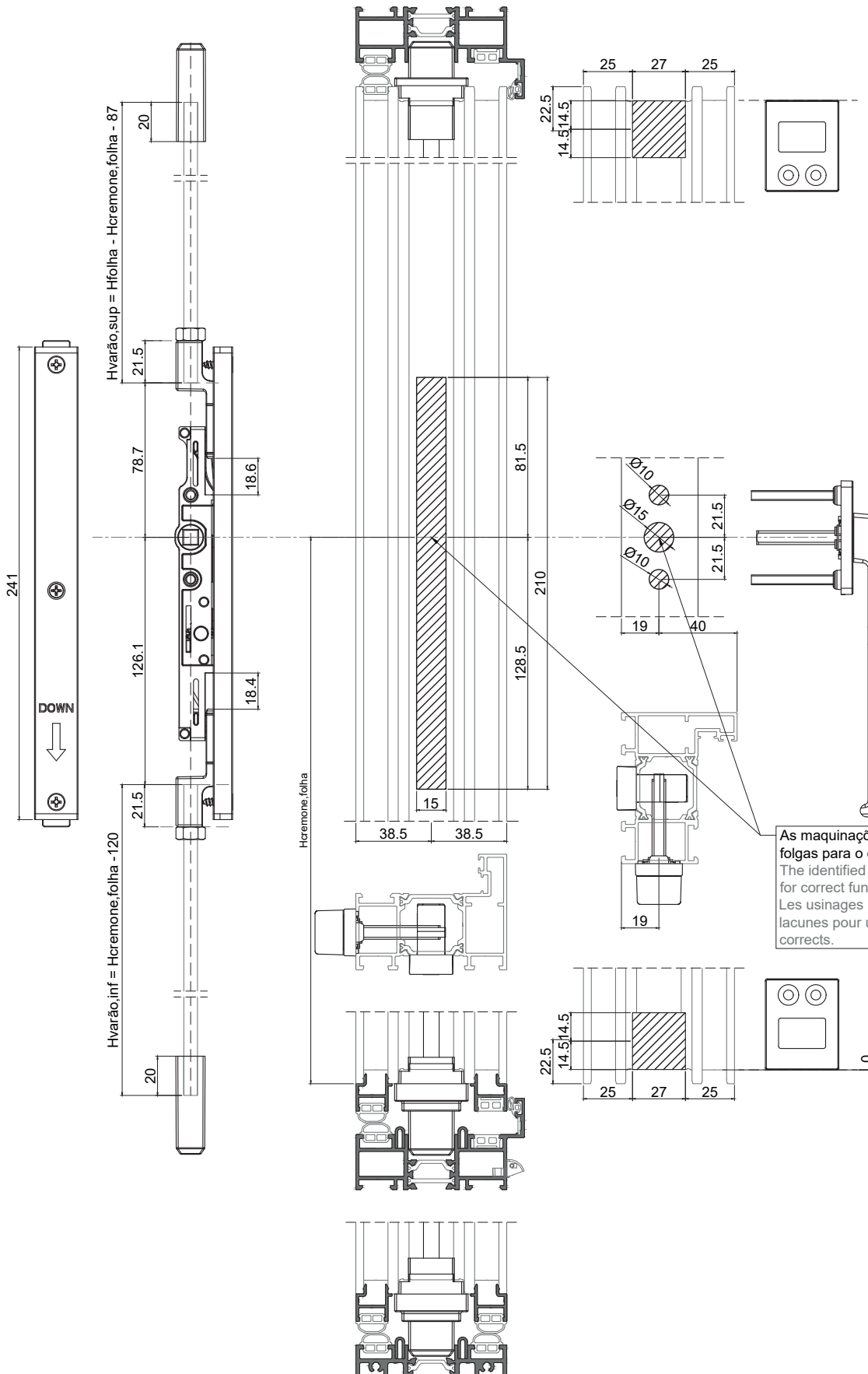
PERFIS   PROFILES   PROFILÉS					
CÓDIGO CODE / CODE	DESIGNAÇÃO DESIGNATION / NOMINATION	CORTE HORIZ. HORIZONTAL CUT / COUPE HORIZ.	CORTE VERT. VERTICAL CUT / COUPE VERTICALE	QUANT. QUANTITY	CORTE CUT / COUPE
HT 06	PERFIL BATENTE CASEMENT PROF. / PROF. BATTANT	-	H-77 = Hf+6	2	■

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

**1 - Maquinação para mecanismo e manípulo - abertura interior.**

Mechanism and handle machining - inside opening.

Usinage pour mécanisme et poignée - ouverture intérieure.

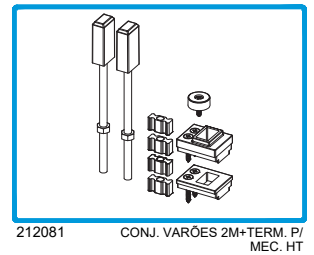
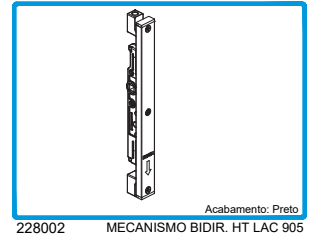
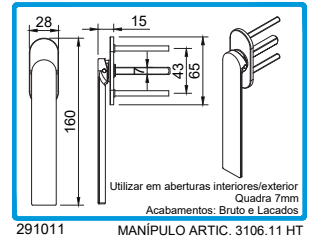
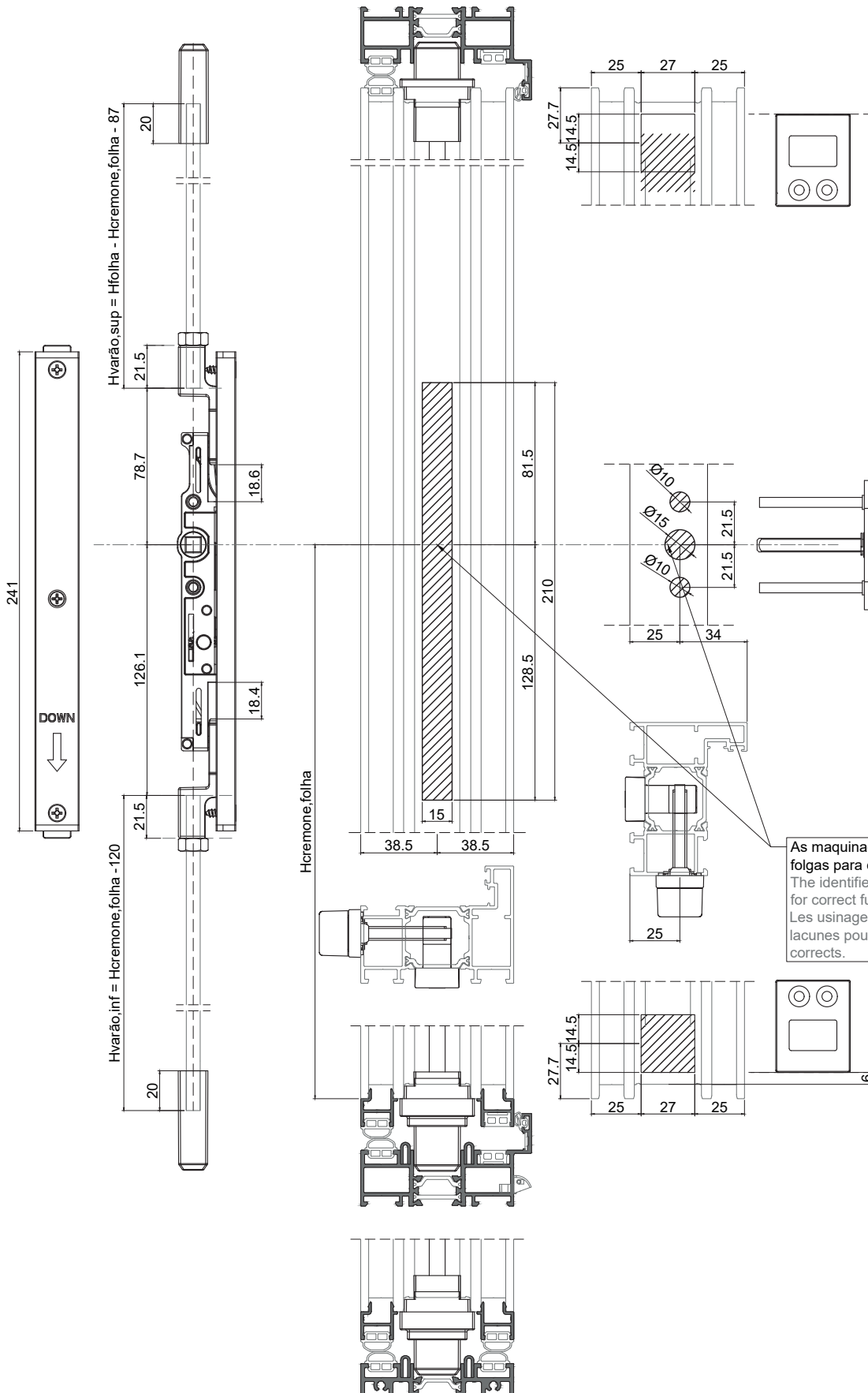


**MAQUINAÇÃO DE PERFIS PARA APLICAÇÃO DE ACESSÓRIOS**  
PROFILES MACHINING FOR ACCESSORIES ASSEMBLY  
USINAGE DES PROFILÉS POUR ASSEMBLAGE DES ACCESSOIRES

**1 - Maquinação para mecanismo e manípulo - abertura exterior.**

Mechanism and handle machining - outside opening.

Usinage pour mécanisme et poignée - ouverture extérieure.

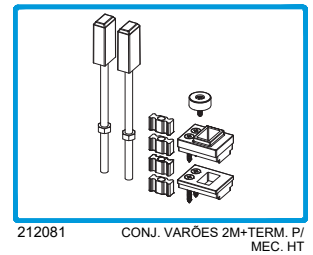
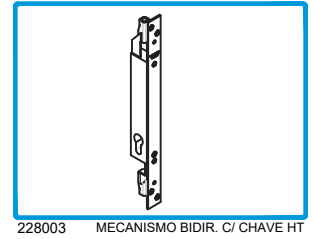
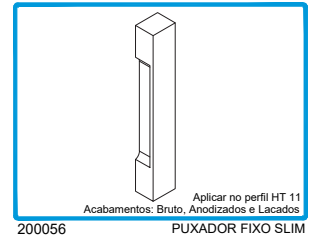
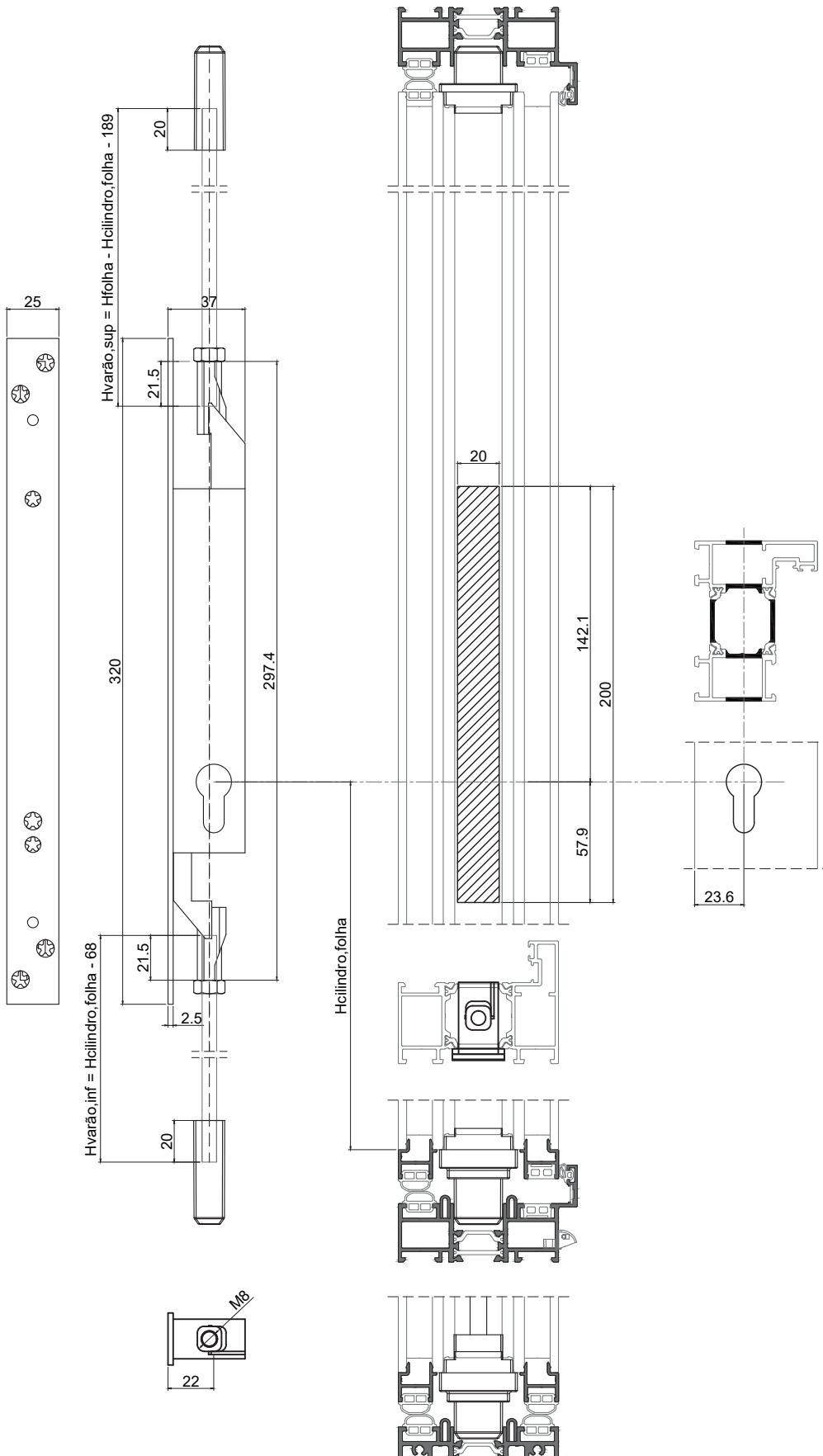


As maquinações identificadas devem ficar sem folgas para o correto funcionamento e estética.  
The identified machinings must be free of gaps for correct functioning and aesthetics.  
Les usinages identifiés doivent être exempts de lacunes pour un fonctionnement et une esthétique corrects.

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

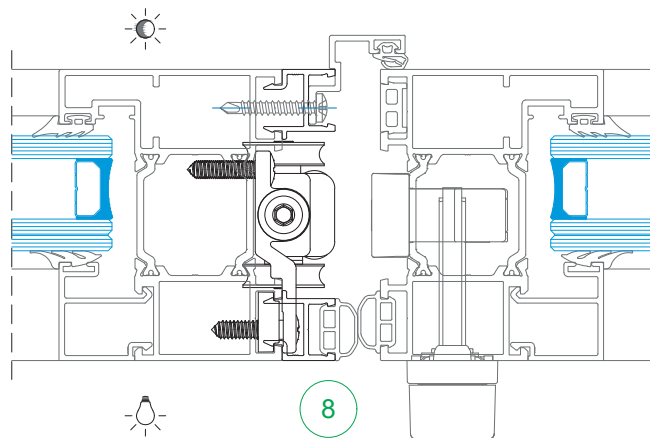
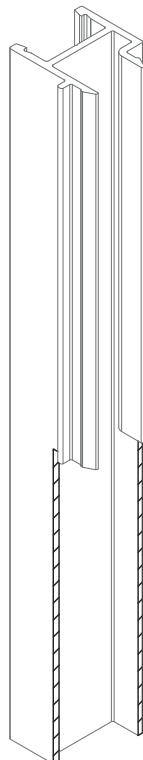
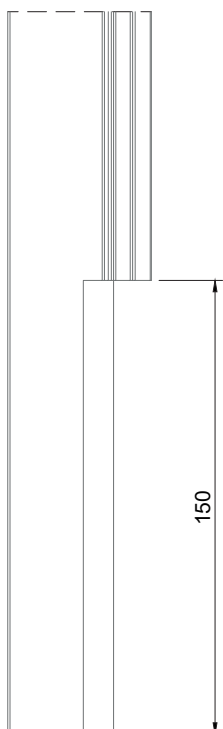
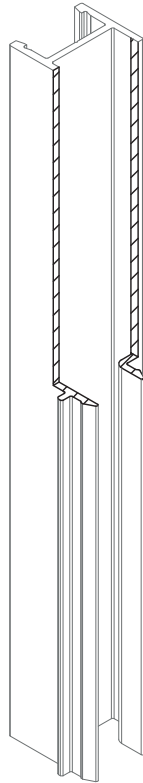
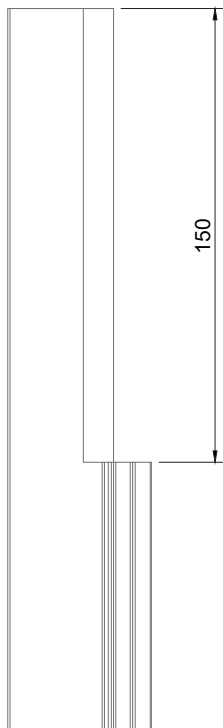
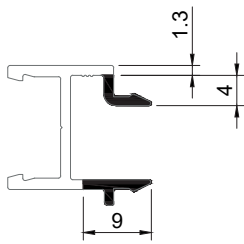
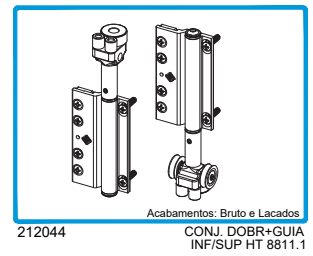
**2 - Maquinação para mecanismo com chave e manípulo.**

Mechanism with key and handle machining.  
Usinage pour mécanisme avec clé et poignée.



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

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



Esta maquinação é necessária sempre que se aplique este acessório no perfil.

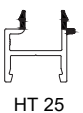
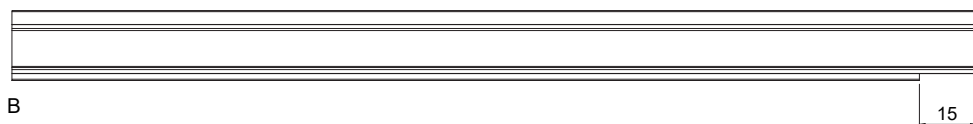
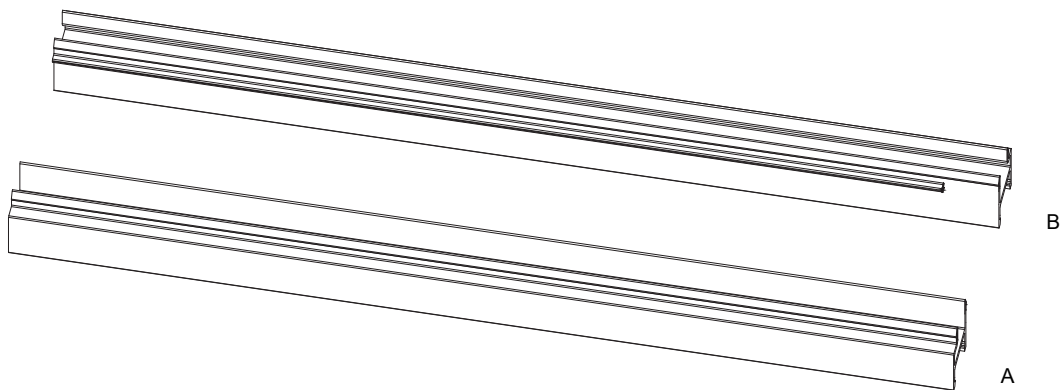
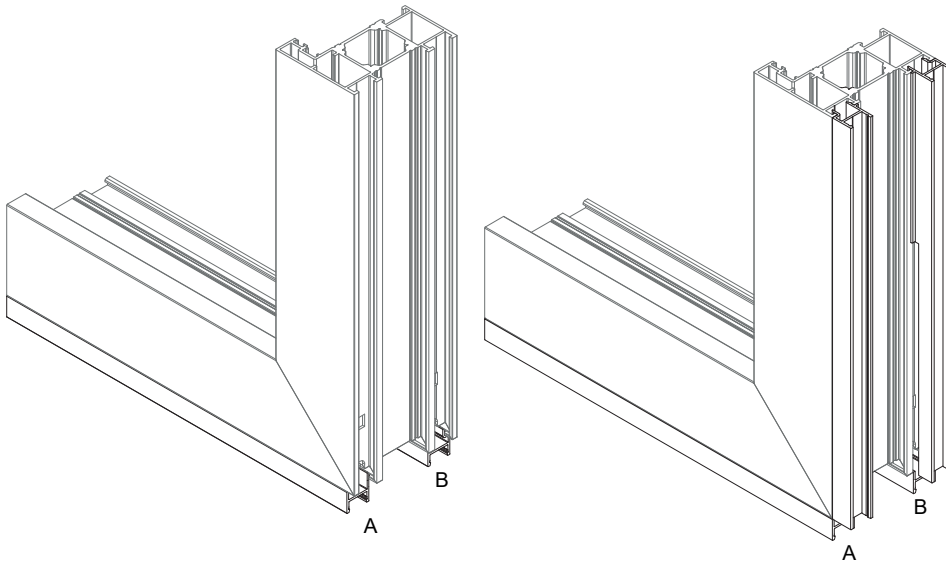
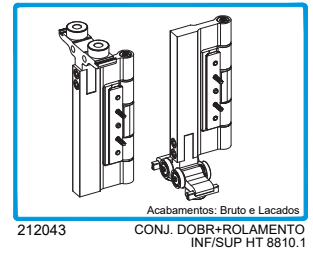
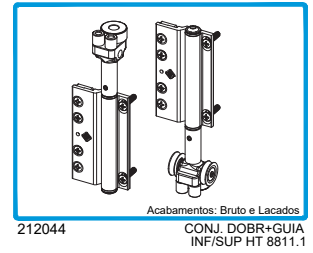
This machining is necessary whenever this accessory is applied in the profile.

Cet usinage est nécessaire chaque fois que cet accessoire est appliqué sur le profilé.

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

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

Esta maquinação é necessária sempre que se apliquem estes acessórios no perfil.  
This machining is necessary whenever these accessories are applied in the profile.  
Cet usinage est nécessaire chaque fois que ces accessoires sont appliqué sur le profilé.



# 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



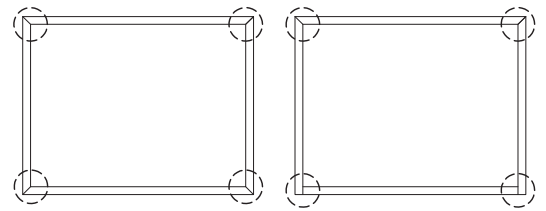
**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

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

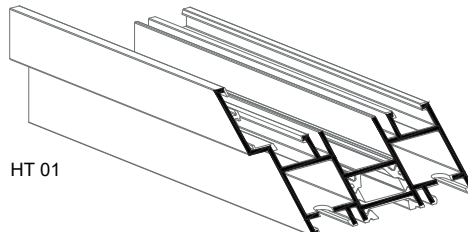
1.1 - Aplicar silicone à cor do perfil ou neutro na zona das esquadrias.  
Apply silicone in the same color as the profiles or neutral in the frame's areas.  
Appliquer du silicone sur la couleur des profilés ou neutre dans la zone des cadres.

HT 01

HT 01



HT 49

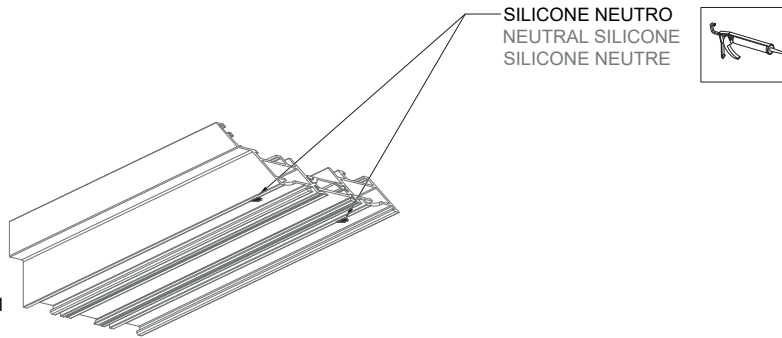
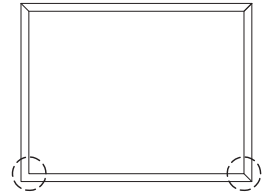


HT 01



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.



HT 01

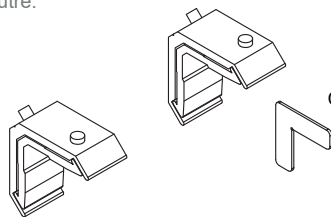
SILICONE NEUTRO  
NEUTRAL SILICONE  
SILICONE NEUTRE



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

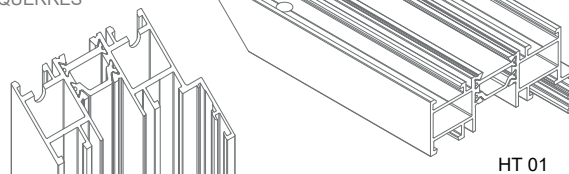
Corner cleats and alignment corners application and filling all the tightening areas of the corner cleats with neutral silicone.

Application des équerres et angles d'alignement et remplissage de toutes les zones de serrage des équerres avec du silicone neutre.

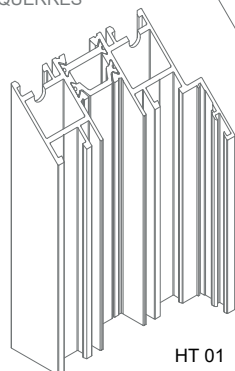


CANTO | CORNER | ANGLE

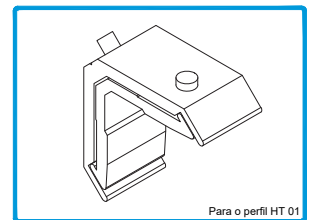
ESQUADROS | CORNER CLEATS | ÉQUERRES



HT 01

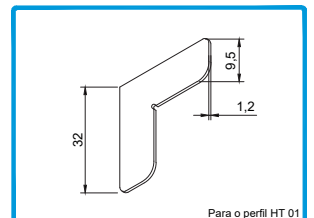


HT 01



204016

Para o perfil HT 01  
ESQUADRO HT Nº1



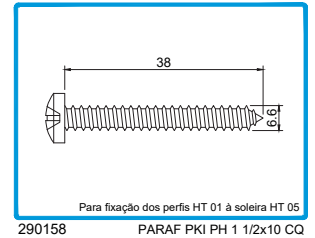
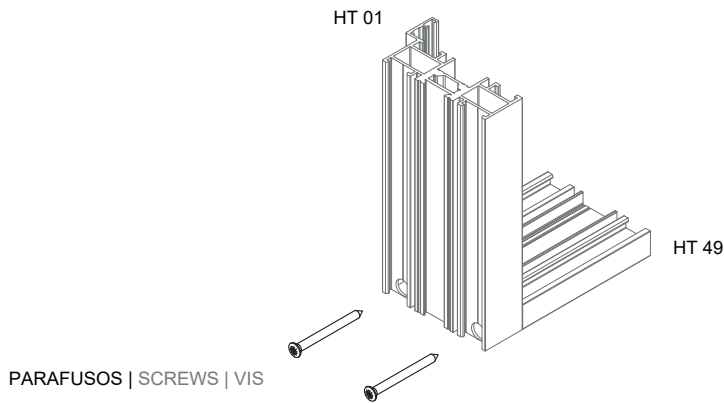
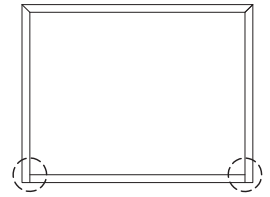
213017

Para o perfil HT 01  
CANTO ALINHAMENTO OS

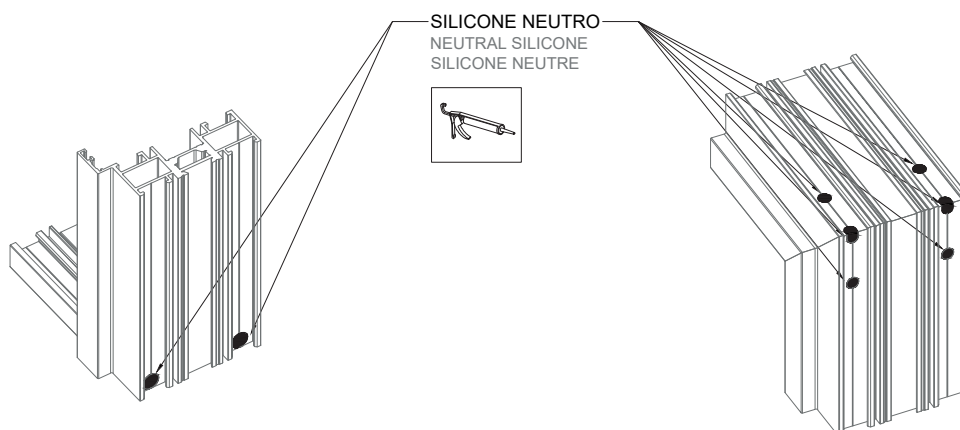
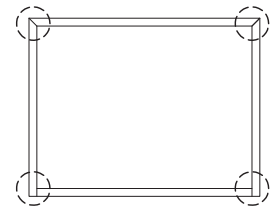
**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

**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.



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

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

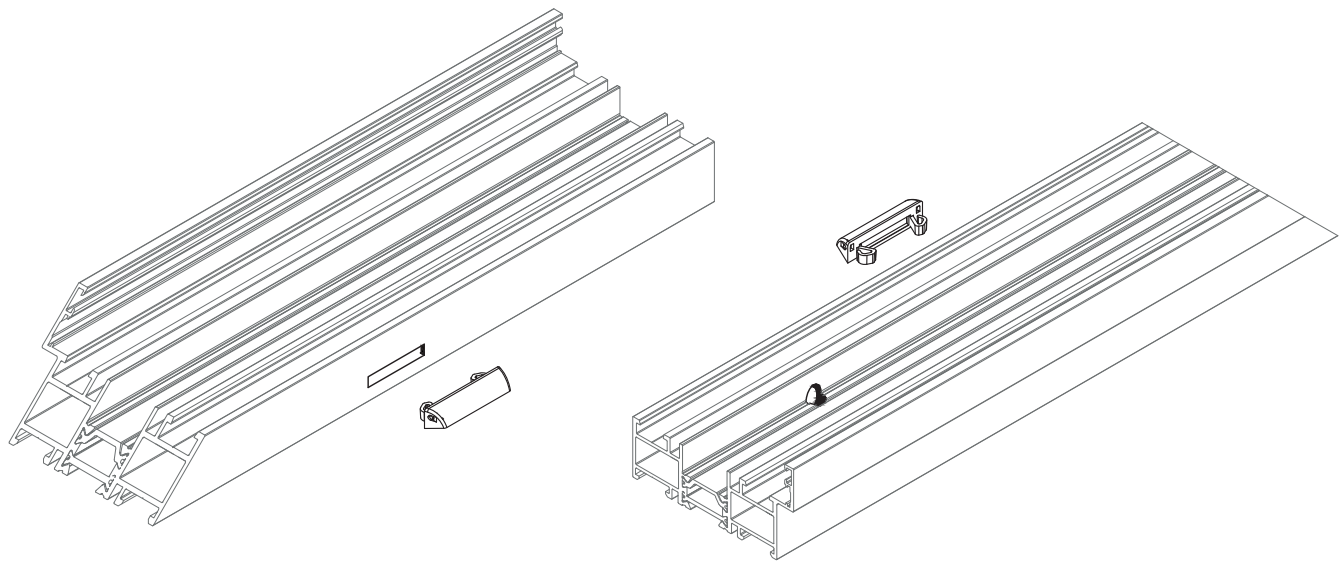
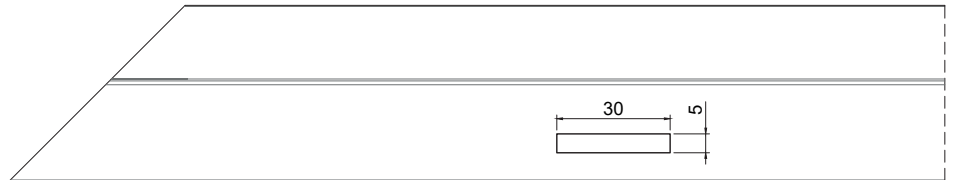
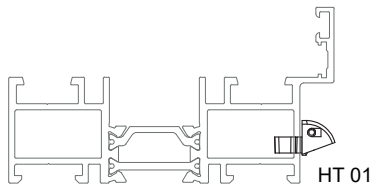
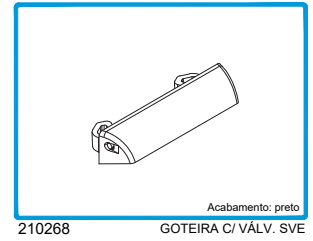
Drips placing in fixed frames.

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.

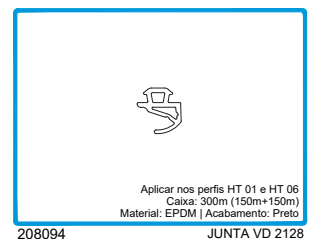
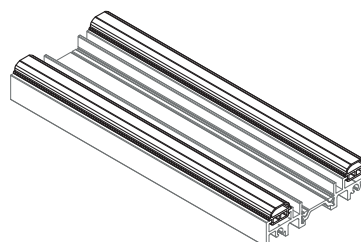
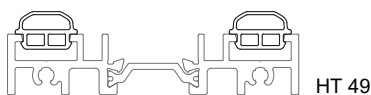
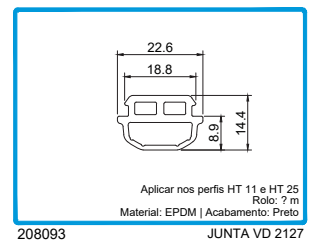
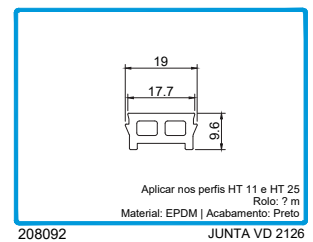
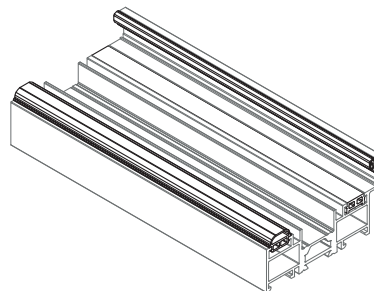
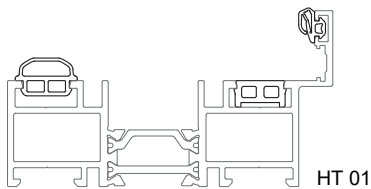
Placer les lapets à l'extérieur du profilé et fixer-les avec des points de silicone aux extrémités.



**4 - Aplicação de vedantes nos aros fixos.**

Seals application in fixed frames.

Application des joints sur les cadres dormants.



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

**5 - Aplicação do perfil guia HT 801 nos aros fixos.**

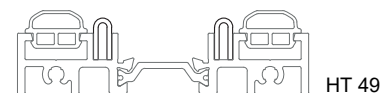
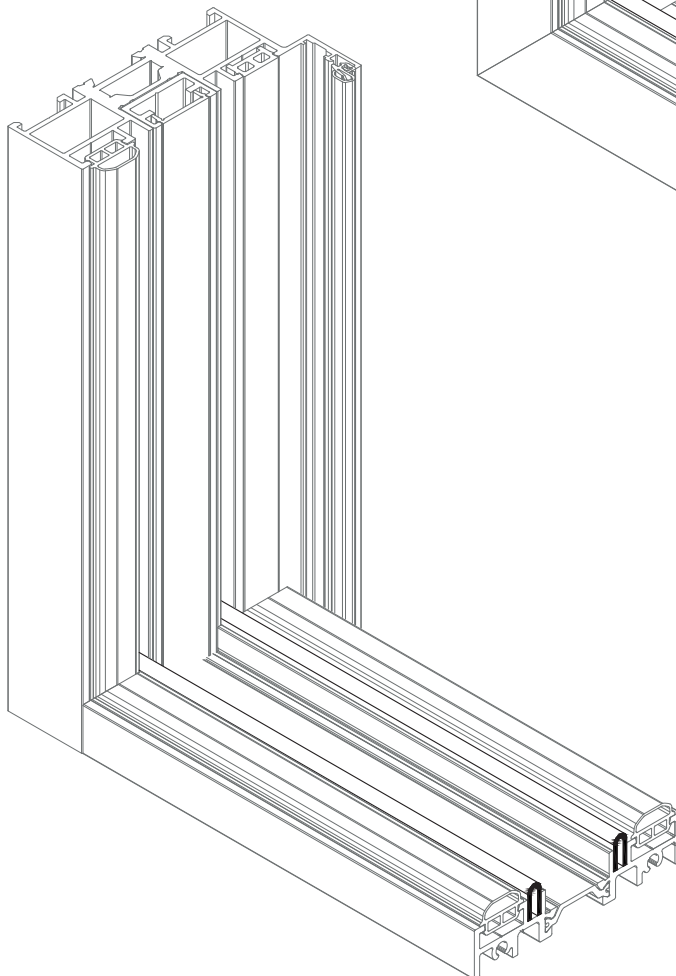
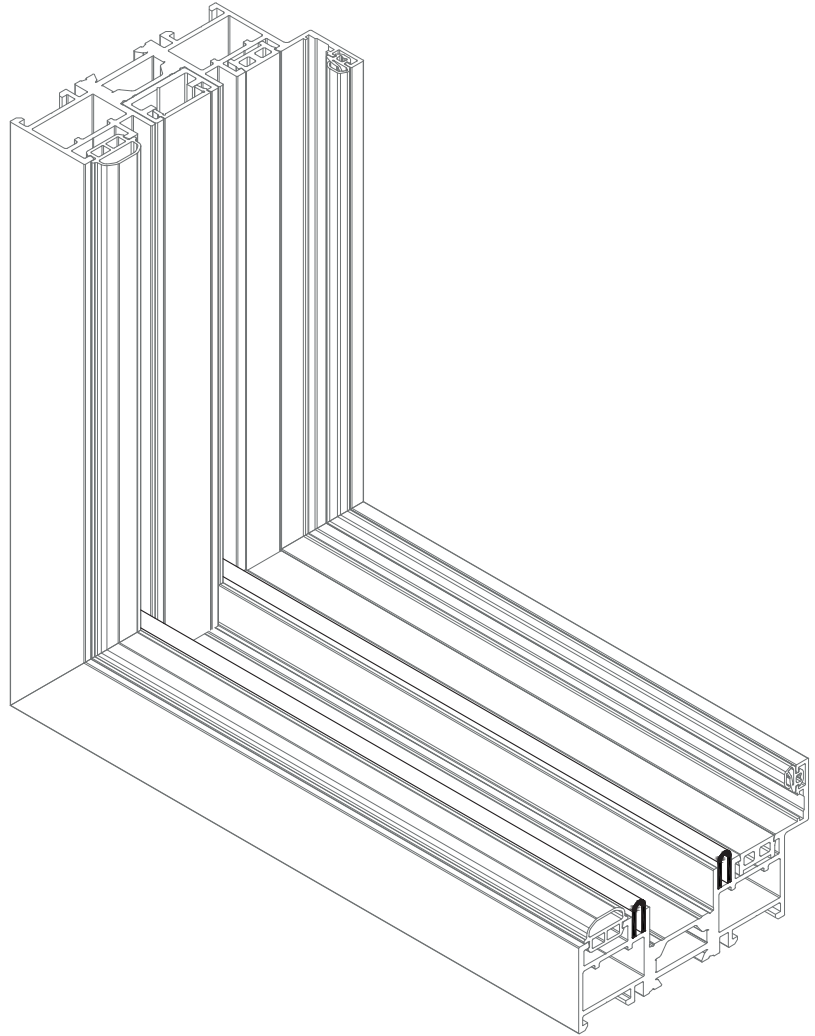
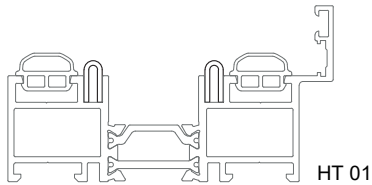
HT 801 rail profile application in fixed frames.

Aplicação do perfilé de guide HT 801 sur les cadres dormants.

**O perfil HT 801 deverá ser aplicado nas soleiras, conforme esquemas abaixo:**

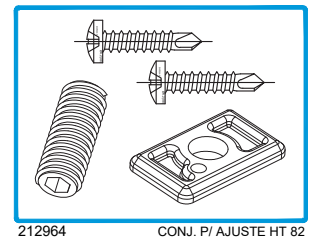
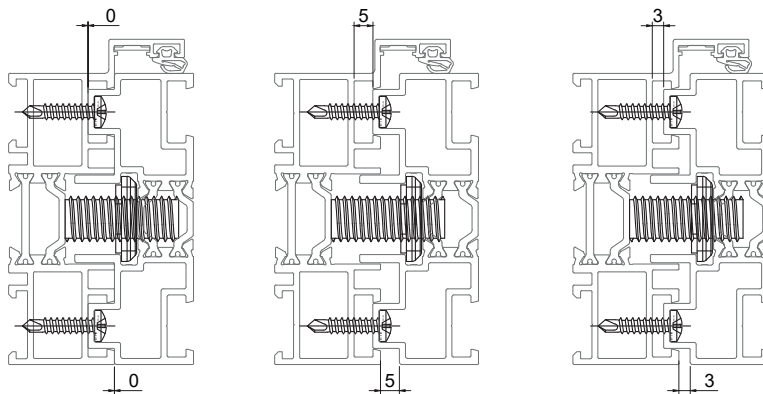
The HT 801 profile must be applied in the sills, according to the schemes below:

Le profilé HT 801 doit être appliqué aux seuils, selon les schémas ci-dessous:

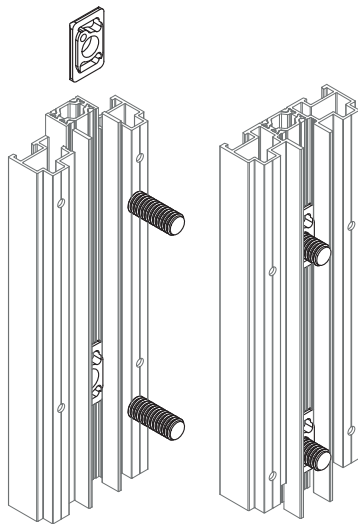


**MONTAGEM DOS PERFIS ARO FIXO**  
FIXED FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS DORMANTS

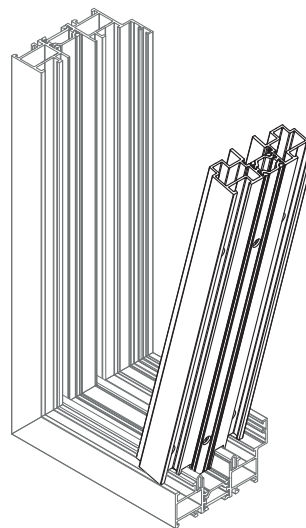
**6 - Aplicação do perfil lateral de ajuste HT 82.**  
HT 82 adjustable jamb profile application.  
Application du profilé de jambage réglable HT 82.



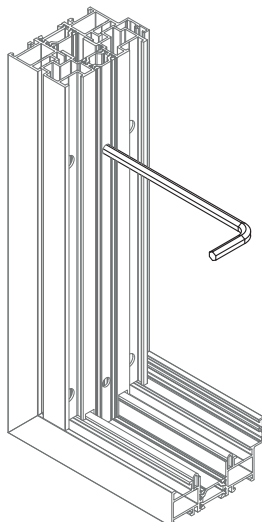
**PASSO | STEP | ÉTAPE 1:**  
Colocar dos acessórios no perfil HT 82.  
Accessories application in the HT 82 profile.  
Fixation d'accessoires au profilé HT 82.



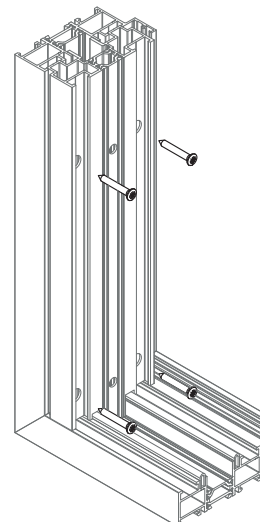
**PASSO | STEP | ÉTAPE 2:**  
Colocação do perfil HT 82 nos perfis laterais do aro fixo.  
Placement of the HT 82 profile on the side profiles of the fixed frame.  
Poser du profilé HT 82 sur les profilés latéraux du cadre dormant.



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



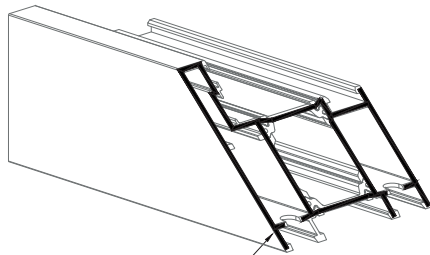
**MONTAGEM DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS OUVRANTS

**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.

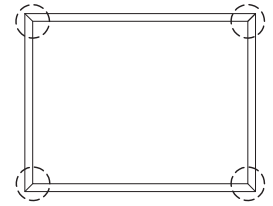
Appliquer du silicone sur la couleur des profilés ou neutre dans la zone des cadres.

HT 11



**SILICONE NEUTRO**  
NEUTRAL SILICONE  
SILICONE NEUTRE

HT 11

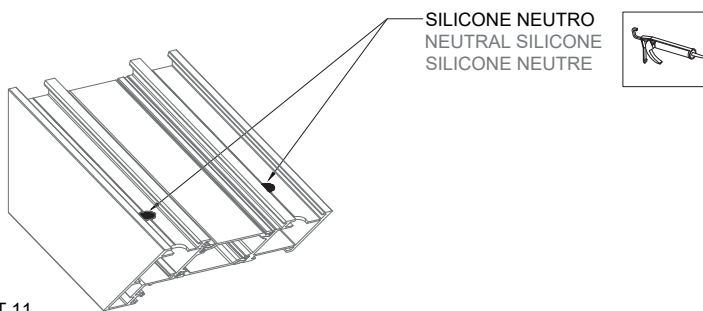


**2 - Antes de se colocarem os esquadros de aperto, deverão encher-se as câmaras dos perfis fixos com silicone neutro, de modo a ficarem seladas.**

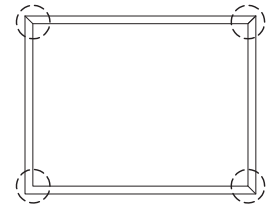
Before placing the corner cleats, the fixed frame profiles channels must be filled with neutral silicone, in order to be sealed.

Avant d'installer les étriers de serrage, les chambres des profilés fixes doivent être remplies de silicone neutre afin d'être scellées.

HT 11



**SILICONE NEUTRO**  
NEUTRAL SILICONE  
SILICONE NEUTRE

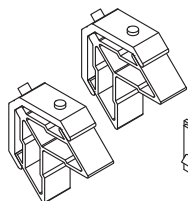


**3 - Aplicação dos esquadros e cantos de alinhamento e preenchimento de todas as zonas de aperto dos esquadros, com silicone neutro.**

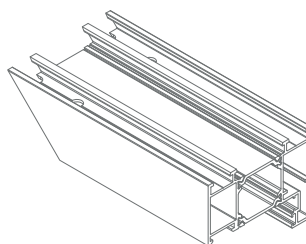
Corner cleats and alignment corners application and filling all the tightening areas of the corner cleats with neutral silicone.

Application des équerres et angles d'alignement et remplissage de toutes les zones de serrage des équerres avec du silicone neutre.

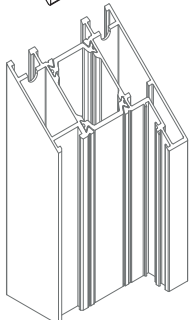
ESQUADROS | CORNER CLEATS | ÉQUERRES



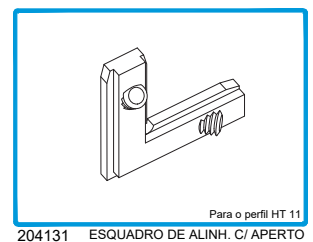
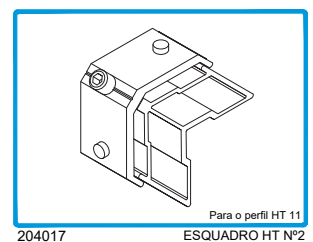
CANTO | CORNER | ANGLE



HT 11

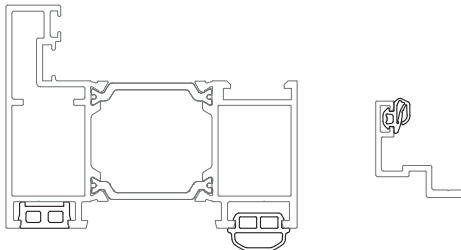
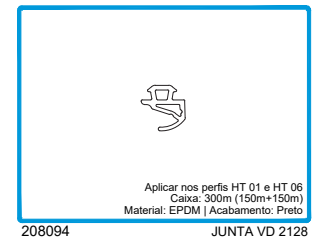
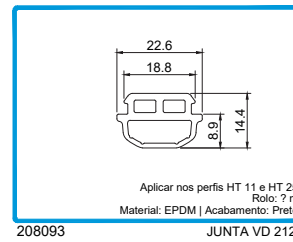
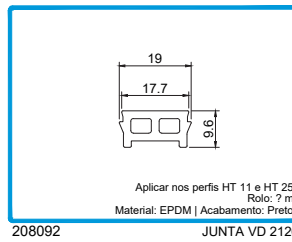


HT 11

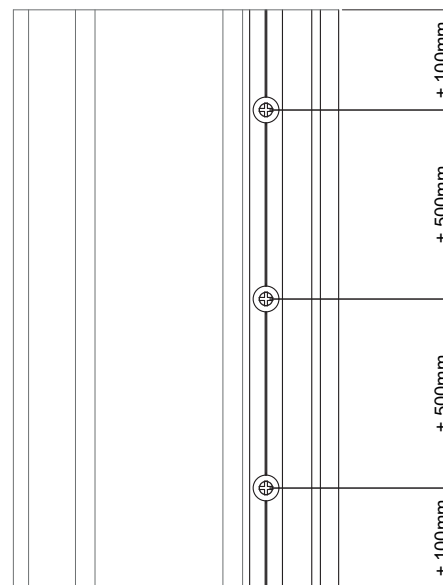
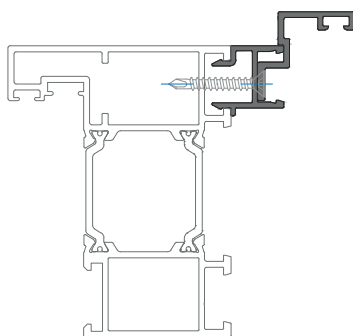
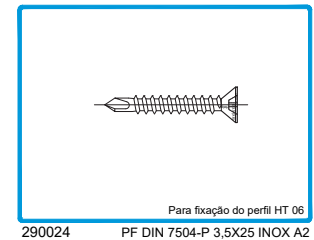
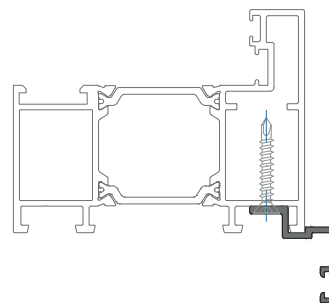
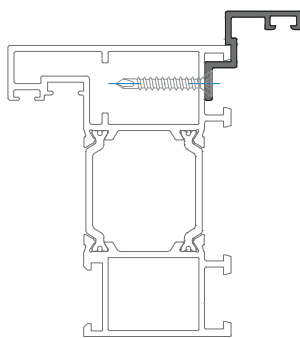


**MONTAGEM DOS PERFIS ARO MÓVEL**  
MOBILE FRAME PROFILES ASSEMBLY  
ASSEMBLAGE DES PROFILÉS OUVRANTS

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



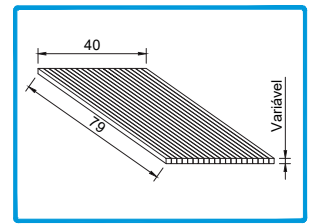
**5 - Fixação do perfil complementar batente.**  
Casement complementary profile fixation.  
Fixation du profilé complémentaire battant.



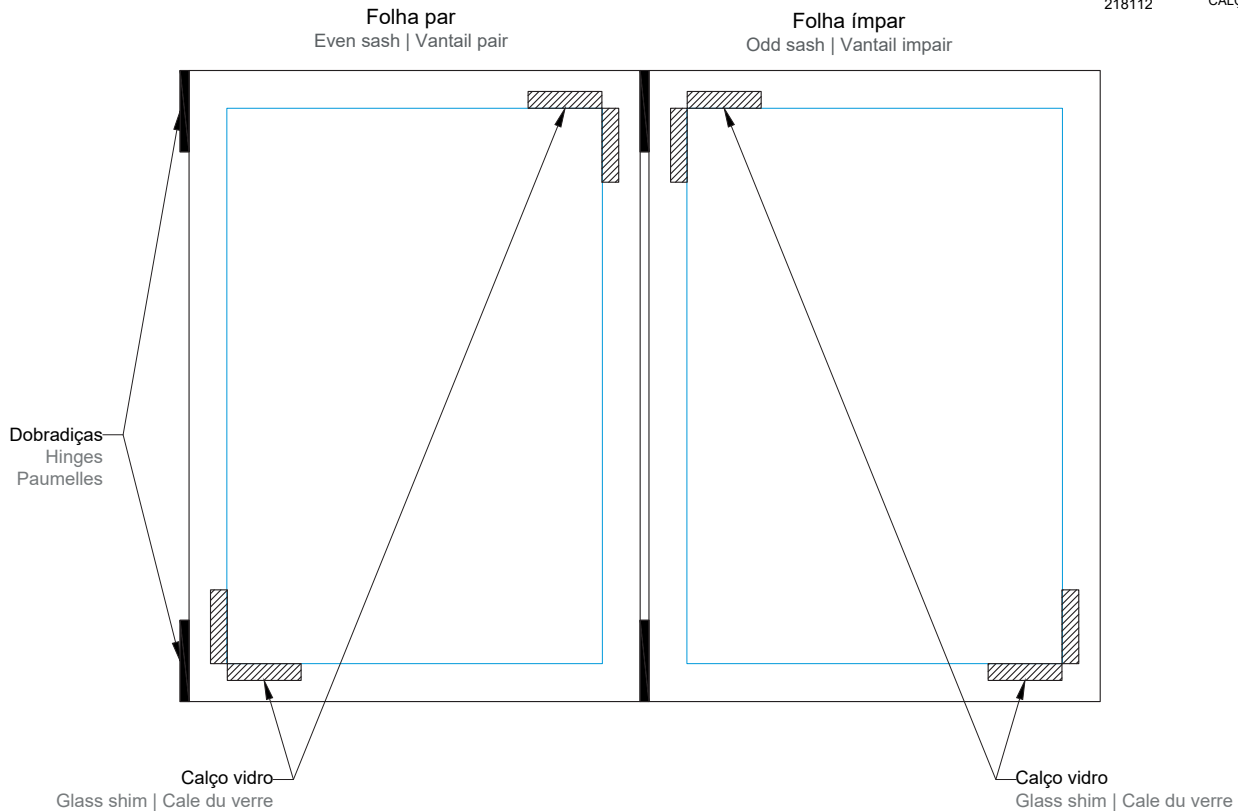
**É necessário escarear os furos efetuados de forma a embeber a cabeça do parafuso.**  
It is necessary to countersink the drilled holes in order to embed the screw head.  
Il est nécessaire de fraiser les trous percés afin d'encastrer la tête de vis.

**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.

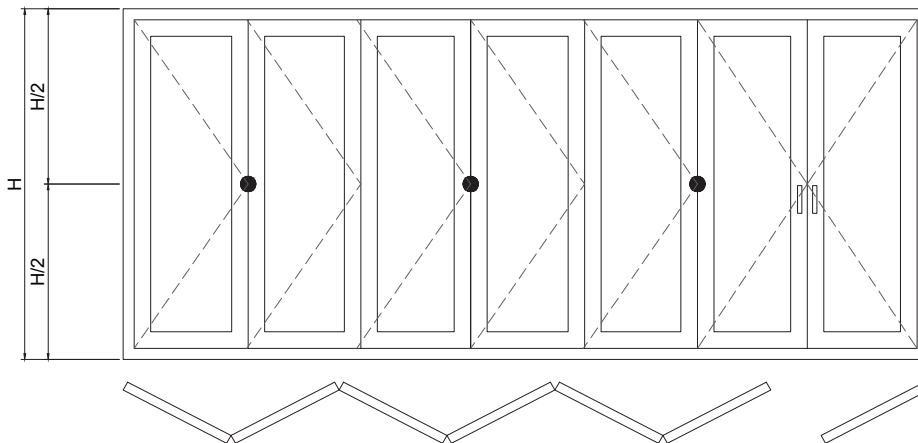
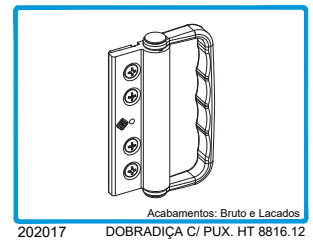


**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

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

**EXEMPLO | EXAMPLE | EXEMPLE**

**Tipologia | Tipology | Typologie 761 - abertura interior | inside opening | ouverture intérieure**

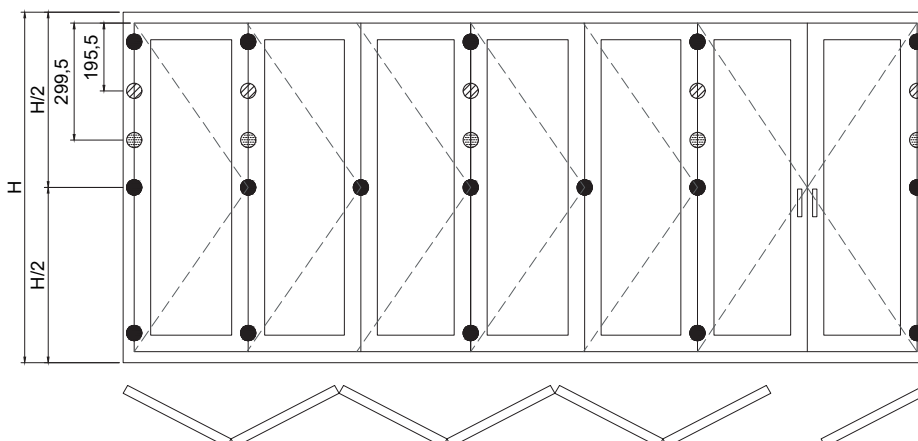
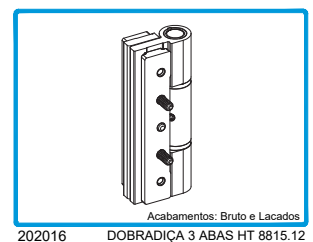


- Posição de aplicação  
Application position  
Position d'application

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

**EXEMPLO | EXAMPLE | EXEMPLE**

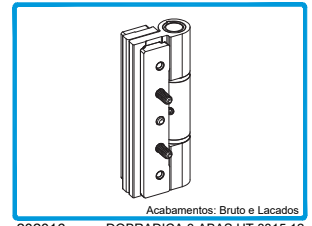
**Tipologia | Tipology | Typologie 761 - abertura interior | inside opening | ouverture intérieure**



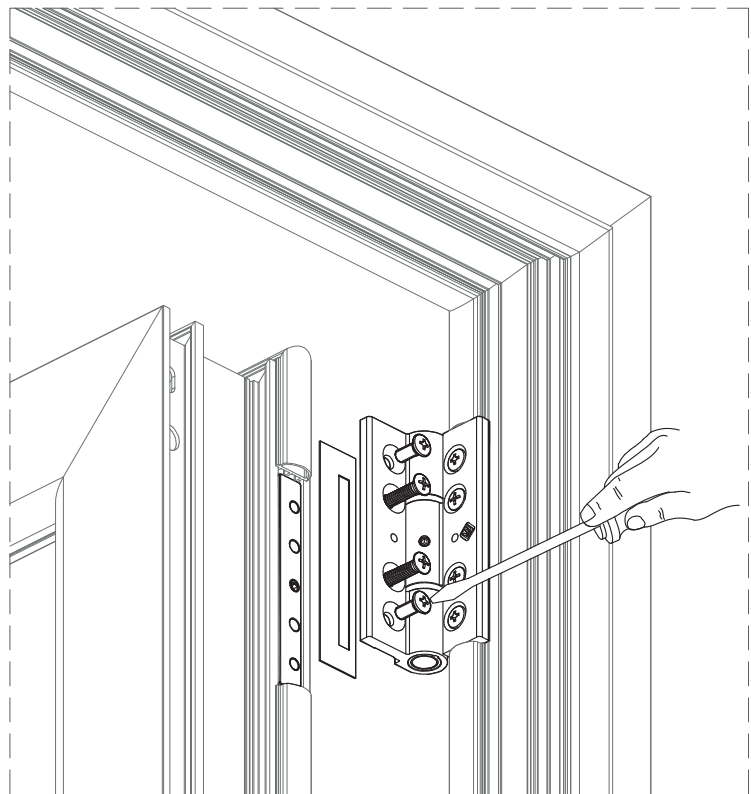
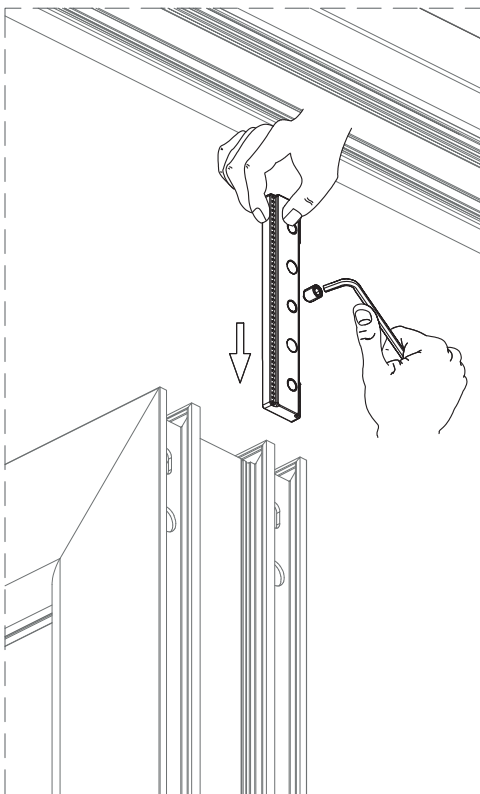
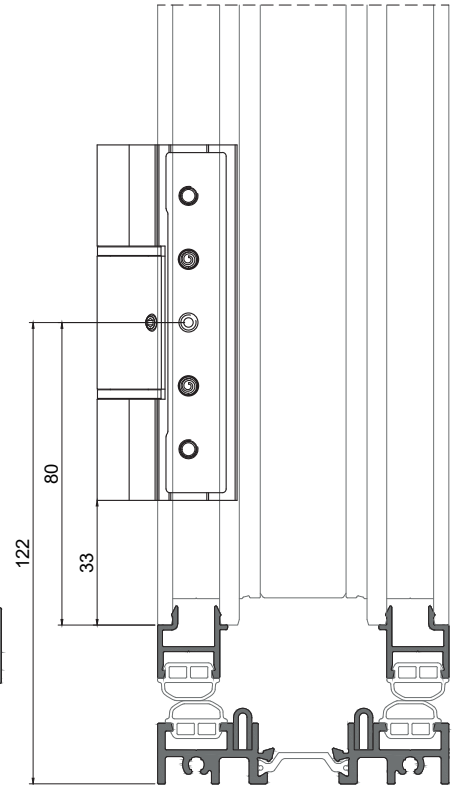
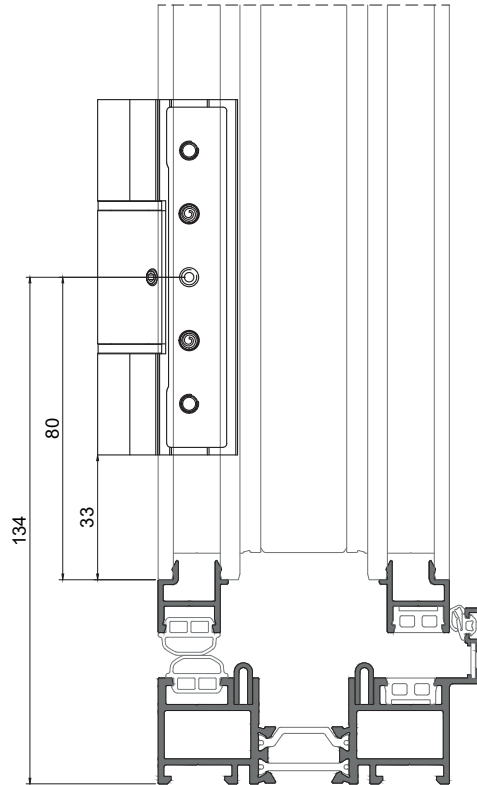
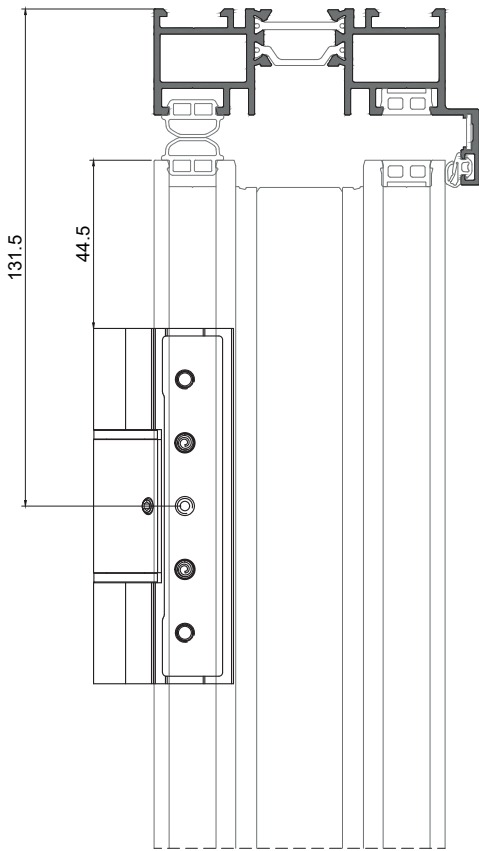
- **Quantidade Base**  
(para folhas com P<90kg e H<2200mm)  
Standard Quantity  
(for sashes with P<90kg and H<2200mm)  
Quantité Standard  
(pour ventaux avec P<90kg et H<2200mm)
- ⊗ **Aumento 1**  
(para folhas com P<90kg e 3000mm>H>2200mm)  
Increase 1  
(for sashes with P<90kg and 3000mm>H>2200mm)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

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

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

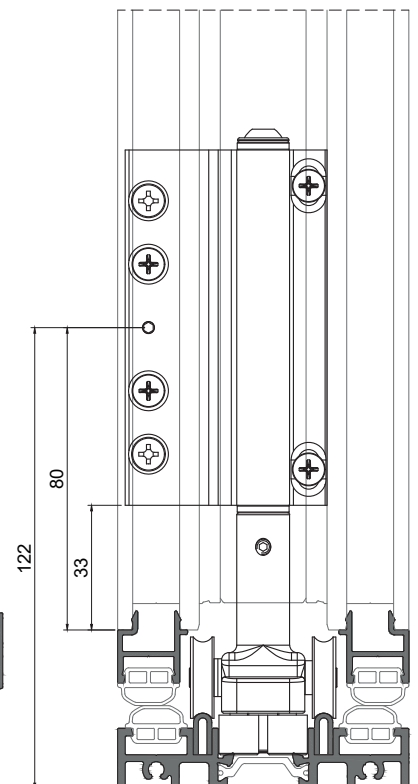
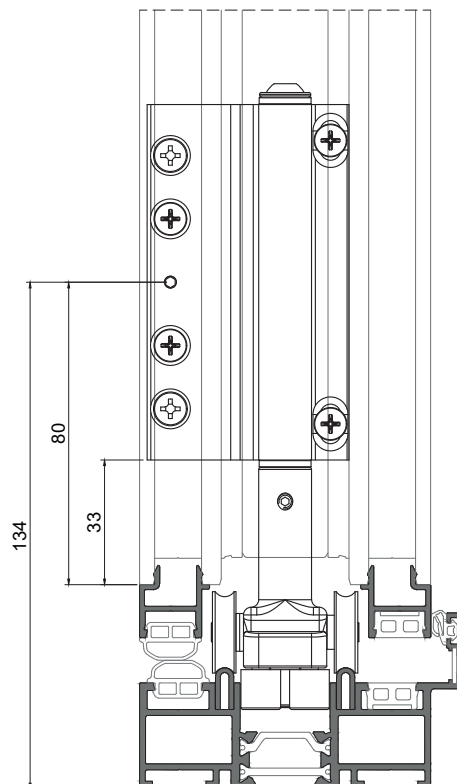
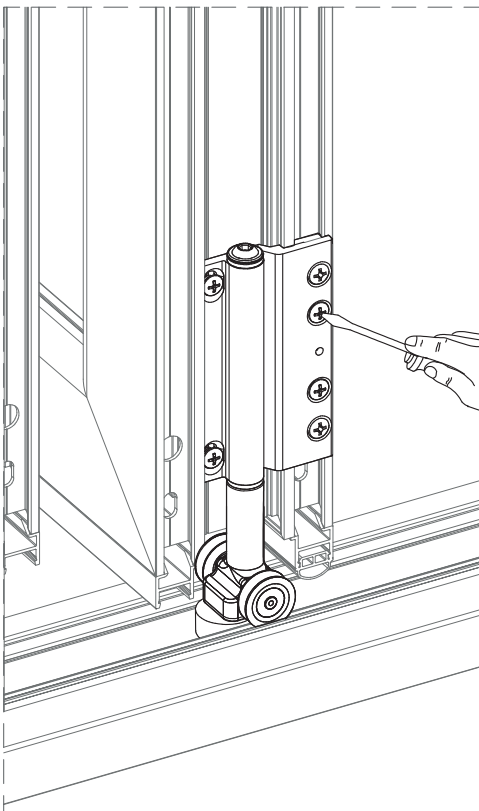
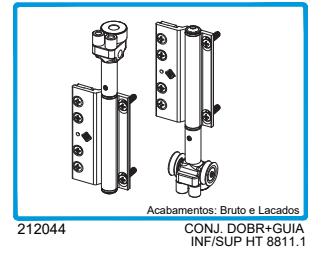
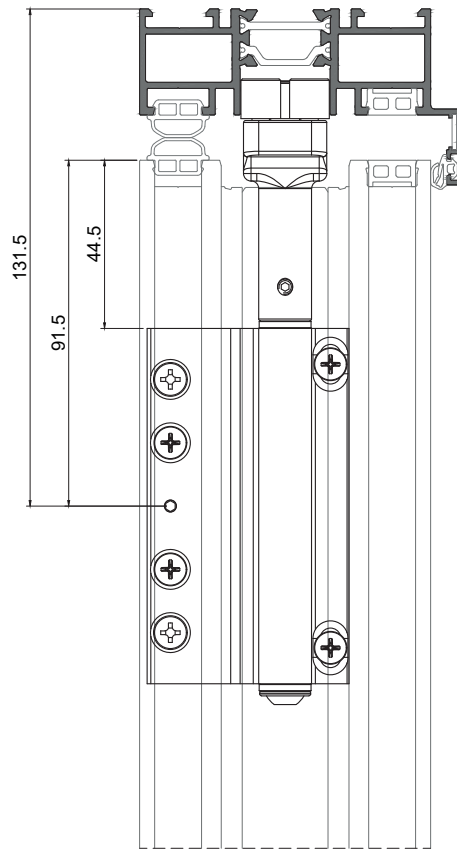
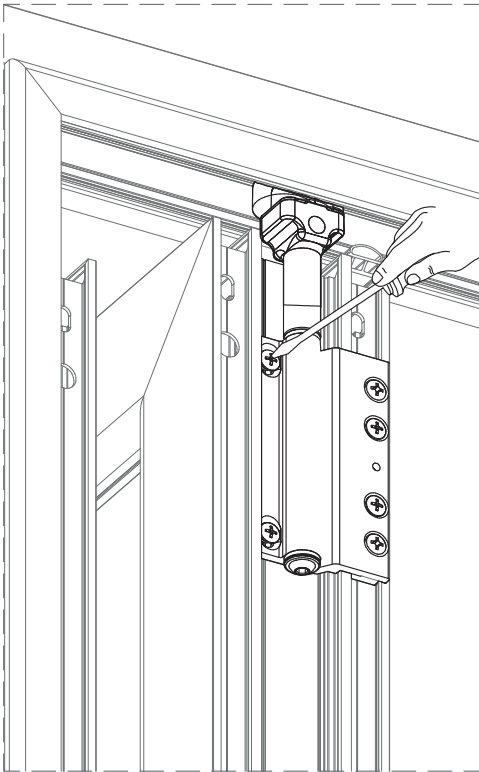


202016 Acabamentos: Bruto e Lacados DOBRADIÇA 3 ABAS HT 8815.12



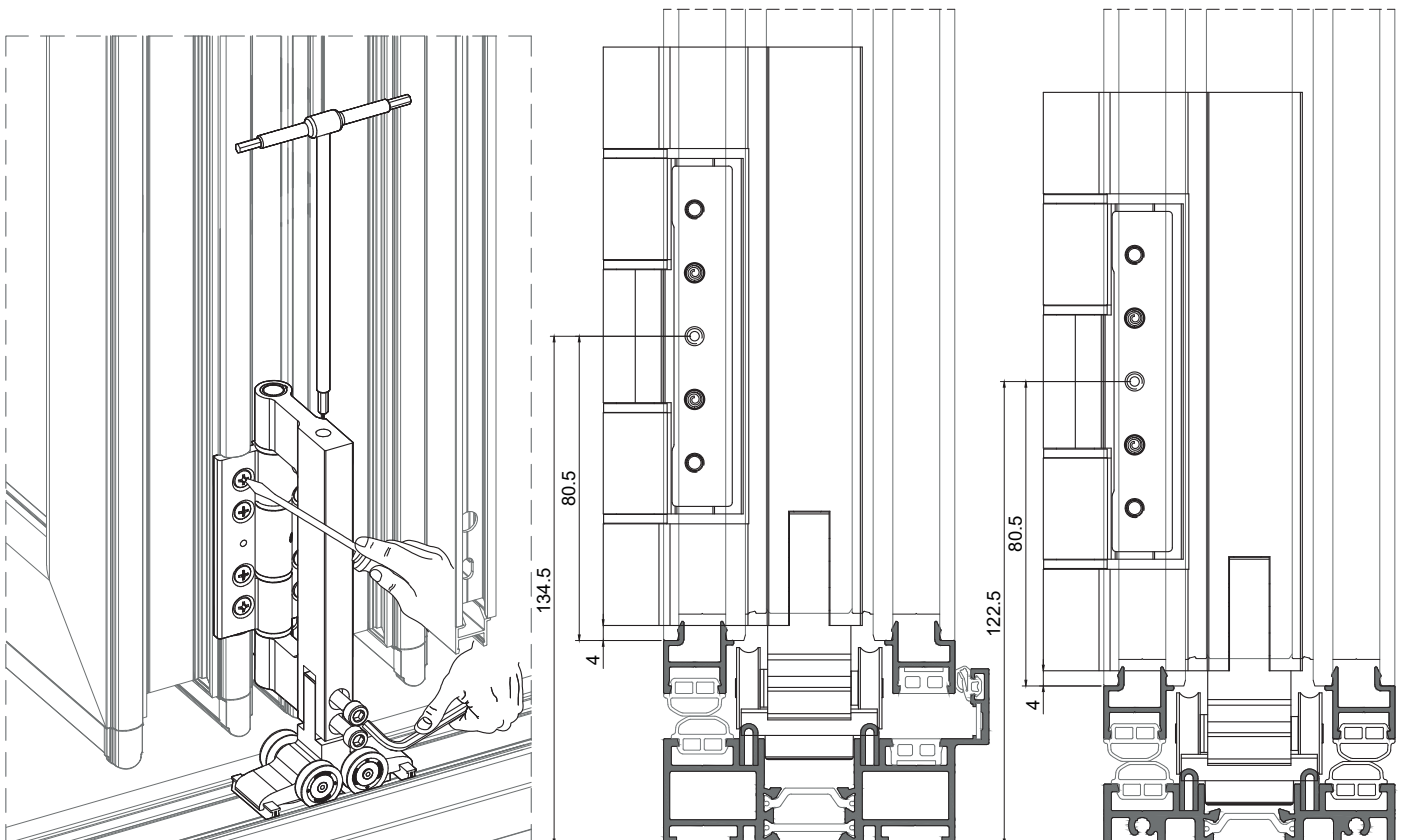
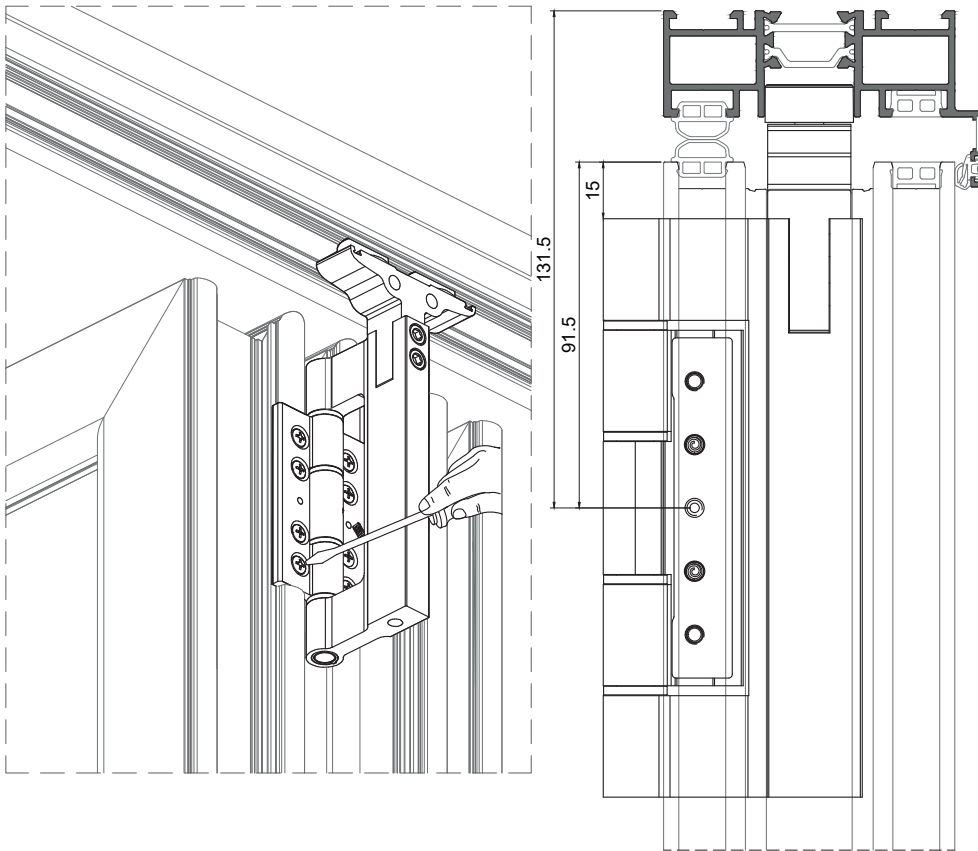
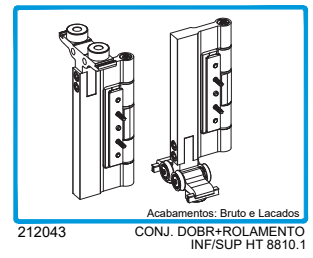
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

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



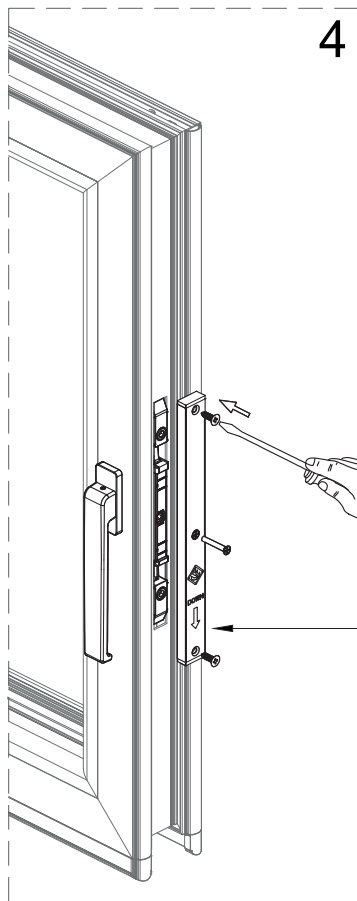
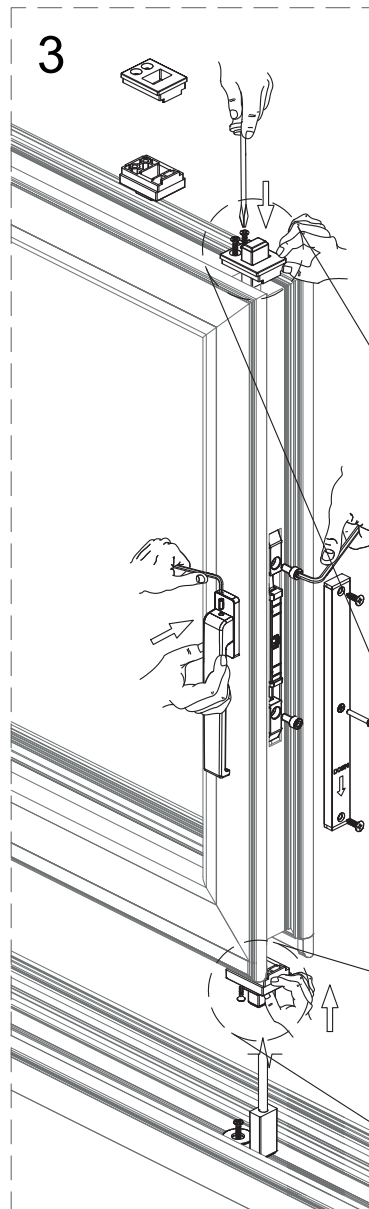
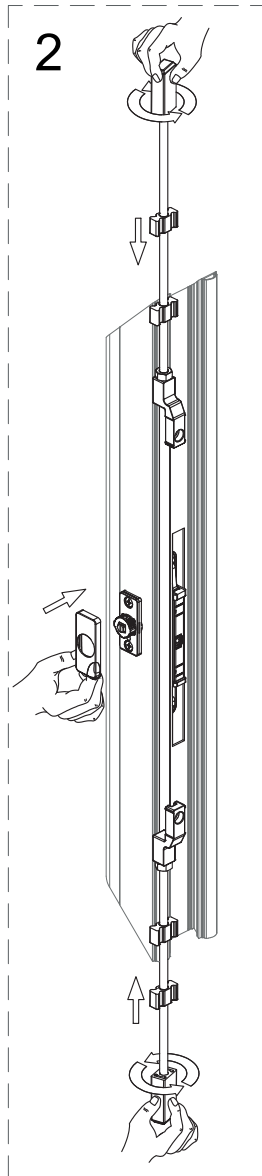
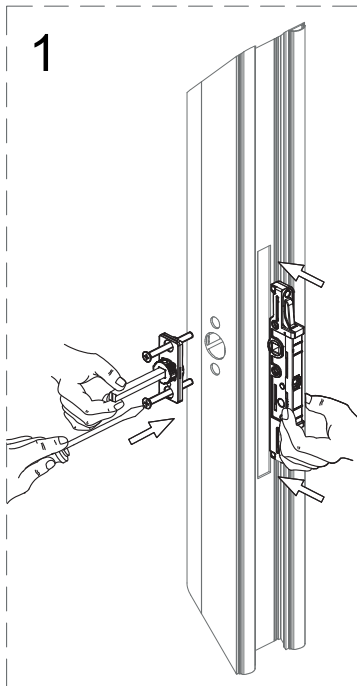
**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

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

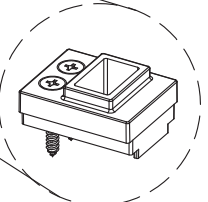
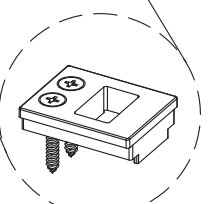
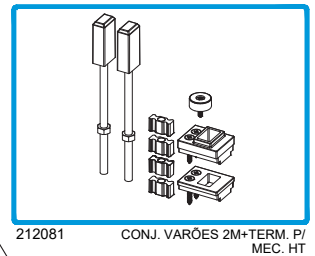
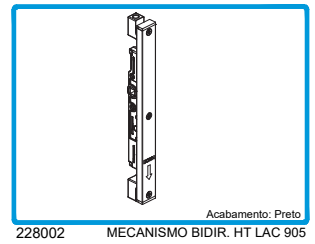
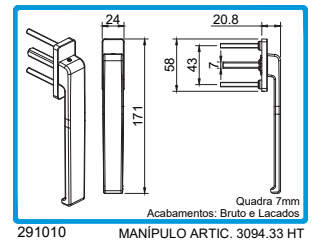


**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

**5 - Aplicação do Conj. Mecanismo Bidirecional e Manipulo Artic. 15mm.**  
Bidirectional Mechanism Kit and Foldable System Handle application.  
Application du Kit de Mécanisme Bidirectionnel et Poignée pour système repliable.

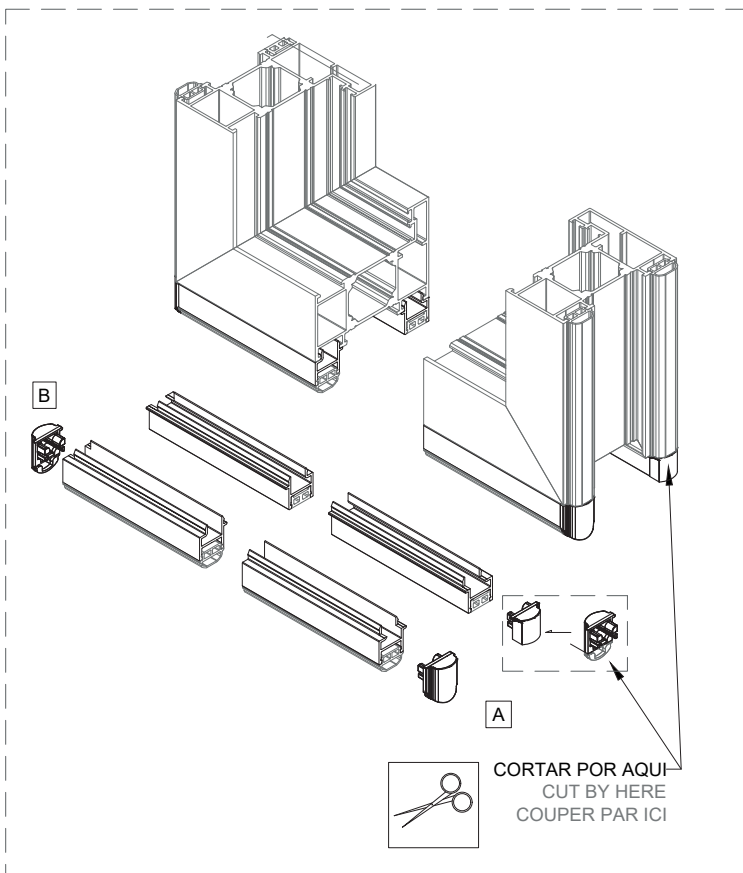
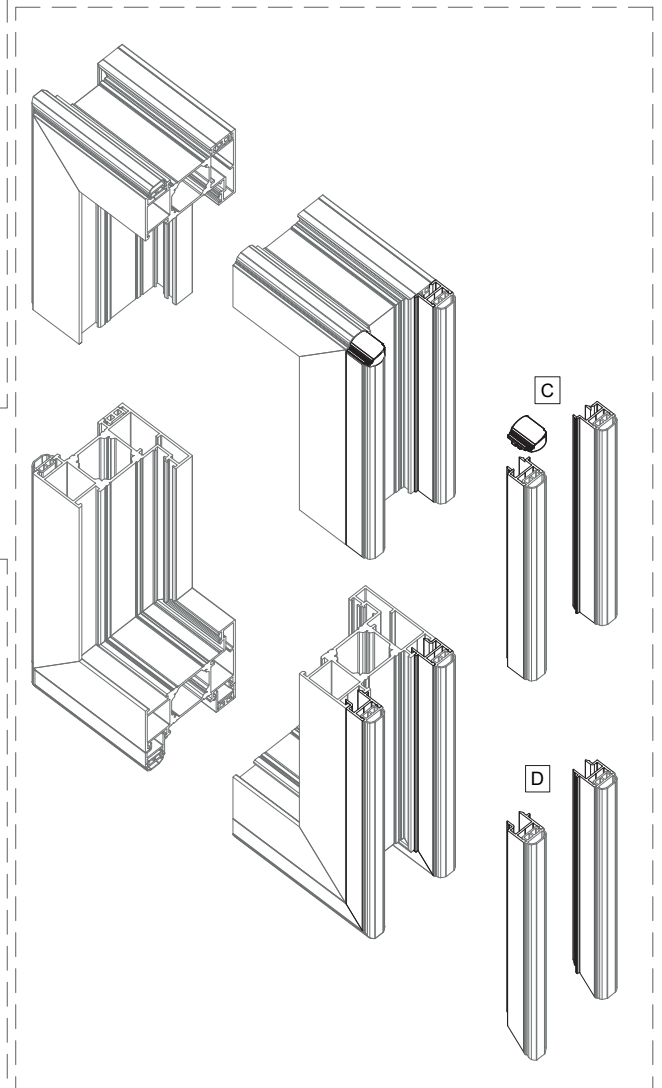
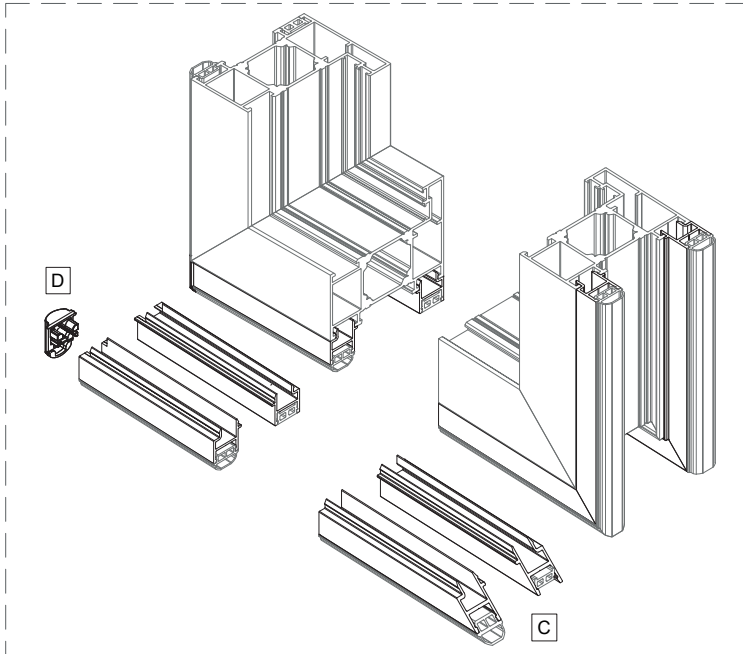
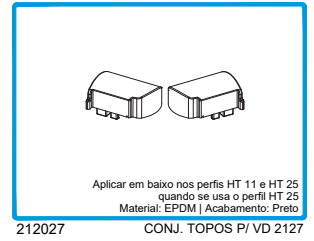


**ATENÇÃO À POSIÇÃO DO MECANISMO**  
**ATTENTION TO THE POSITION OF THE MECHANISM**  
**ATTENTION À LA POSITION DU MÉCANISME**



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

6 - Aplicação do Conj. Topos p/ VD 2127.  
2127 Gasket End-caps Kit application.  
Application du Kit d'Embouts pour Joint 2127.

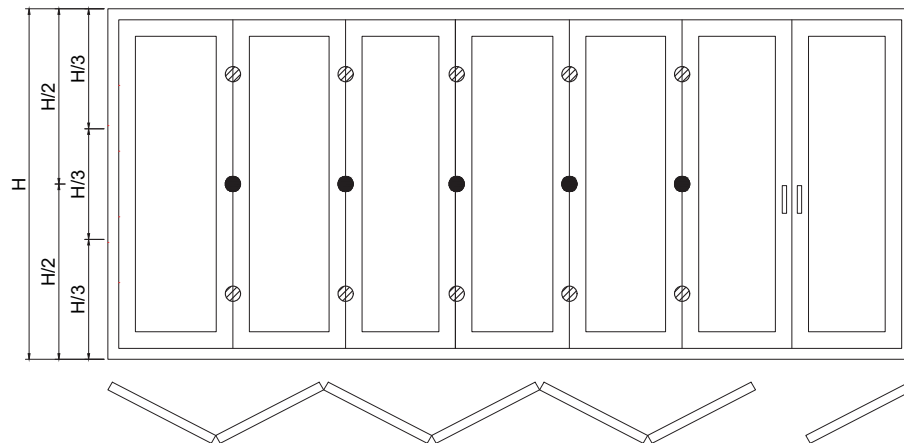
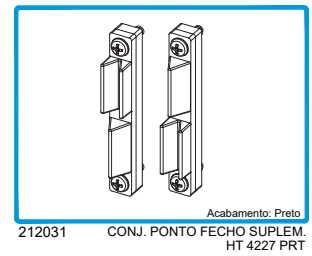


**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

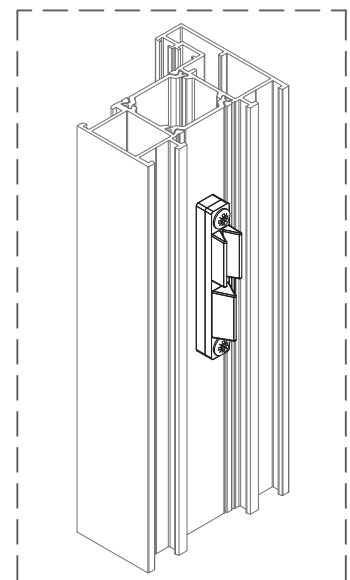
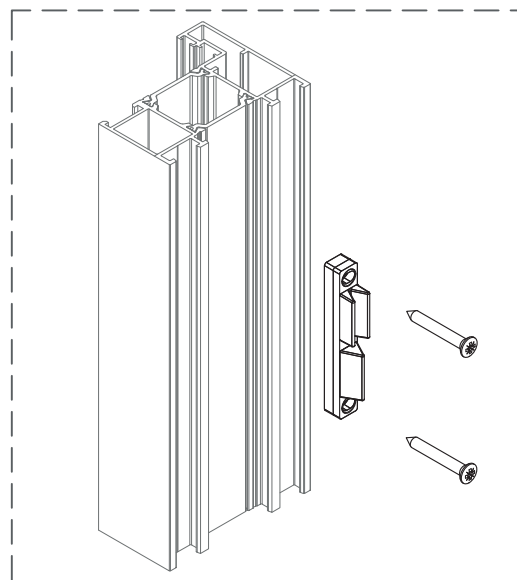
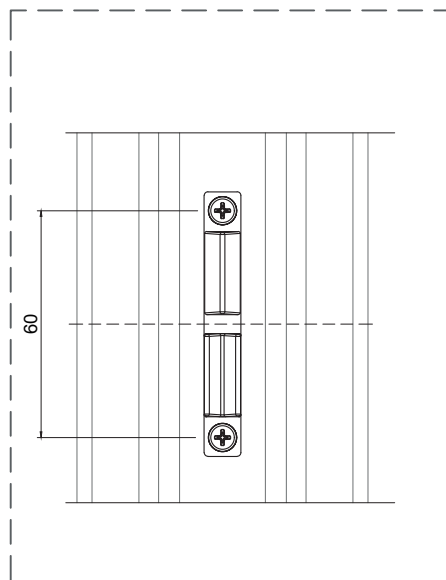
7 - Aplicação dos Conj. Ponto Fecho Suplem. 4227 HT.  
Additional Closing Point Kit application in the passive sash application.  
Application du Kit de Point de Fermeture Supplémentaire.

**EXEMPLO | EXAMPLE | EXEMPLE**

**Tipologia | Tipology | Typologie 761 - abertura interior | inside opening | ouverture intérieure**

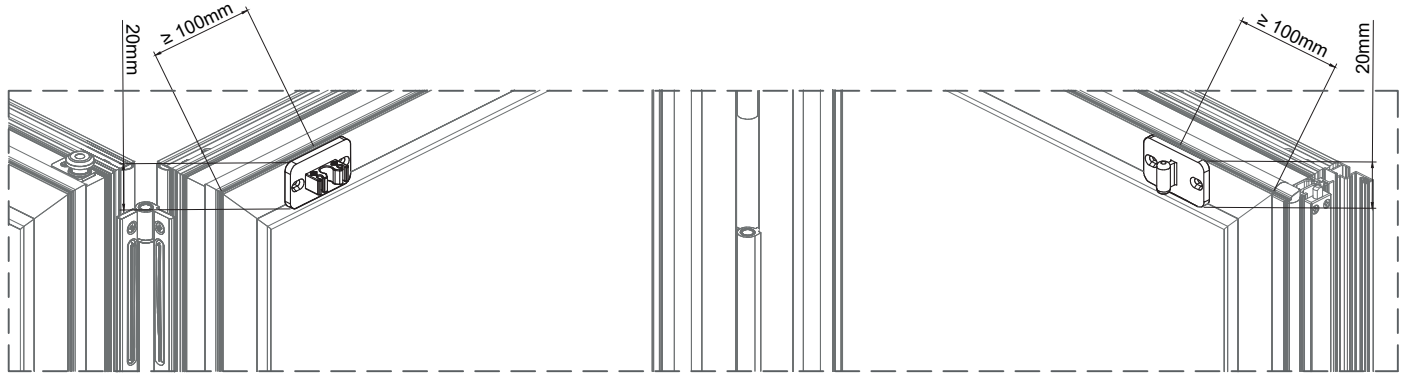
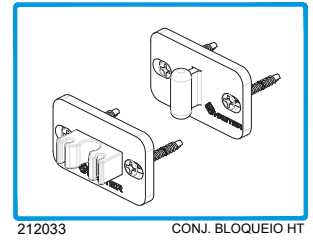


- Posição de aplicação  
(para folhas com H<2200mm)  
Application position  
(for sashes with H<2200mm)  
Position d'application  
(pour ventaux avec H<2200mm)
- ⊗ Posição de aplicação  
(para folhas com H>2200mm)  
Application position  
(for sashes with H>2200mm)  
Position d'application  
(pour ventaux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

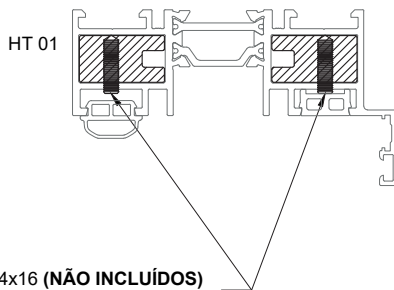
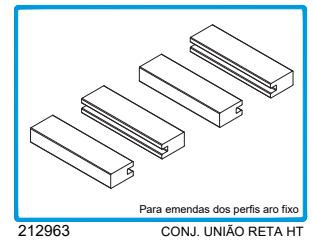


**MONTAGEM DOS ACESSÓRIOS**  
ACCESSORIES ASSEMBLY  
ASSEMBLAGE DES ACCESSOIRES

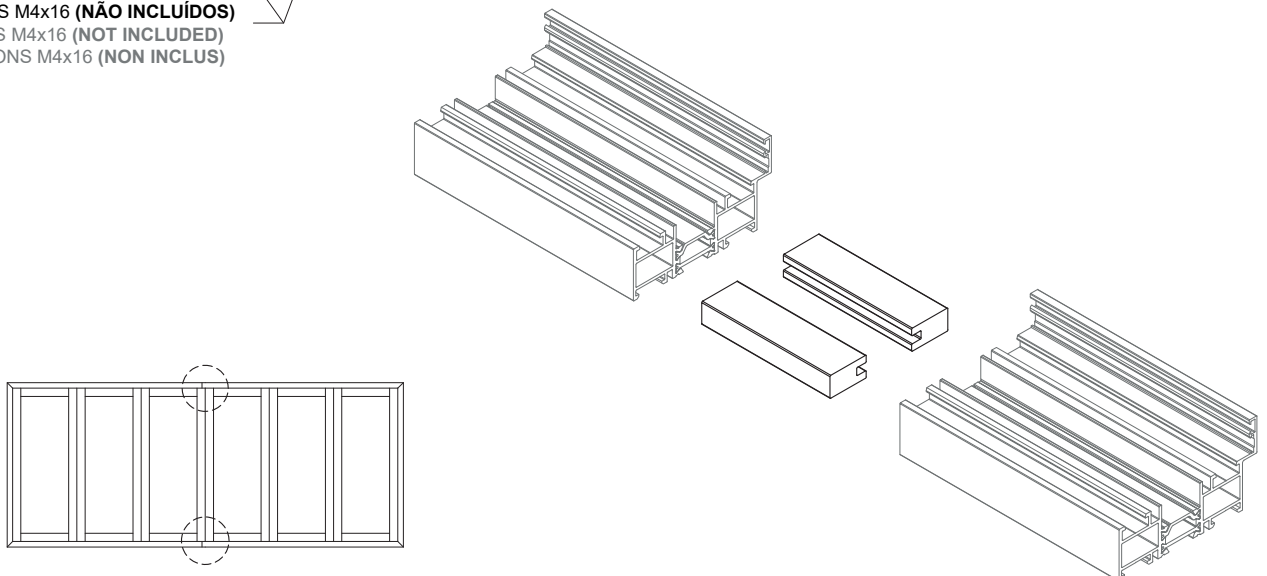
**8 - Aplicação do Conj. Bloqueio HT.**  
HT Locking Kit application.  
Application du Kit de Fermeture HT.



**9 - Aplicação dos conjunto união reta e canto 90° HT.**  
Straight union kit and angles applying in fixed frames.  
Application du kit d'union droit et angle 90° HT.



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





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