



Urban 40

BTF

batente CE fria 40mm

LOU/ALU

BTF - Desempenho / Performance



ITT - Ensaio de tipo inicial - Organismo notificado nº.

Norma EN 14351-1

ETI - Essai de type initial - Laboratoire notifié nº.

0856 - LNEC/LEC



Permeabilidade ao Ar

Perméabilité à l'air

UNE-EN 12207



Classe 1

150pa (50m3)

Classe 2

300pa (27m3)

Classe 3

600pa (9m3)

Classe 4

600pa (3m3)



Estanquicidade à Água

Étanchéité à l'eau

UNE-EN 12208



1A

0pa

2A

50pa

3A

100pa

4A

150pa

5A

200pa

6A

250pa

7A

300pa

8A

450pa

9A

600pa

E750

>600pa



Resistência ao Vento

Résistance au Vent

UNE-EN 12210



A

≤1/150

1

800pa

2

1200pa

3

1600pa

4

2000pa

5

>2000

Exxx

Ensaio realizado numa janela de batente de duas folhas com:
Essai réalisé sur une fenêtre de deux ouvrants à la française de:

1700 x 2020 mm

Certificado de ensaio/Certificat d'essai nº 01/2010

Desempenho térmico e acústico / Performance thermique et acoustique

Elementos usados na base dos cálculos
Elements utilisés sur la base de calculs:

Janela oscilo-batente de 2 folhas com:
Fenetre oscilo-batant 2 vantaux avec:
2000 x 2200 mm



Transmissão Térmica

Transmittance Thermique

UNE-EN 10077-2



Atenuação Acústica

Isolation Acoustique

EN 14351-1+A1 (Anexo B)

Exterior / Extérieur



Interior / Intérieur

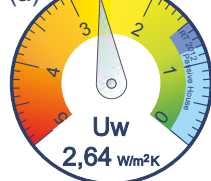
Composição e valores dos vidros / Composition et valeurs de vitrage

	Unidade de vidro (IGU)*	Y	Ug	g	Tlg	Rw (C;Ctr)
(a)	GuardianSun 4+12 Argon+Float 4mm	0,049	1,2	0,43	70%	30(-1;-3)
(b)	GuardianSun 4+12 Ar+Float 4mm	0,049	1,5	0,43	70%	30(-1;-3)
(c)	Float 4+16 Ar+Float 4mm	0,049	2,7	0,78	82%	34(-1;-5)

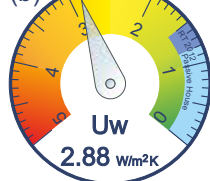
Y - Coeficiente linear junta alumínio/vidro (com Warm Edge Thermoform Glassinsulation). Ug - Coeficiente Térmico g - Factor Solar Tlg - Transmissão Luminosa

$$U_w = \frac{\sum A_g U_g + \sum A_f U_f + \sum l_g \Psi_g}{\sum A_g + \sum A_f}$$

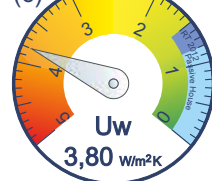
(a)



(b)



(c)



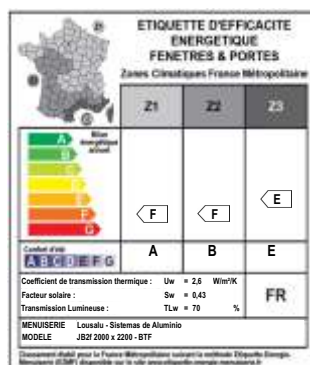
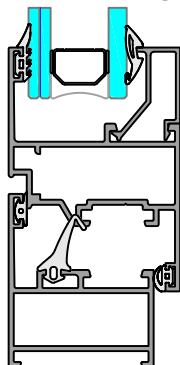
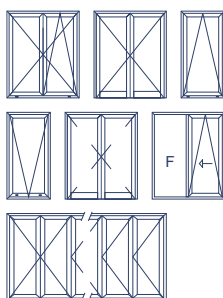
- (a) 31 (-1;-4)
- (b) 31 (-1;-4)
- (c) 33 (-1;-6)



Rw (C;Ctr) com vidro / avec vitrage

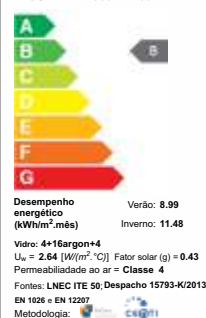
Tipologia e Classe energética / Typologie et classe énergétique

Tipologia construtiva
Typologie constructive



Avec vitrage (a)

Desempenho energético de:
JOB2TF - 2000 x 2200 - BTF



Verão: 8.99
Inverno: 11.48

Vidro: 4+16Argon+4
Uv = 2.64 [W/(m²·°C)] Fator solar (g) = 0.43
Permeabilidade ao ar = Classe 4
Fontes: LNEC ITE 50, Despacho 15793-K/2013;
EN 1026 e EN 12207
Metodologia: CEN

Com Vidro (a)

Materiais, Tratamentos e Acabamentos / Matériaux, Traitement et Finition

Perfis / Profils: Liga / alliage EN AW - 6060 (T5) - Acessórios / Accessoires: Canal Europeu

Vedantes / Joint d'étanchéité: EPDM / mousse de EPDM - Poliamida / Polyamid: Não Utilizada

Acabamentos / Finition: Anodizado, Lacado e efeito madeira / anodisé, Laqué et effet bois

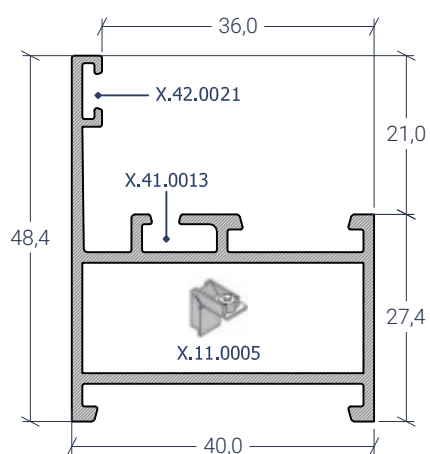
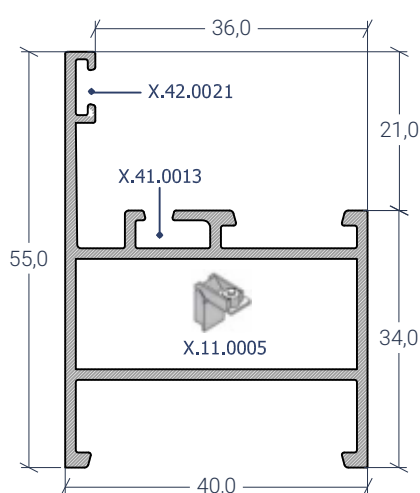
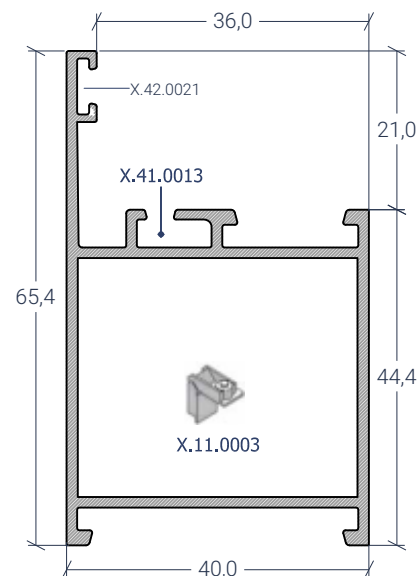
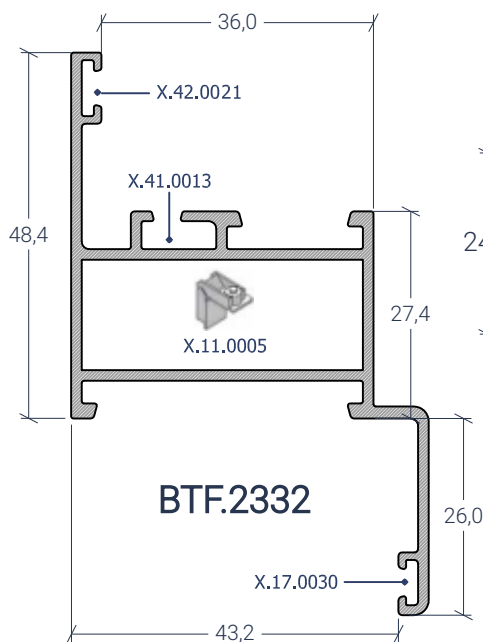
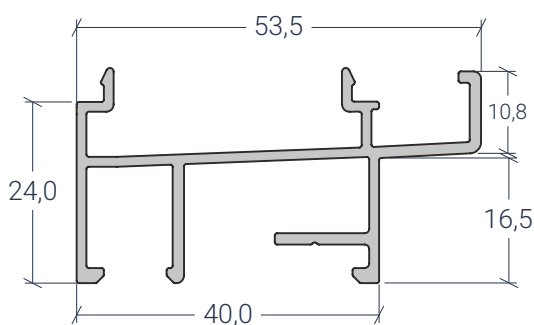
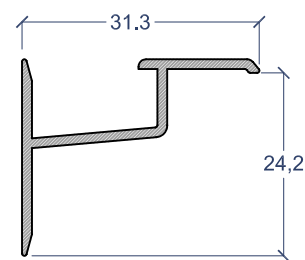
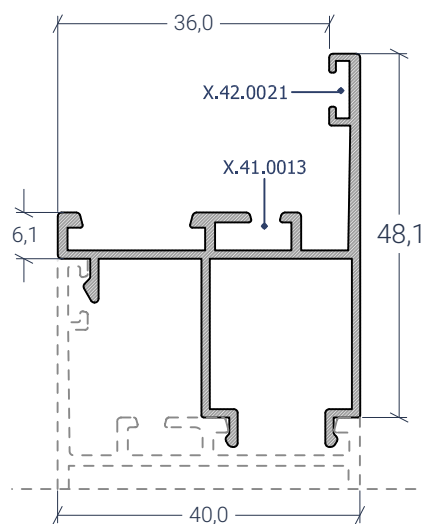
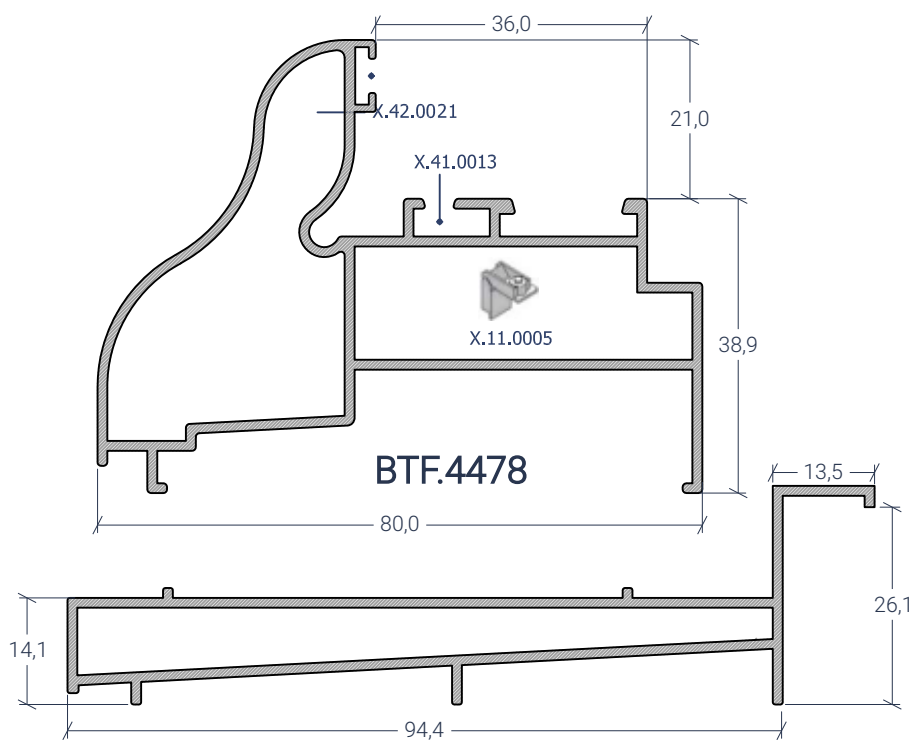
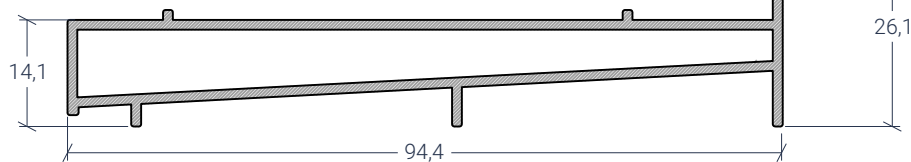


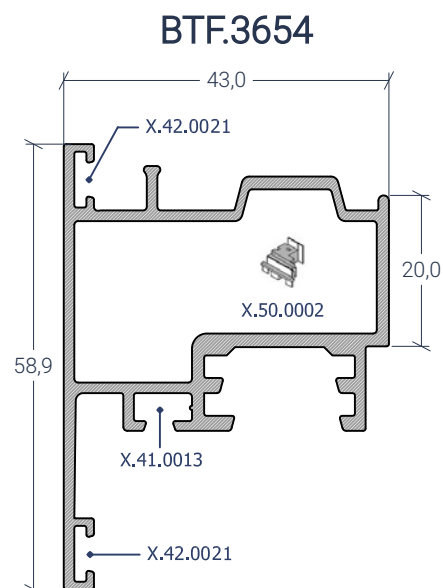
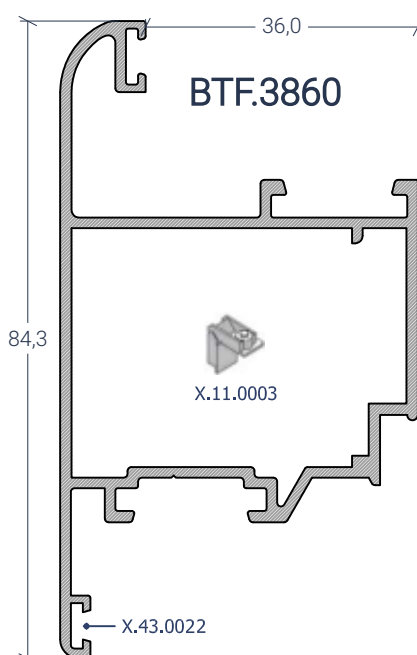
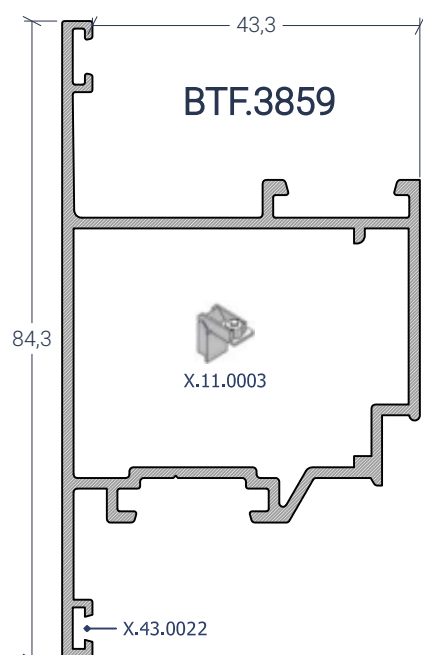
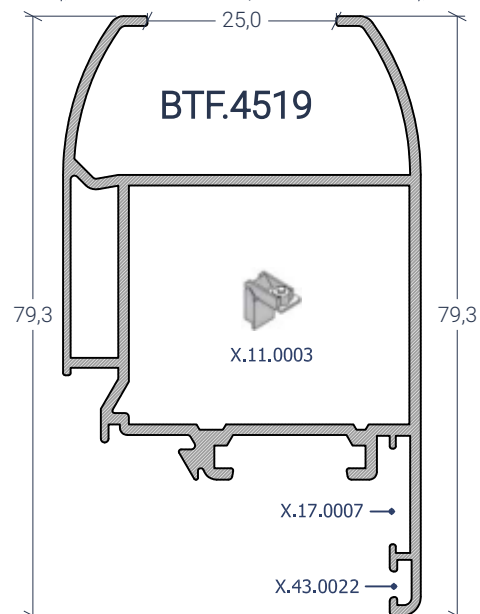
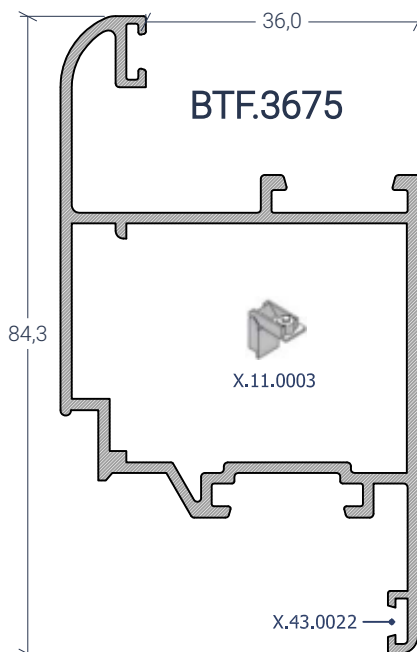
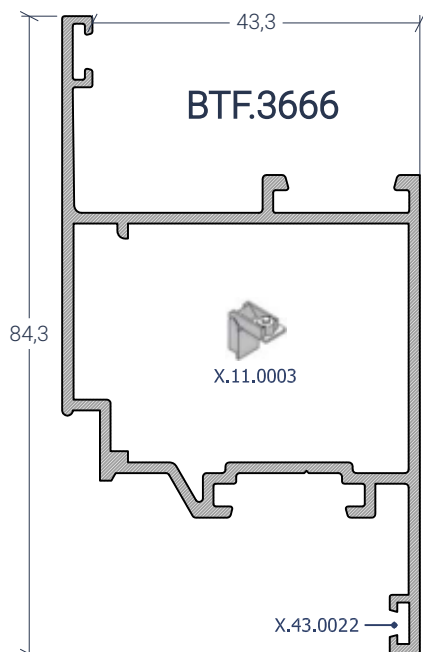
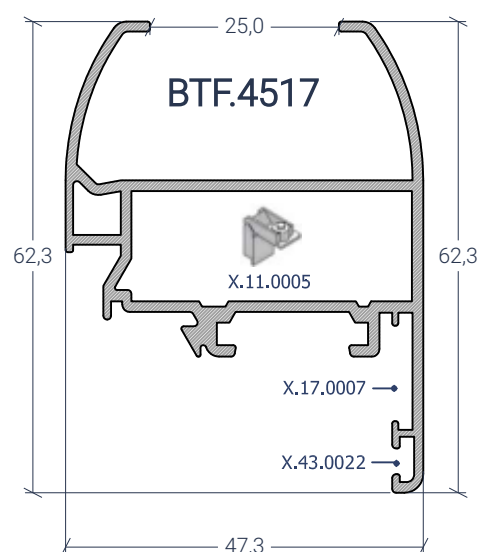
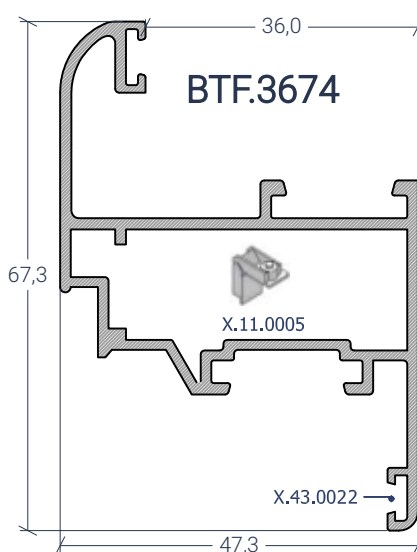
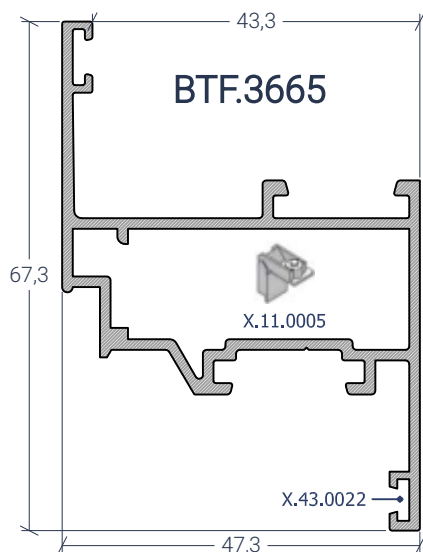
* Fonte: Guardian Performance Calculator 4.1 e Acoustic Database 20171102 by Guardian Glass. Os valores apresentados são apenas ilustrativos, pois podem variar em função dos vidros a aplicar em obra.

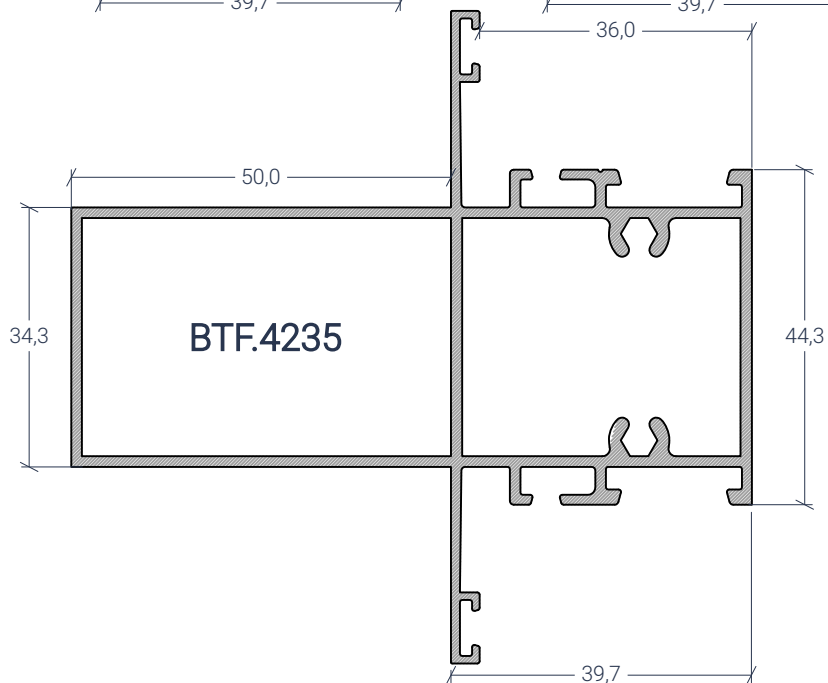
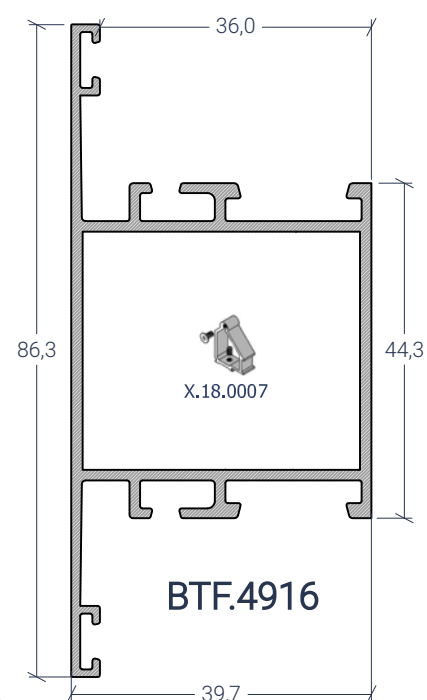
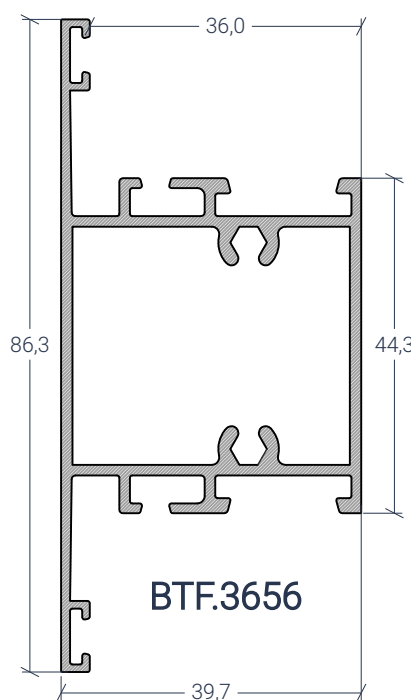
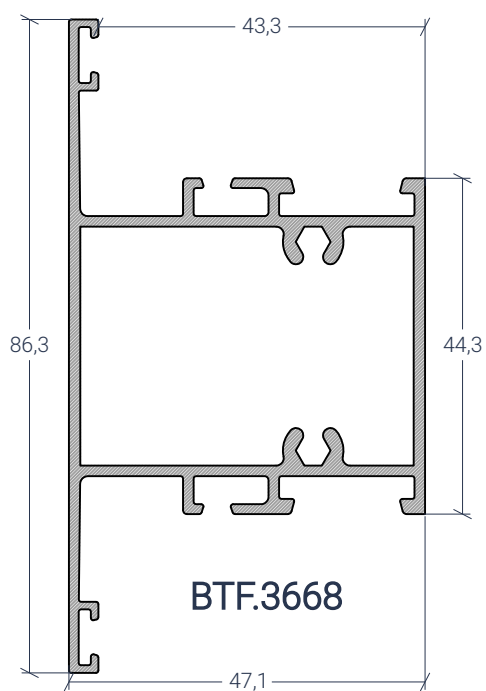
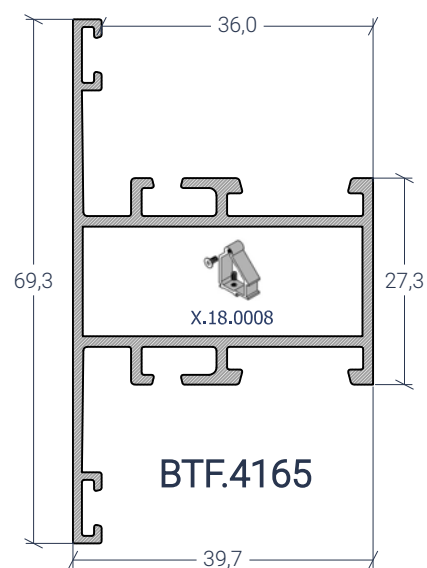
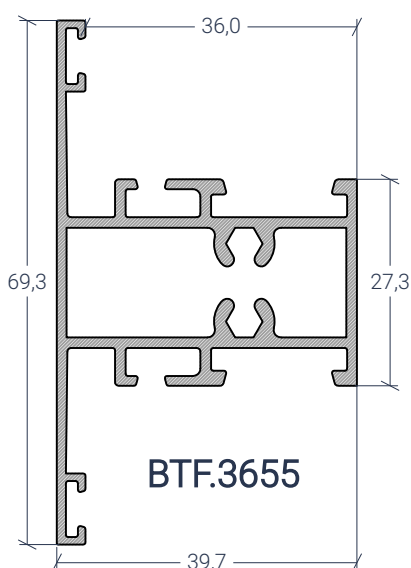
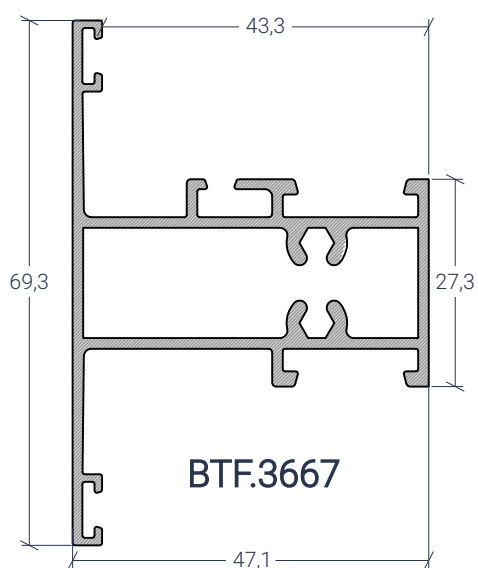
BTF



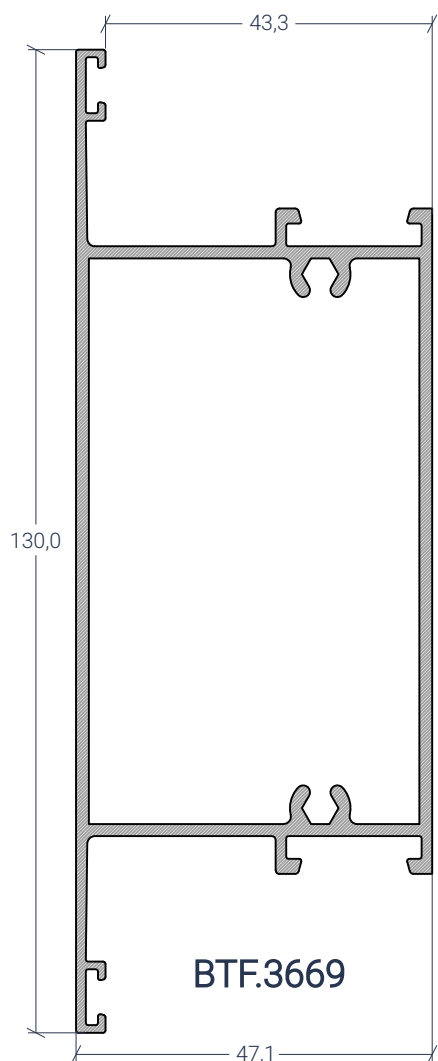
Urban40


BTF.3650

BTF:3806

BTF.3651

BTF.2332

BTF.4006

Y.0035

BTF.6969

BTF.4478

BTF.2066

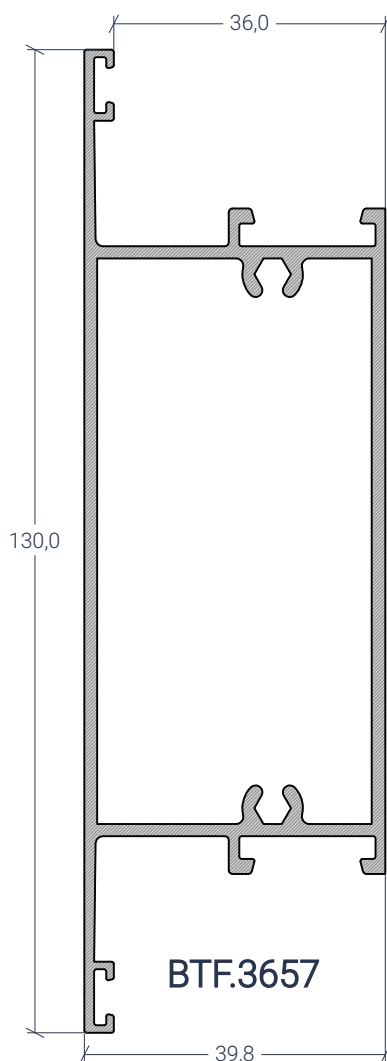




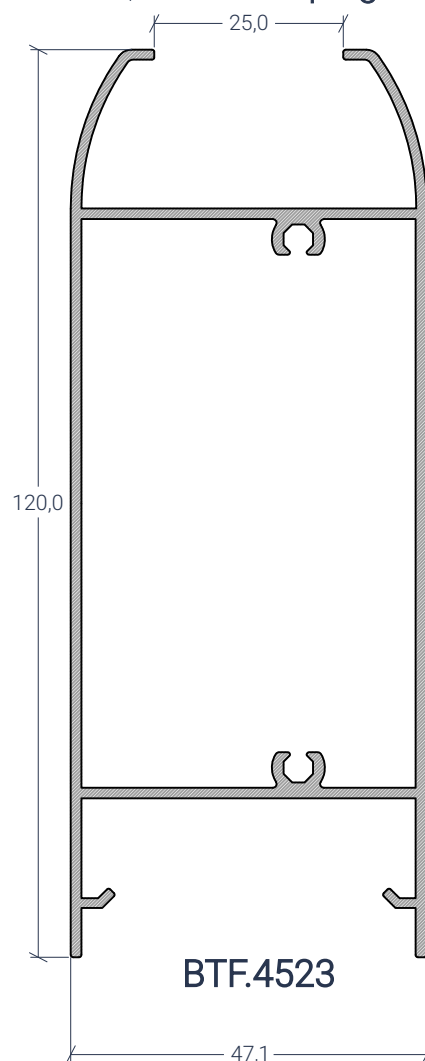
travessas, soleiras e pingadeiras



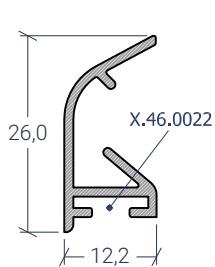
BTF.3669



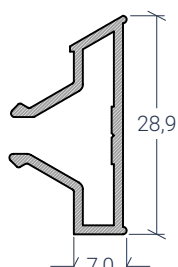
BTF.3657



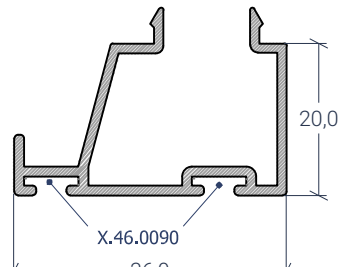
BTF.4523



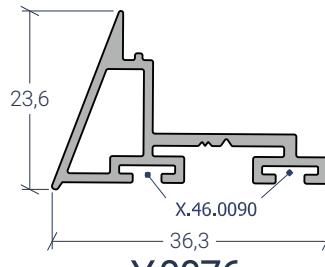
Y.0032



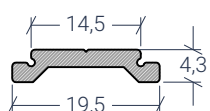
Y.0031



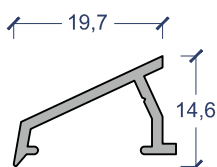
Y.2370



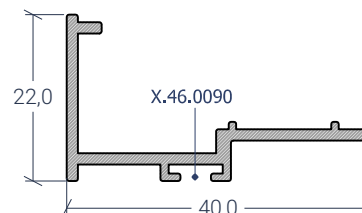
Y.0076



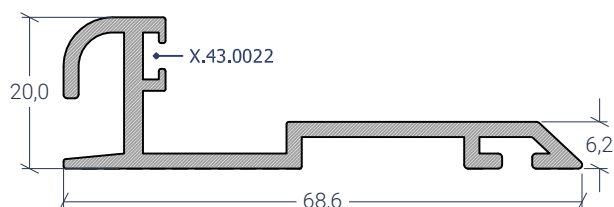
Y.4023



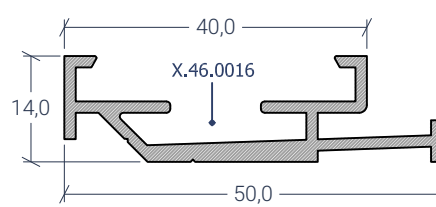
Y.4048



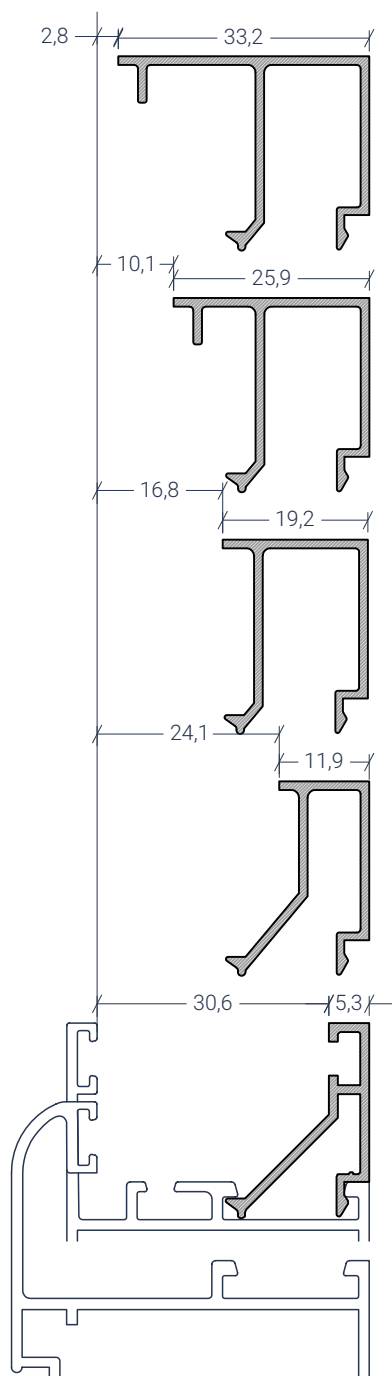
BTF.4098



Y.0075



BTF.4097



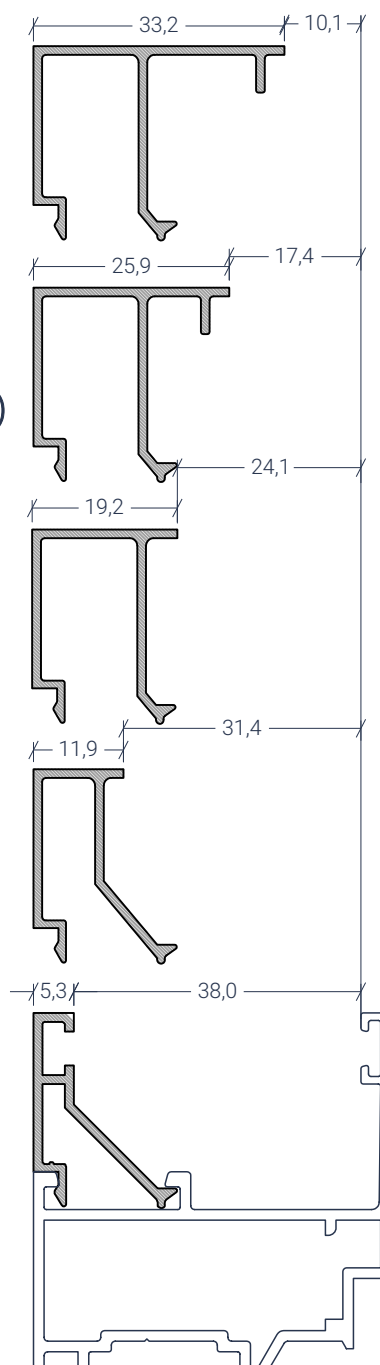
Fixos / Móveis curvos

BTF.3671
(01027)

BTF.3659
(01006/01007)

BTF.3672
(01004)

BTF.3660
(01002)

BTF.4079
(01000)


Móveis retos

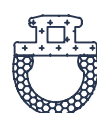
X.50.0002
Topo inversor BTF.3654

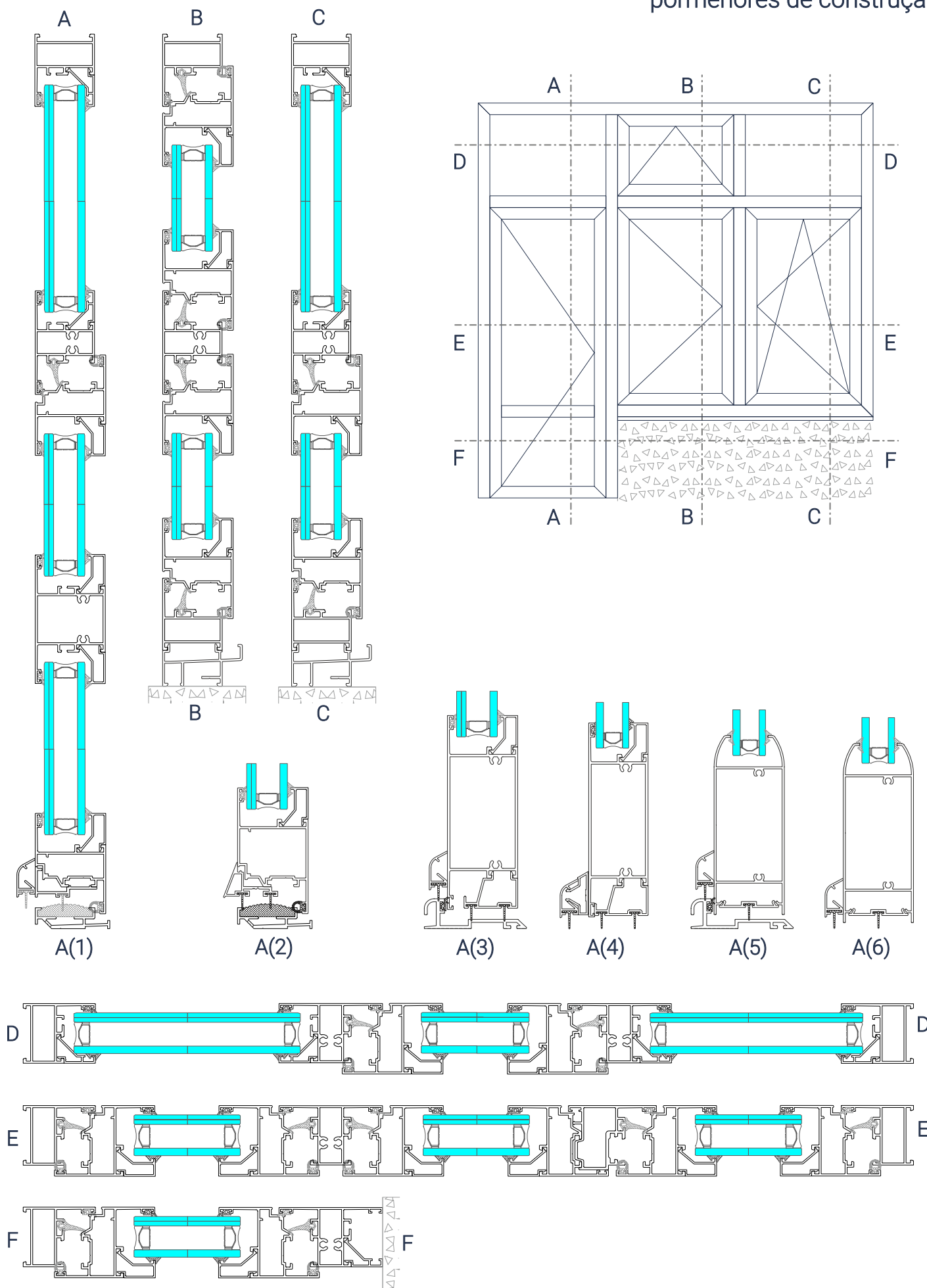
X.50.0035
Topo Pingadeira Y.0032

X.53.0002
Mola Pingadeira Y.0032

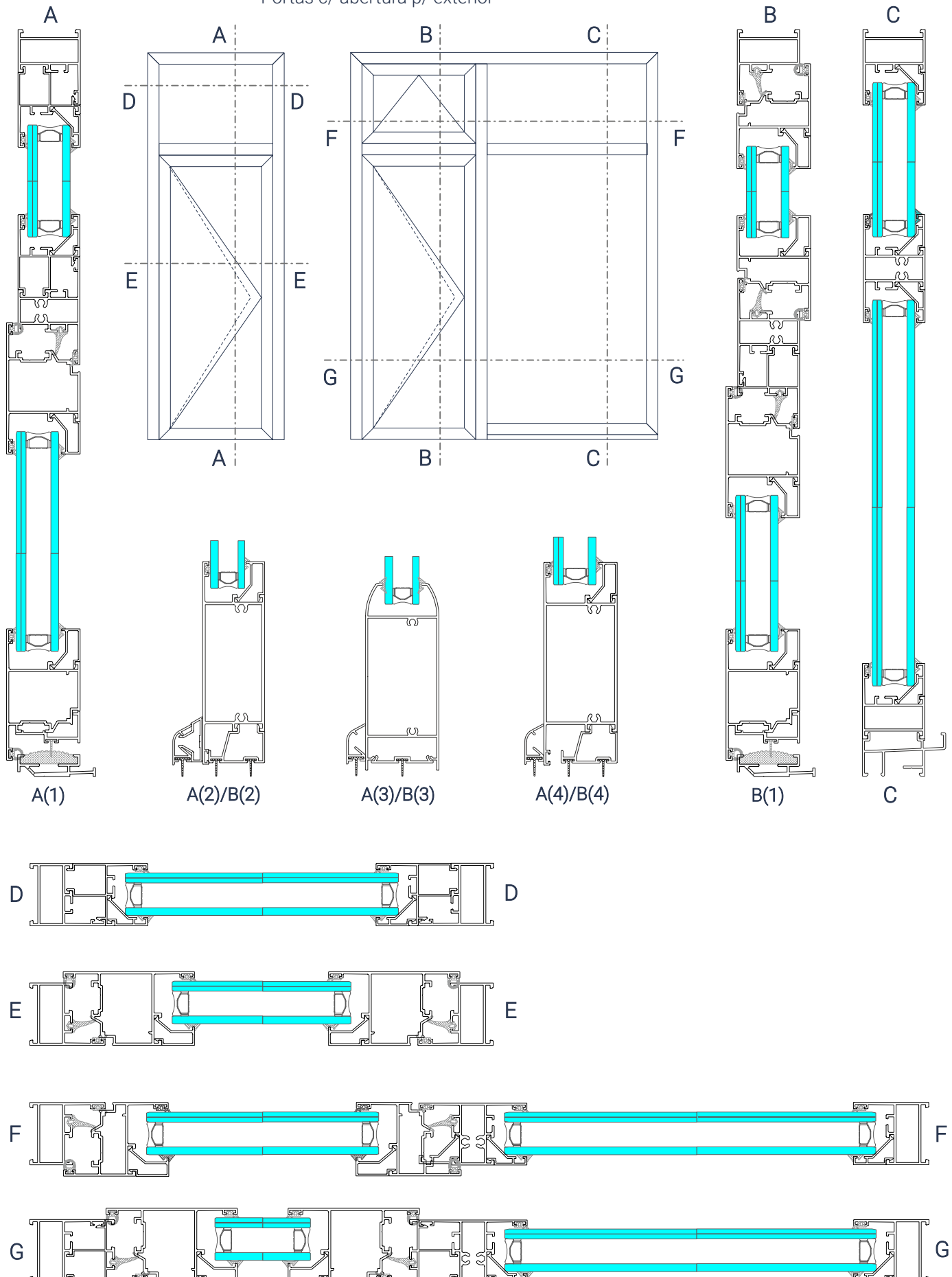
X.56.0041
Topo Pingante Y.0076

X.52.0051
Topo BTF.4006 (par)

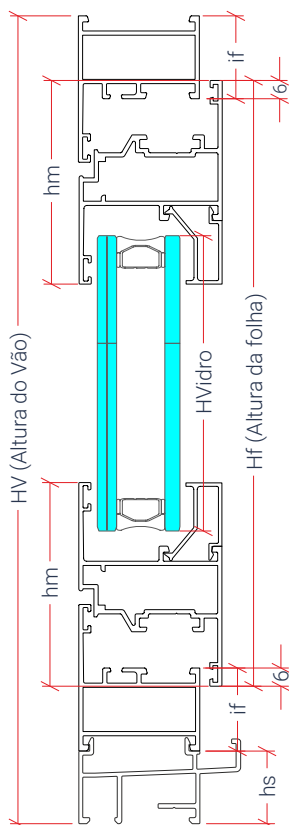

X.11.0003 Esq. M36 P10C (36x31) 	X.17.0007 Esq. Alinhamento (1,8x15) 	X.42.0021 Vedante aro fixo 	X.41.0013 Vedante Central 	X.46.0090 Vedante de pingante 	X.18.0007 União trav. (22 x 26) 
X.11.0005 Esq. M36 P10C (36x14) 	X.17.0030 Esq. Alinhamento (1,5x5,5) 	X.43.0022 Vedante aro móvel 	X.46.0016 Vedante soleira BTF.4097 	X.46.0022 Vedante pingadeira Y.32 	X.18.0008 União trav. (22 x 14) 



Portas c/ abertura p/ exterior

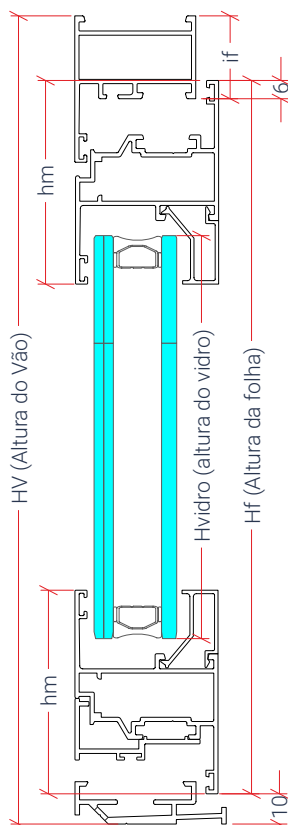


medidas de corte

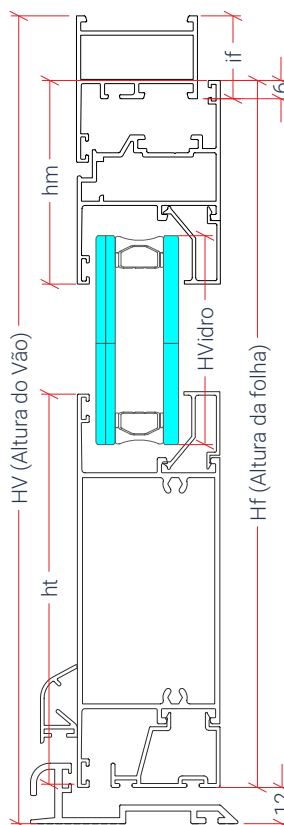


$$HF = (HV + 12) - (2 \times if + hs)$$

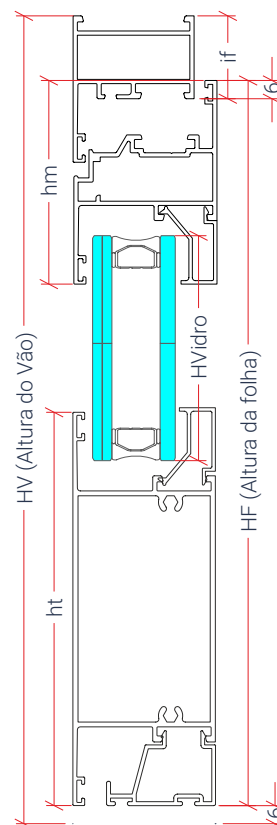
$$H_{Vidro} = HF + 32 - 2 \times hm$$



$$HF = HV - if - 4$$

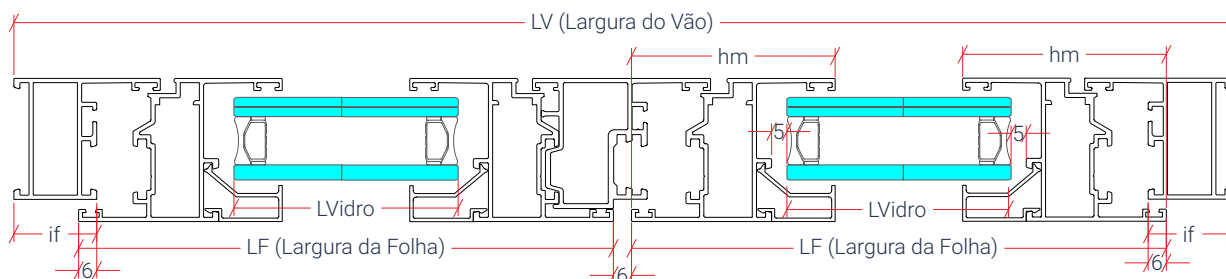


$$HF = HV - if - 6$$



$$HF = HV - if$$

$$H_{Vidro} = HF + 32 - (hm + ht)$$



$$LF = \frac{(LV + 12 - 2 \times if) - ((nF - 1) \times 6)}{nF}$$

$$L_{Vidro} = LF + 32 - 2 \times hm$$

HV - Altura do Vão

LV - Largura do Vão

Hf - Altura da Folha

LF - Largura da Folha

nF - N° de folhas

LVidro - Largura do Vidro

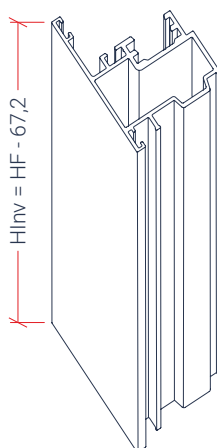
HVidro - Altura do Vidro

if - Altura interior do aro fixo

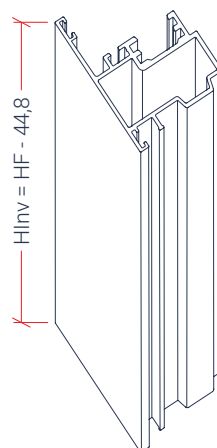
hs - Altura da soleira de condensação

hm - Altura do aro móvel

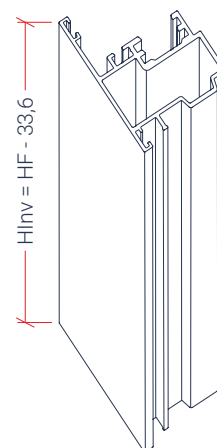
ht - Altura da travessa



c/ aro em baixo



c/ soleira BTF.4097



c/ soleira Y.0075 ou nada