



Alas **60**

Batente de 60mm

*barreira térmica de 25 mm e
vedação central de atenuação acústica*

LOU / ALU

Alas 60 - Desempenho / Performance



ITT - Ensaio de tipo inicial - Organismo notificado nº.

Norma EN 14351-1

ETI - Essai de type initial - Laboratoire notifié nº.

1668 - Ensatec



Permeabilidade ao Ar

Perméabilité à l'air

UNE-EN 12207



Estanquicidade à Água

Étanchéité à l'eau

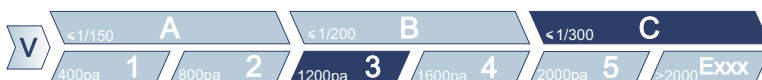
UNE-EN 12208



Resistência ao Vento

Résistance au Vent

UNE-EN 12210



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

1700 x 2125 mm

Certificado de ensaio/Certificat d'essai nº 159016

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

Composição e valores dos vidros / Composition et valeurs de vitrage

Unidade de vidro (IGU)*		Y	Ug	g	Tlg	Rw (C;Ctr)
(a)	GuardianSun LamiGlass 44.1+16 Argon 90%+Float 4mm	0,049	1,0	0,41	69%	38(-2;-5)
(b)	GuardianSun LamiGlass 44.1+16 Ar+Float 4mm	0,049	1,3	0,41	69%	38(-2;-5)
(c)	GuardianSun 4+12 Ar+Float 4mm	0,049	1,5	0,43	70%	30(-1;-3)

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

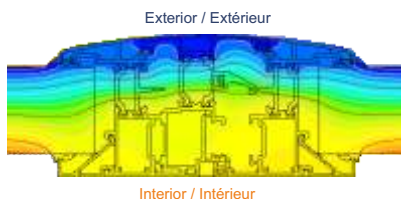
$$U_w = \frac{\sum AgUg + \sum AfUf + \sum Ig\psi_g}{\sum Ag + \sum Af}$$



Transmissão Térmica

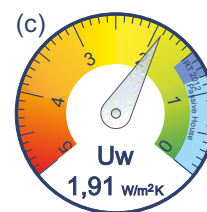
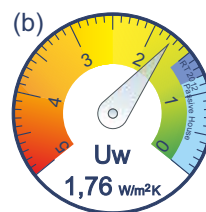
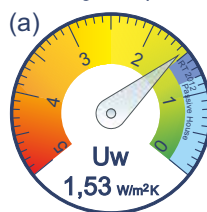
Transmittance Thermique

UNE-EN 10077-2



Exterior / Extérieur

Interior / Intérieur



Atenuação Acústica

Isolation Acoustique

EN 14351-1+A1 (Anexo B)

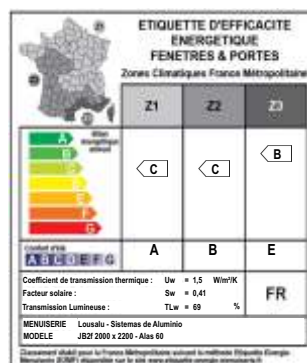
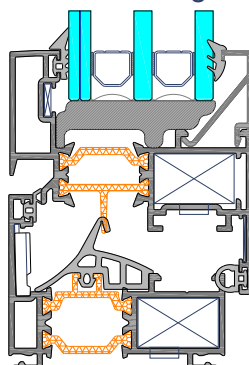
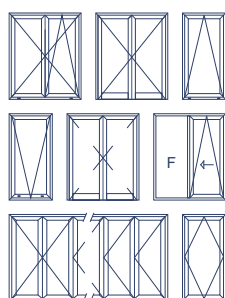
Rw (C;Ctr) com vidro / avec vitrage

- (a) 35 (-2;-5)
- (b) 35 (-2;-5)
- (c) 31 (-2;-4)



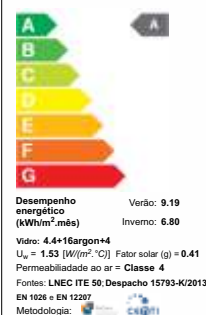
Tipologia e Classe energética / Typologie et classe énergétique

Tipologia construtiva
Typologie constructive



Avec vitrage (a)

Desempenho energético de:
JOB72F - 2000 x 2200 - Alas 60



Com Vidro (a)

Materiais, Tratamentos e Acabamentos / Matériaux, Traitement et Finition

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

Vedantes / Joint d'étanchéité: EPDM / mousse de EPDM - Poliamida / Polyamid: 24,8mm

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

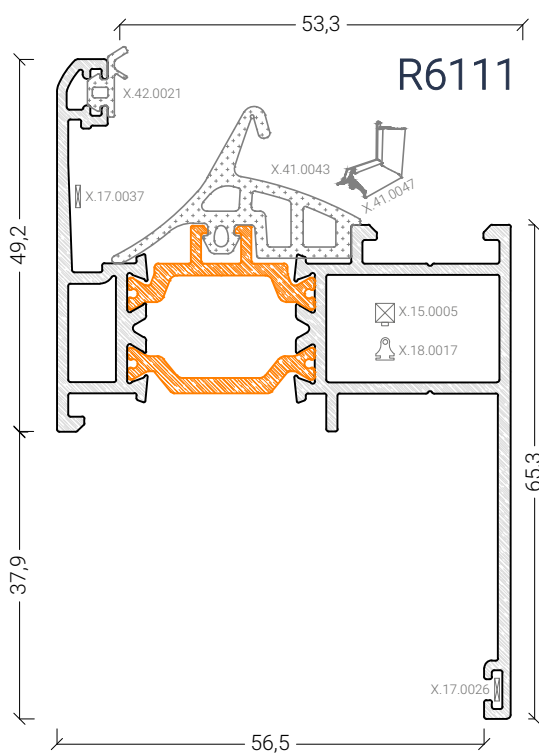
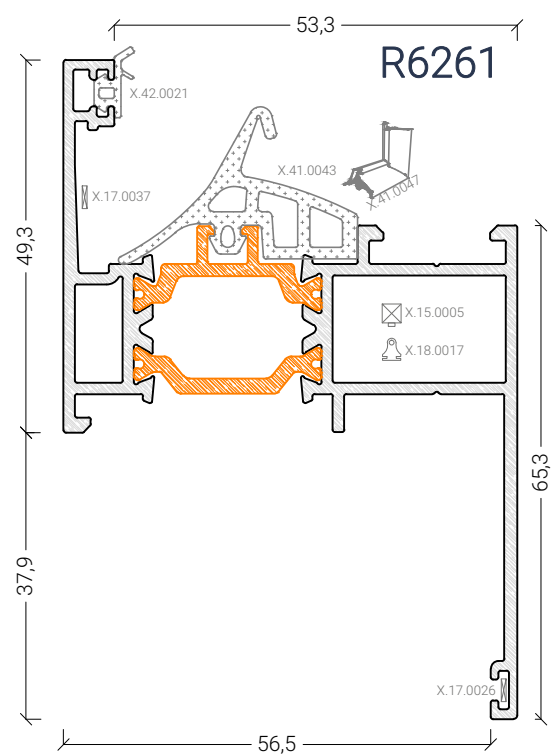
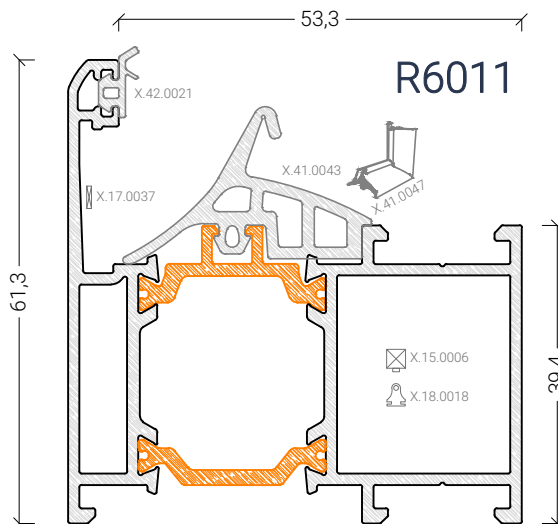
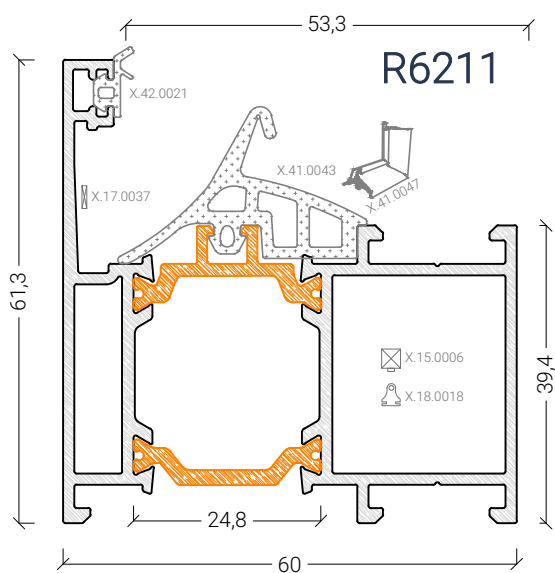
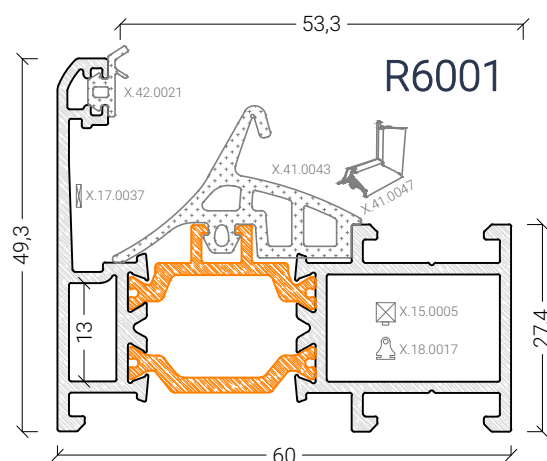
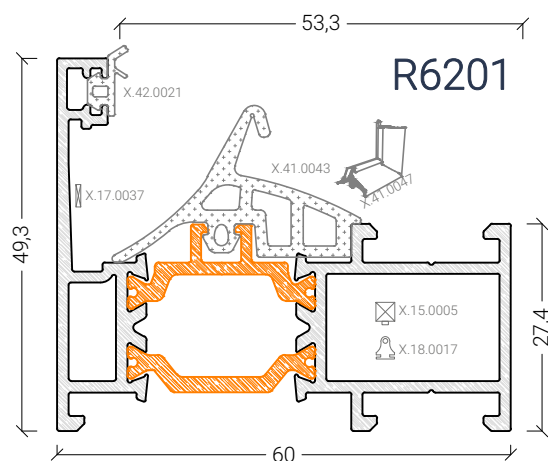


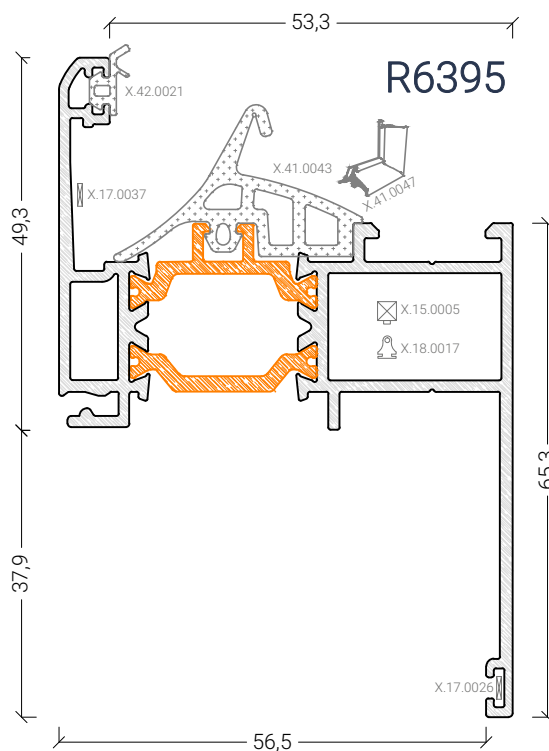
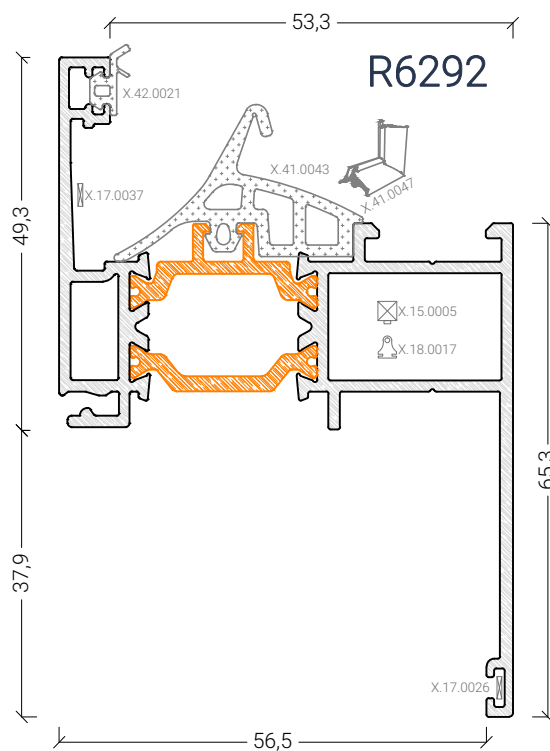
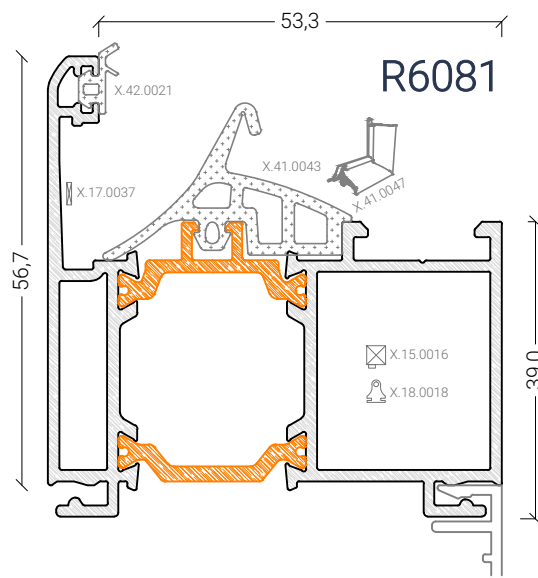
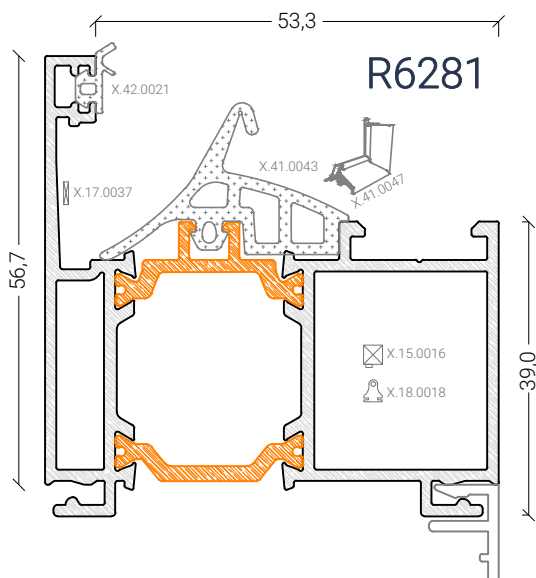
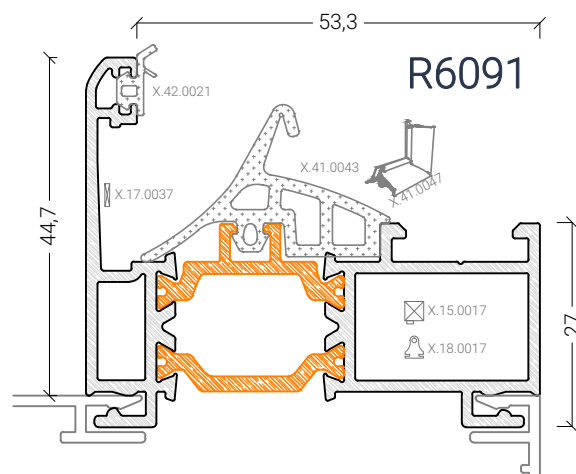
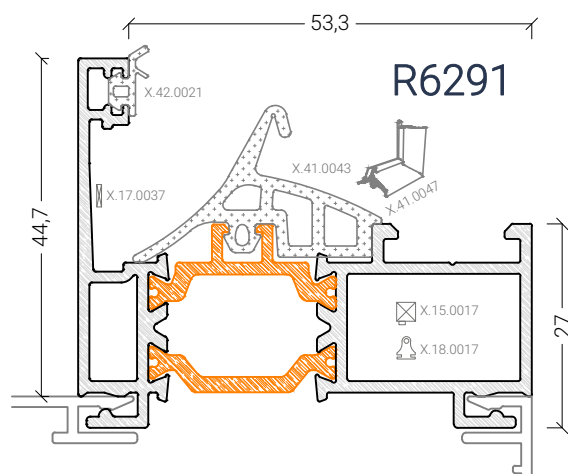
* Fonte: Guardian Performance Calculator 4.1 e Acoustic Database 20171102 by Guardian Glass. Os valores apresentados são apenas ilustrativos, pois podem variar em função dos vidros a aplicar em obra.

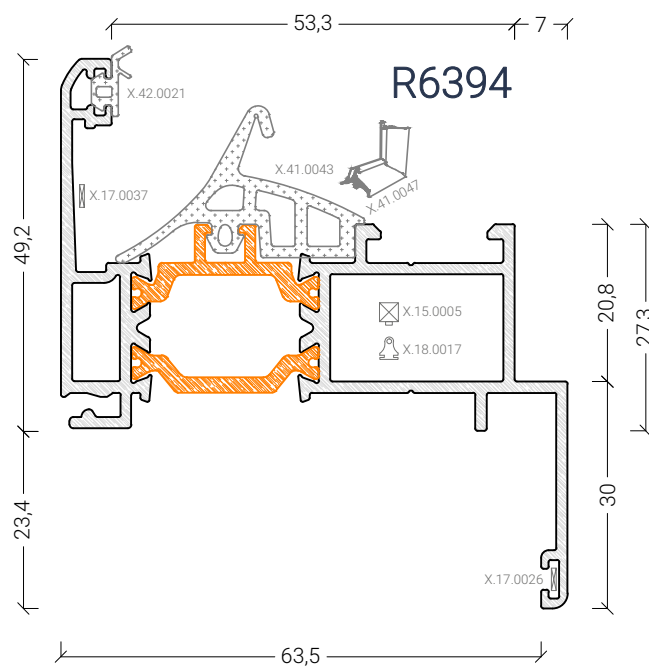
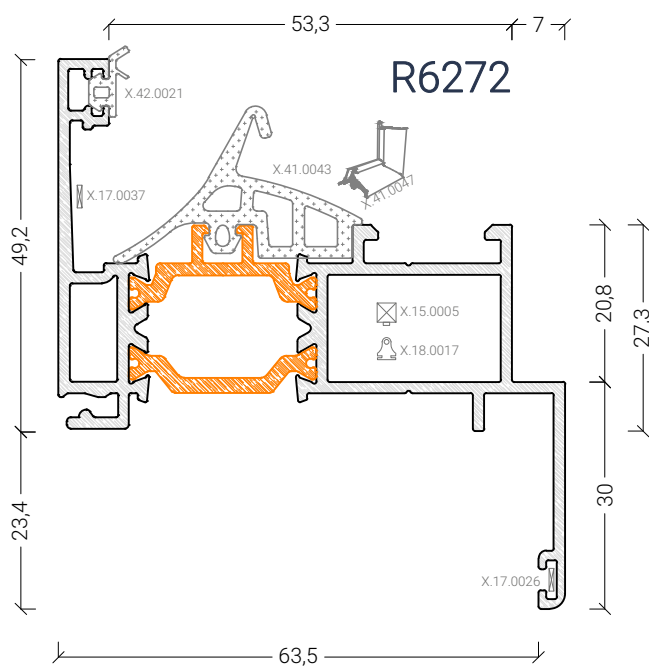
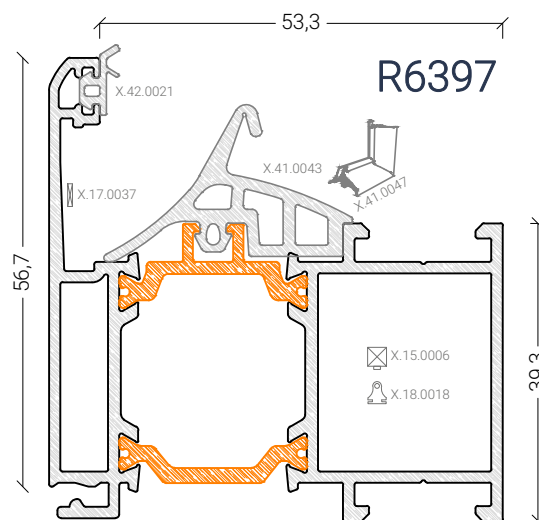
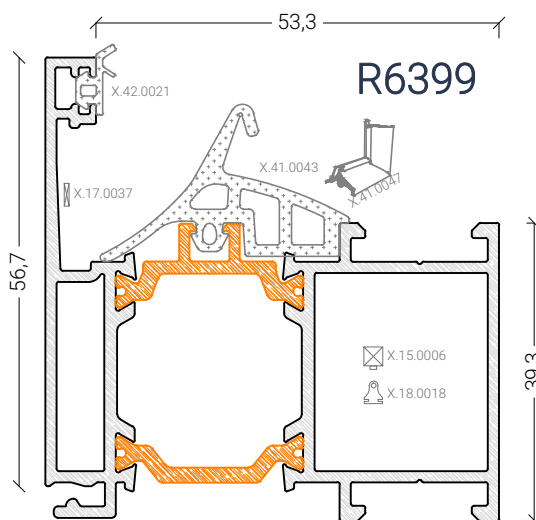
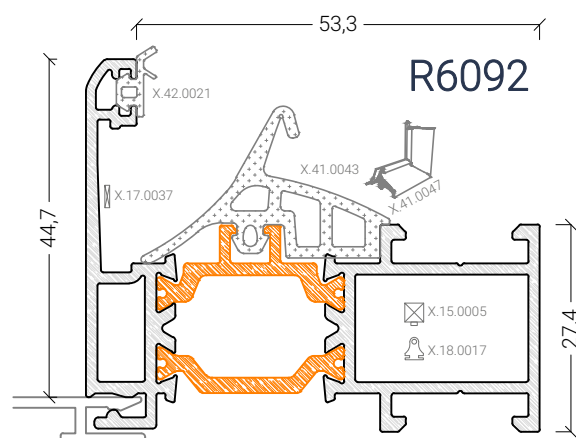
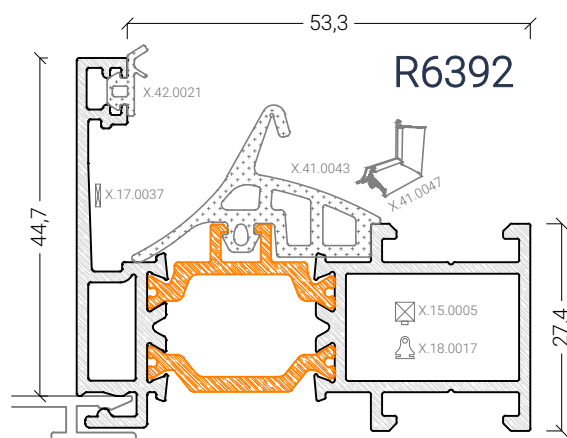
Alas 60

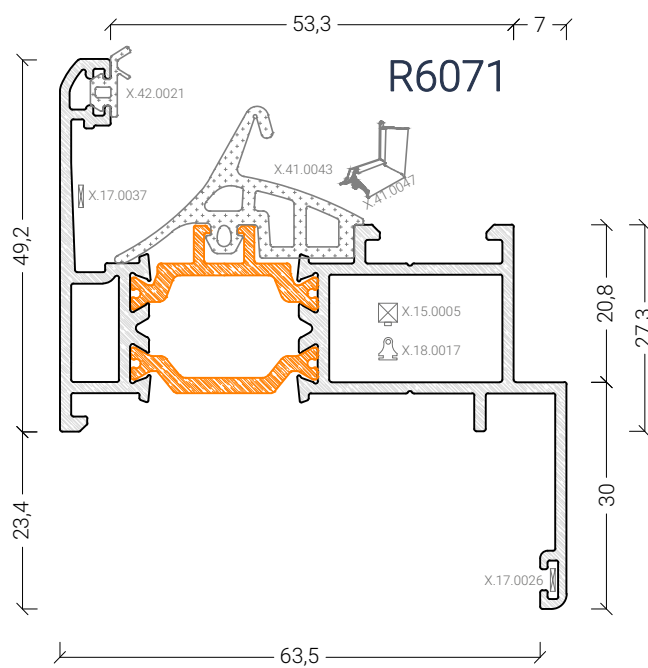
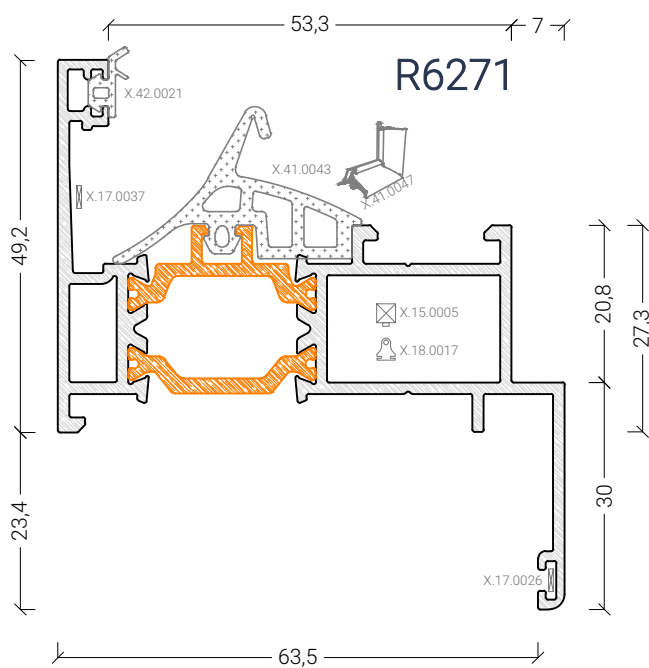
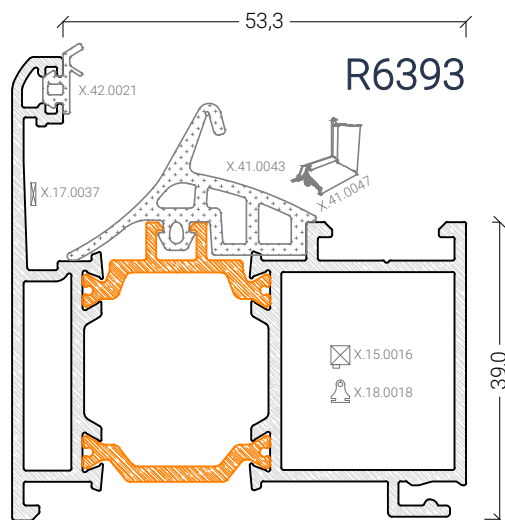
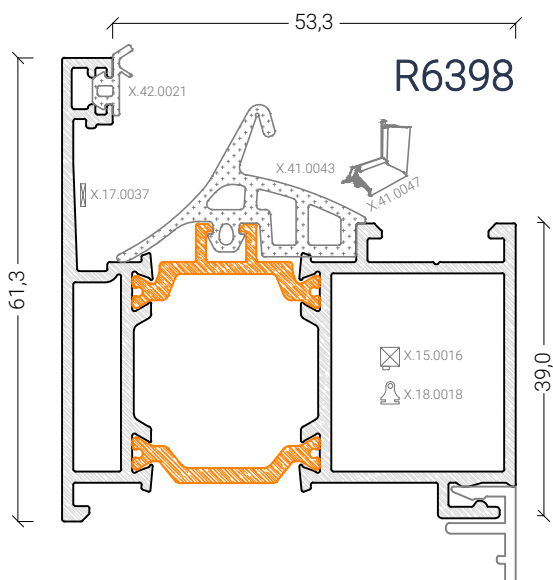
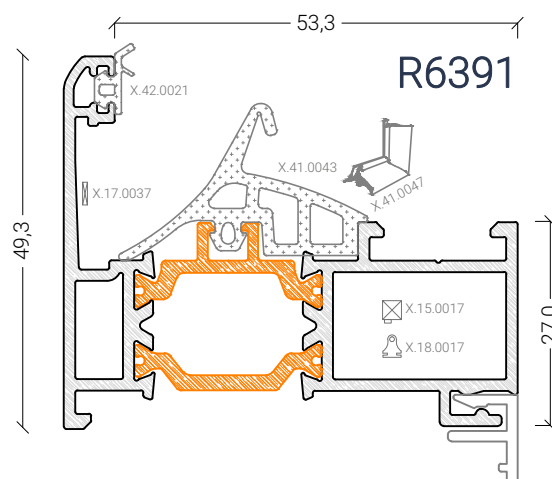
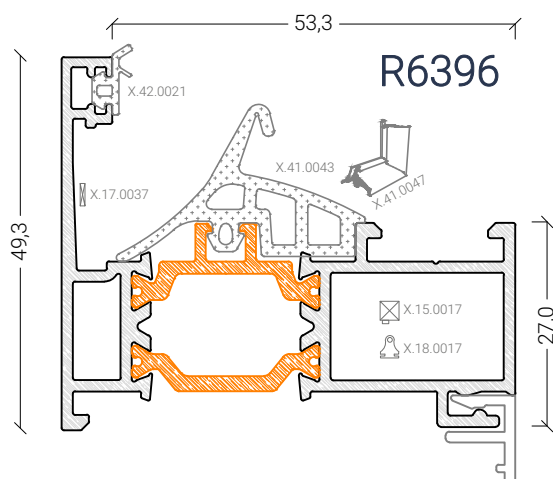


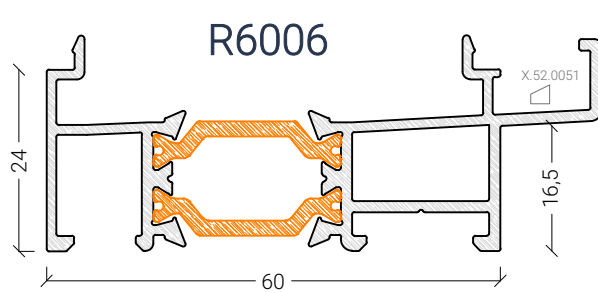
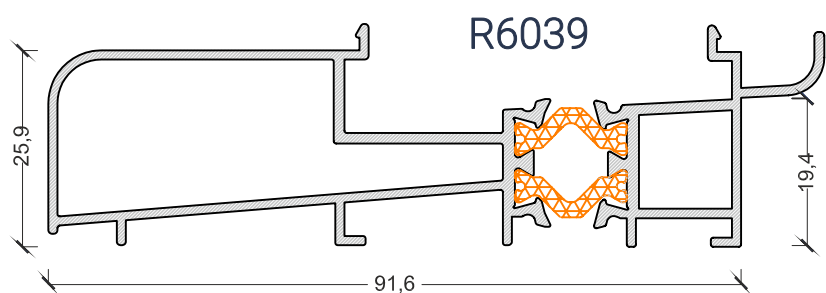
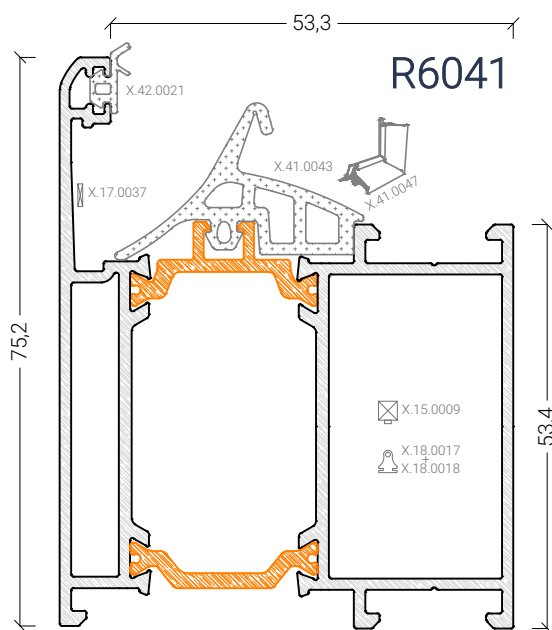
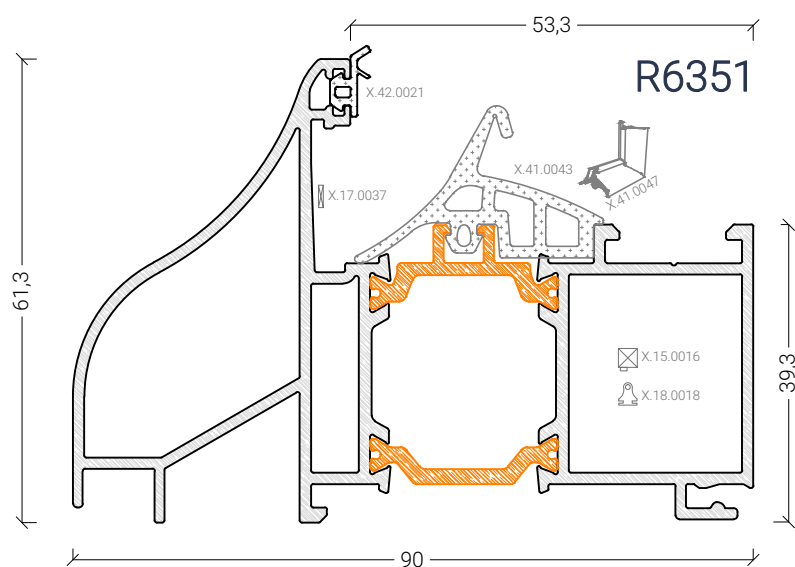
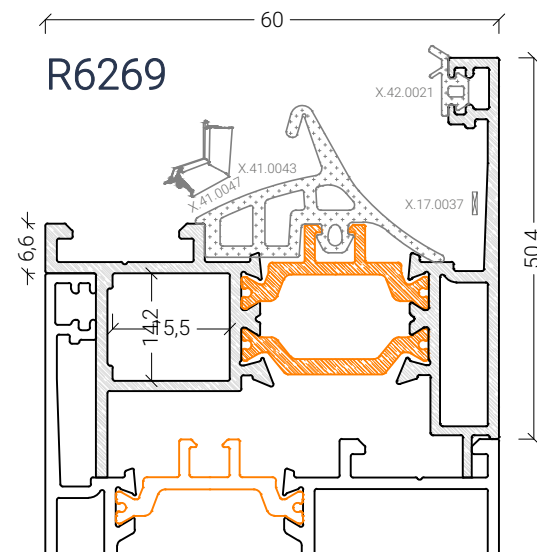
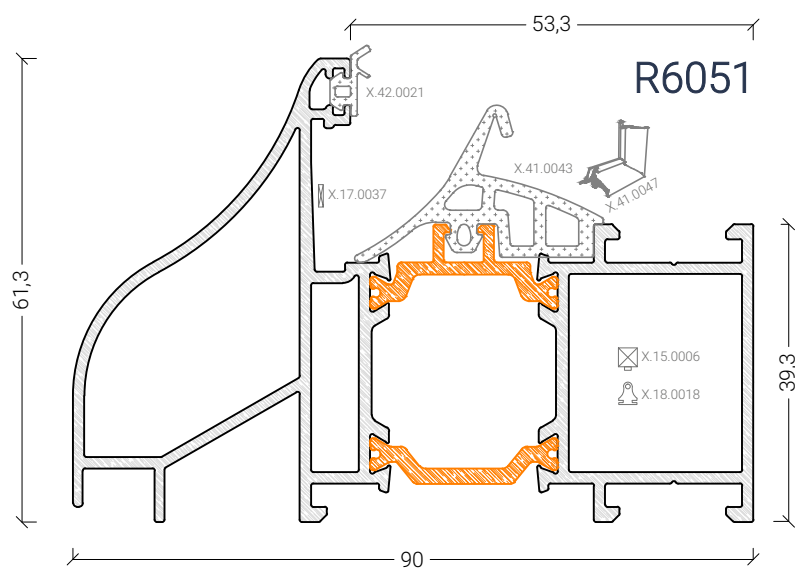
rpt 25 mm

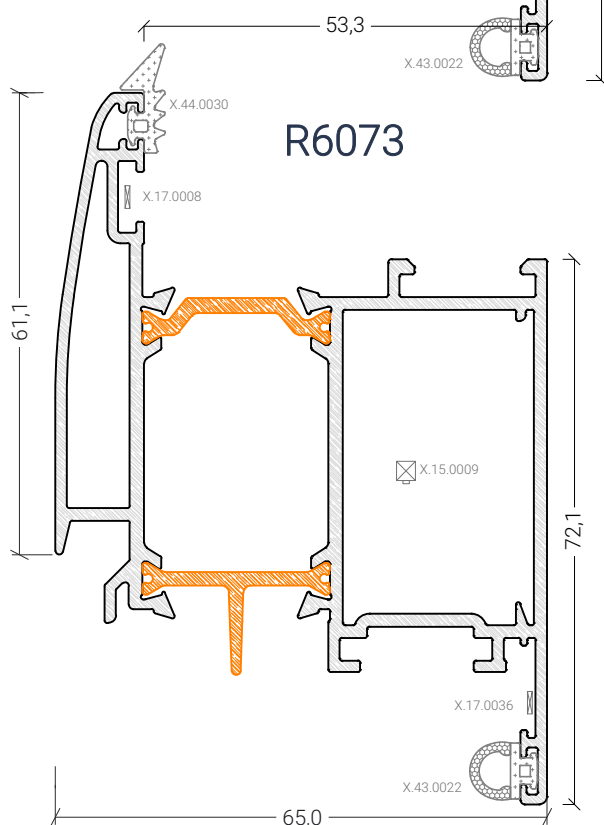
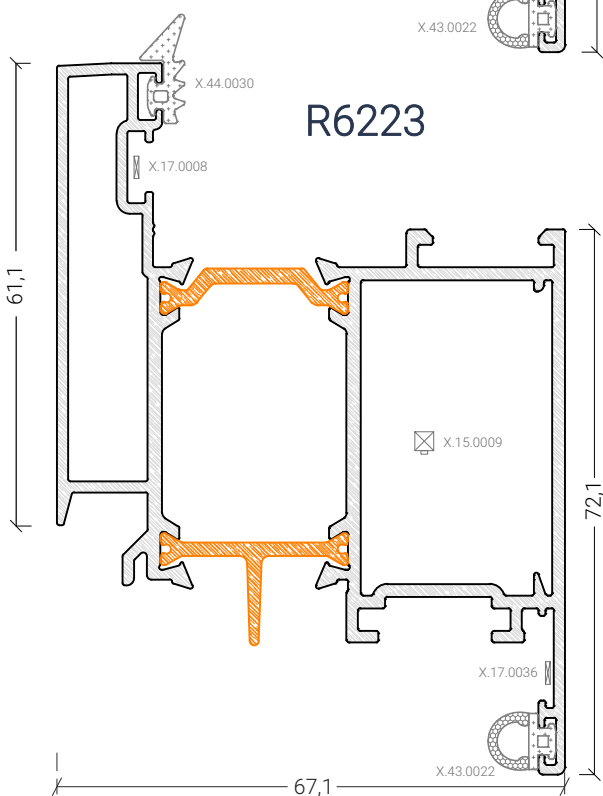
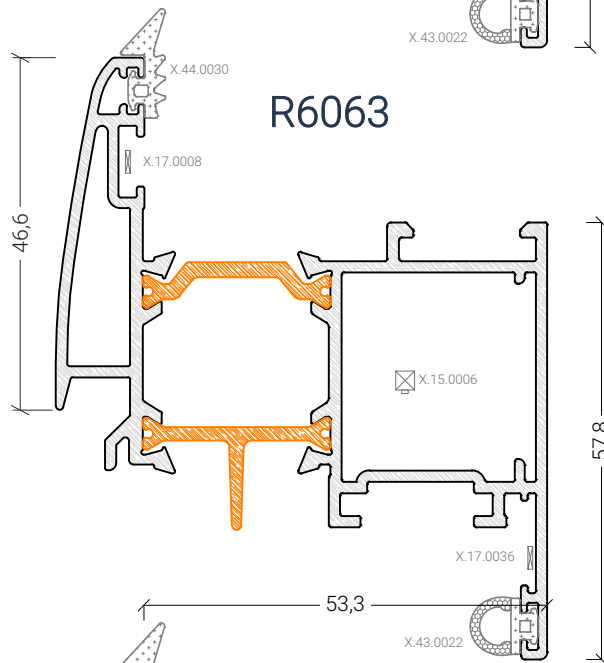
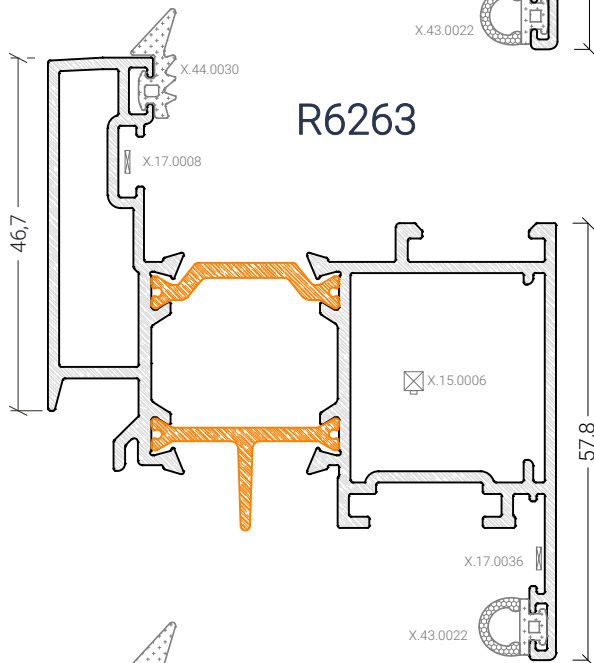
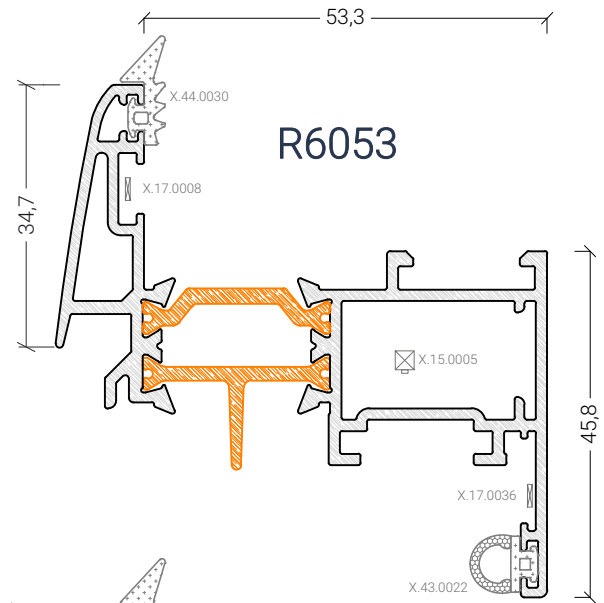
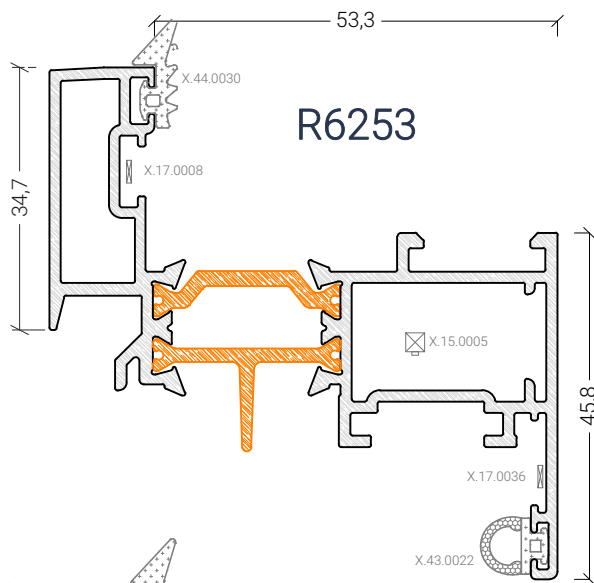




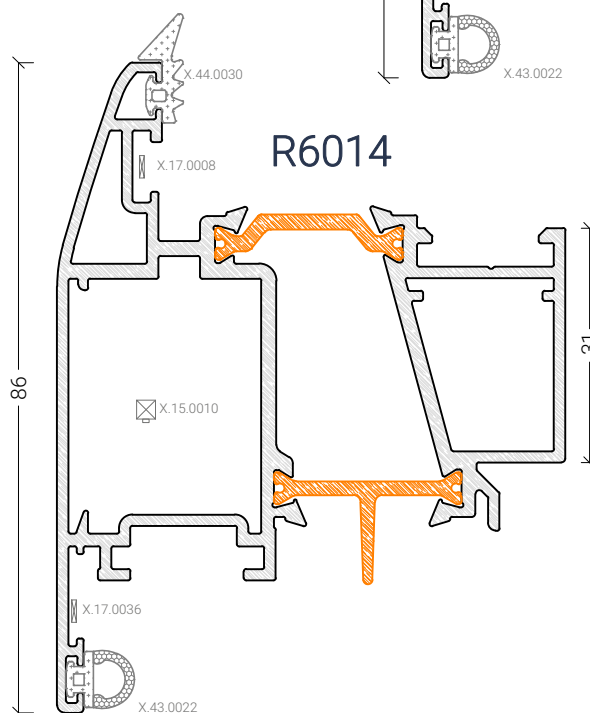
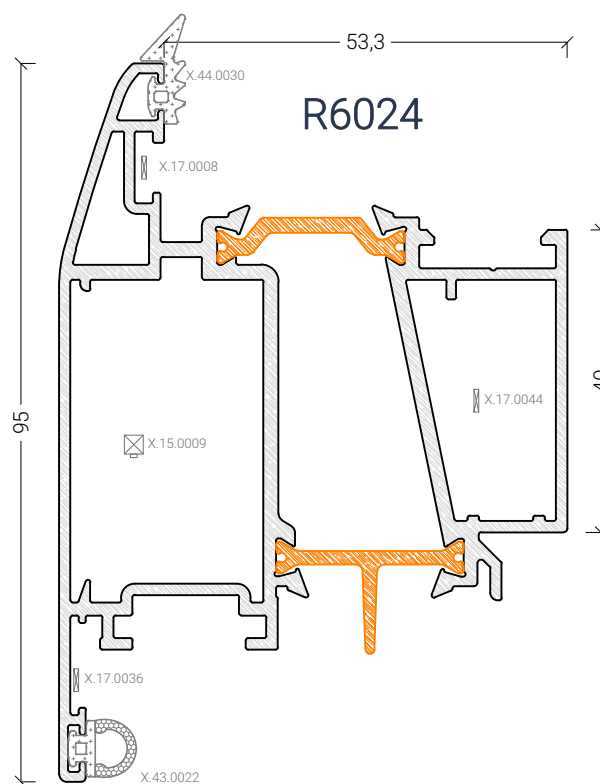
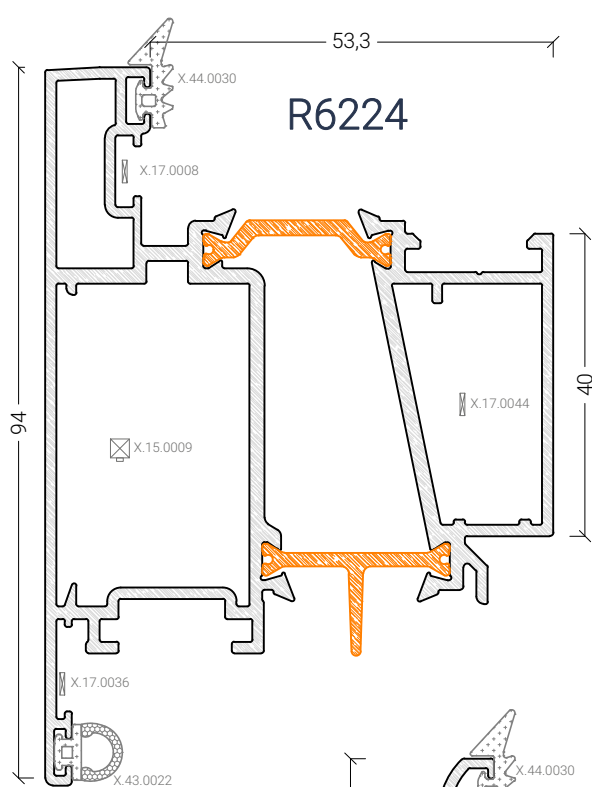
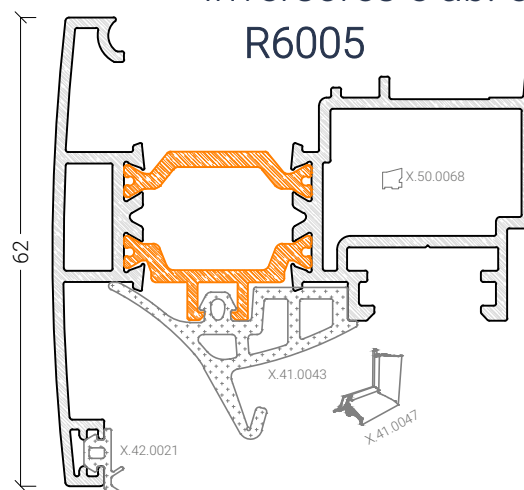
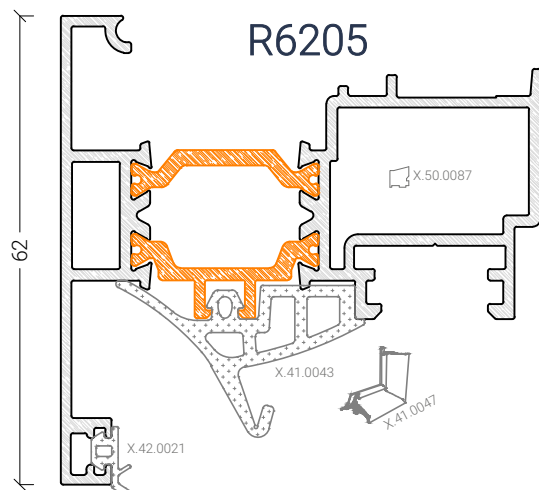




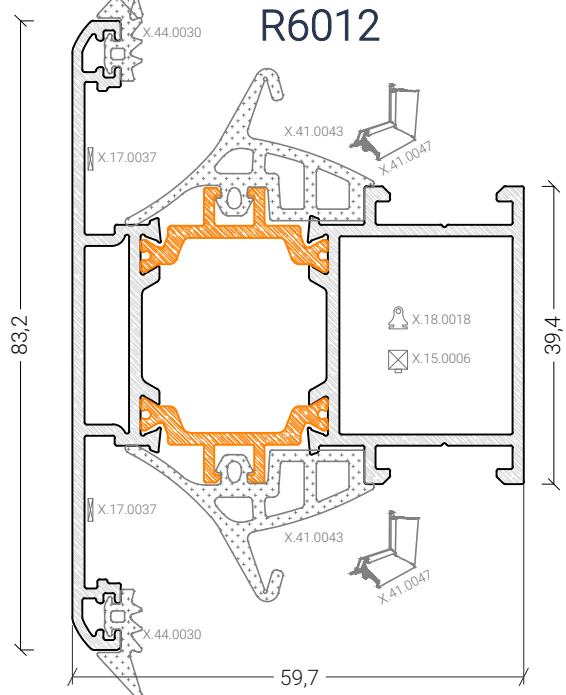
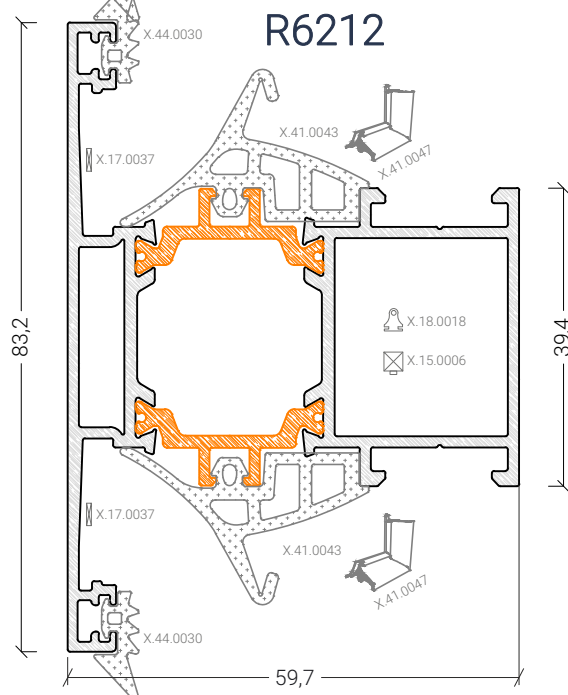
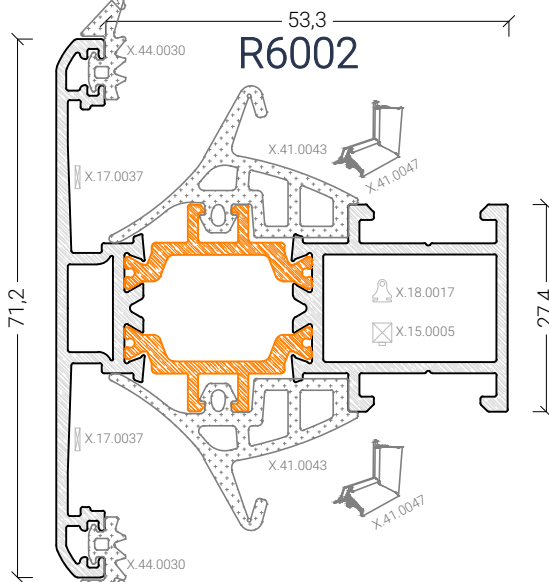
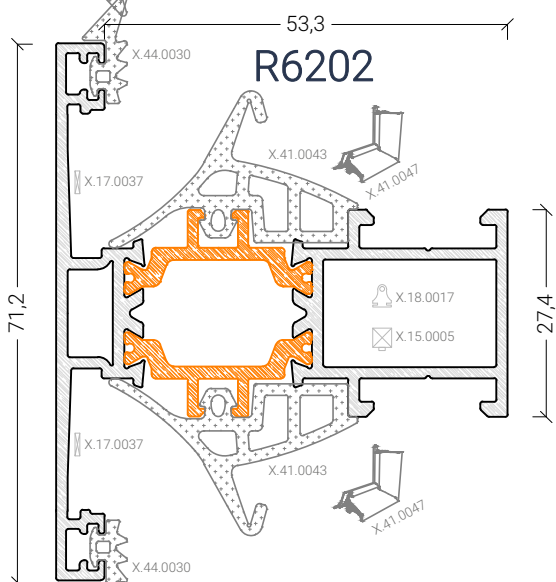
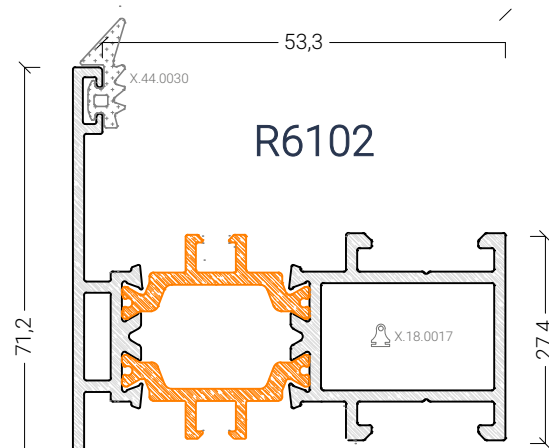
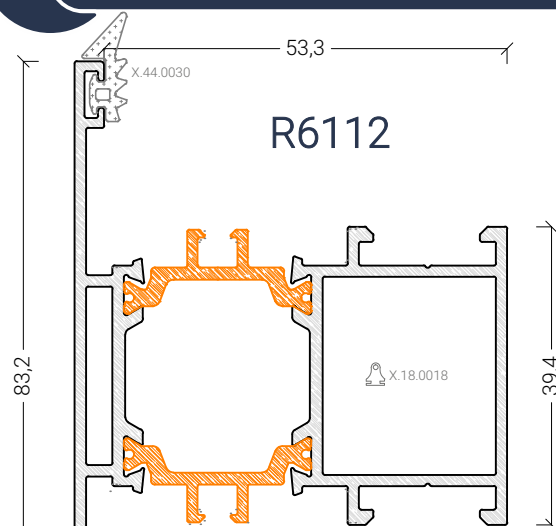


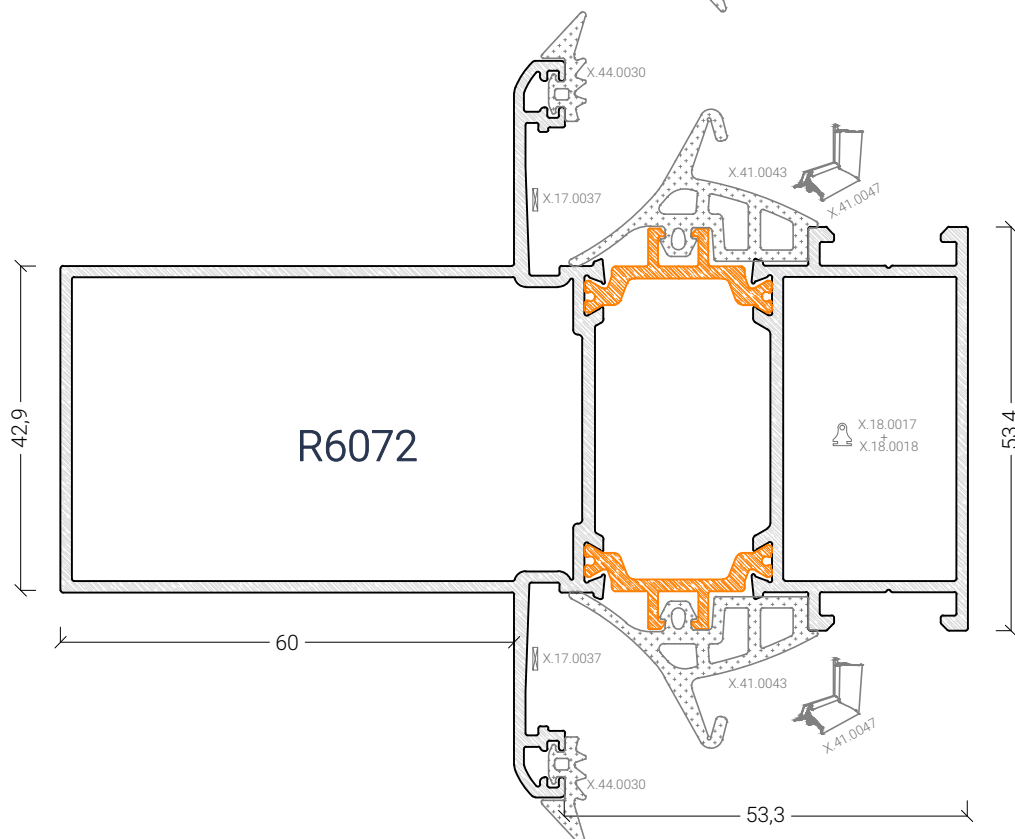
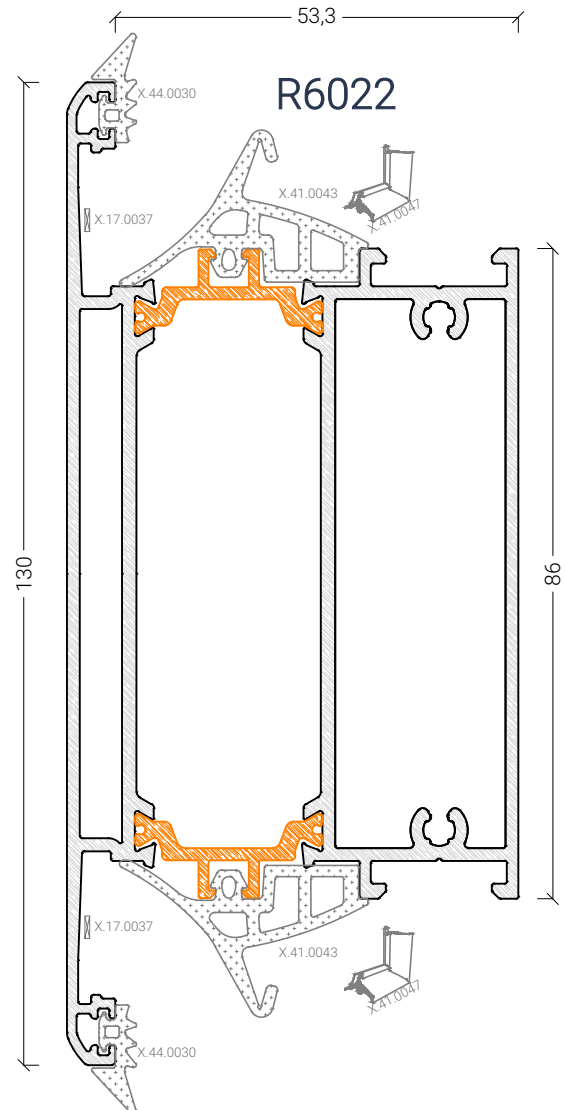
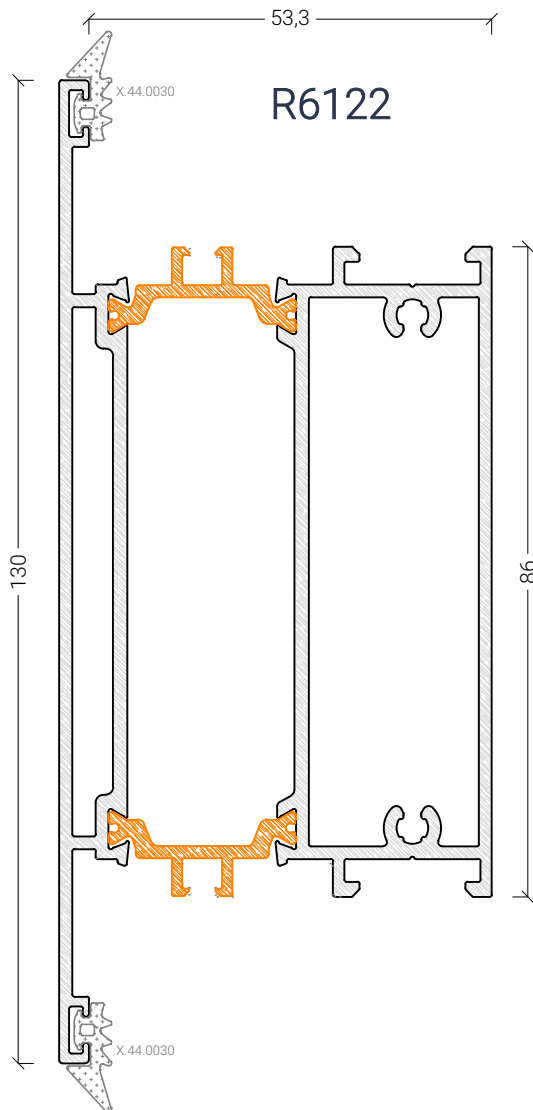


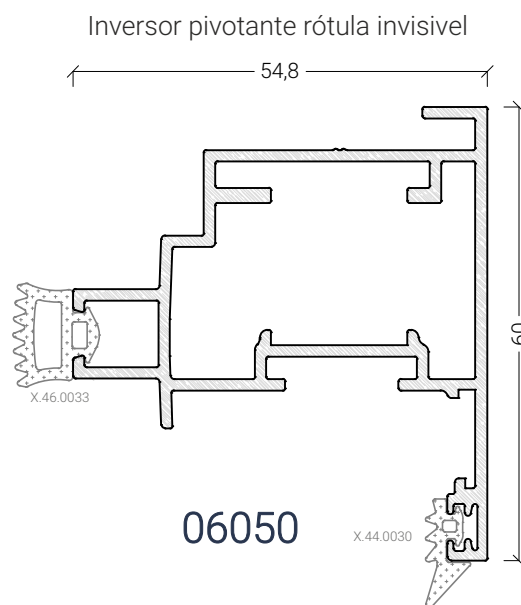
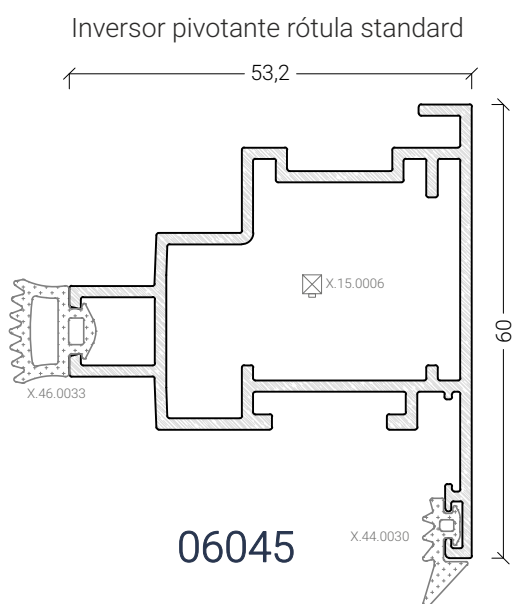
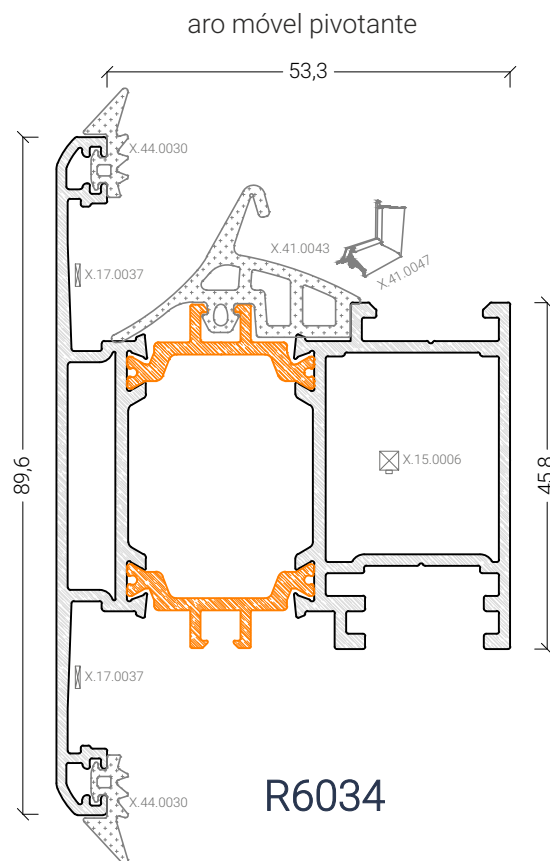
Inversores e ab. exterior



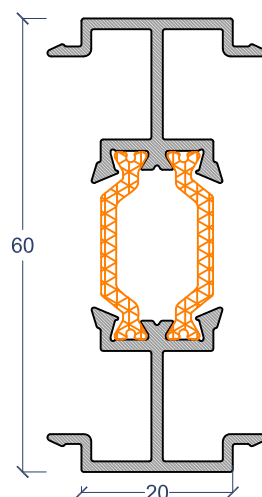
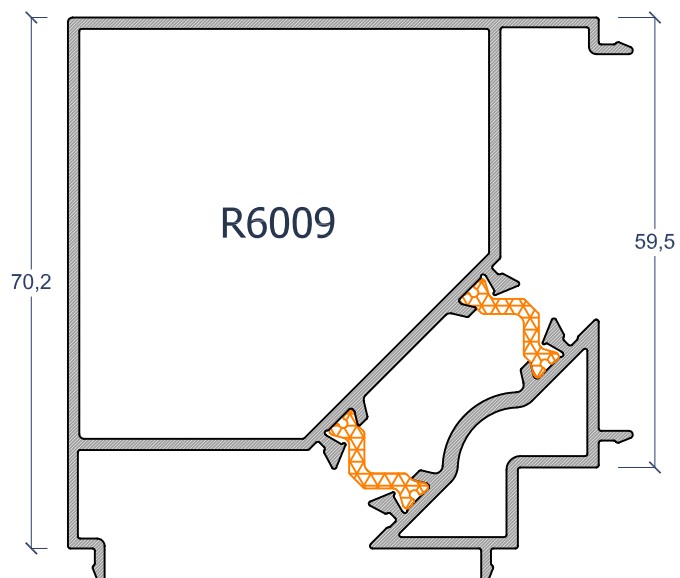
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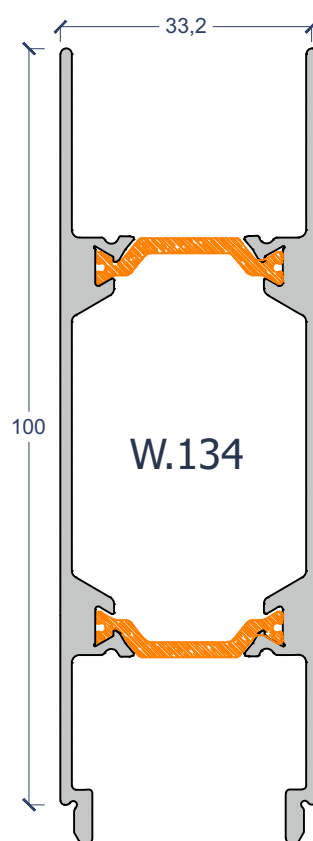




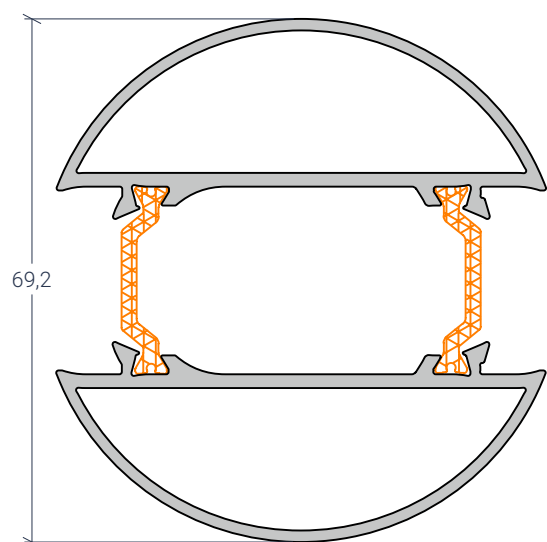
uniões, enchimentos e soleiras



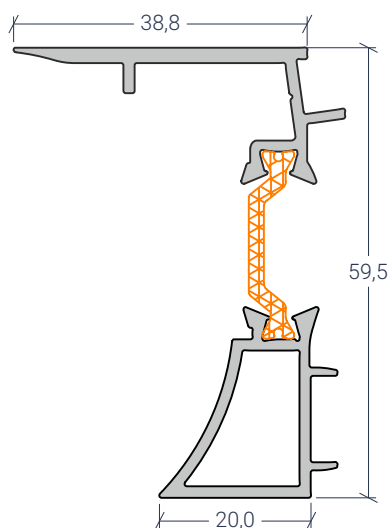
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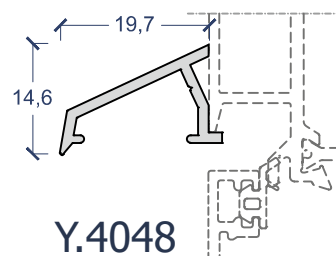
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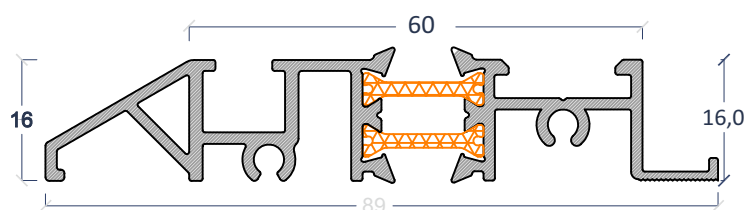
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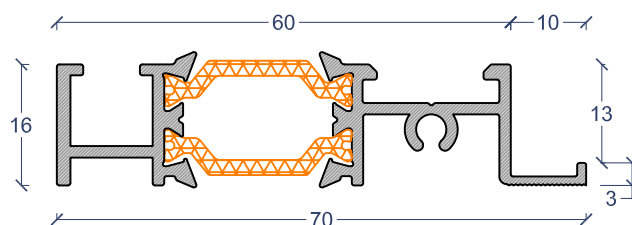
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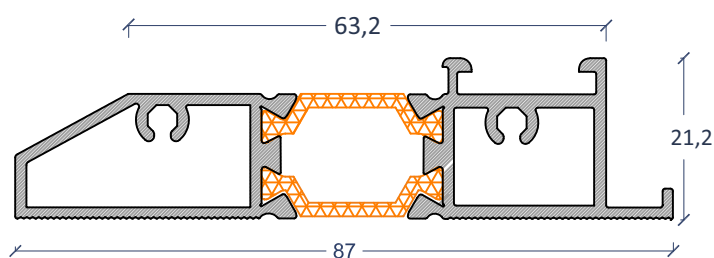
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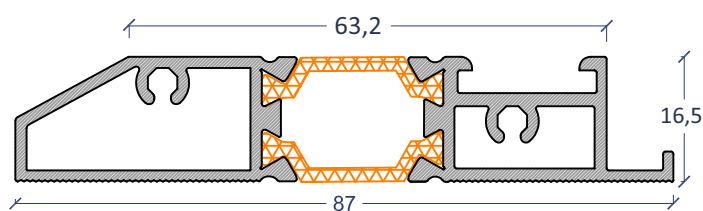
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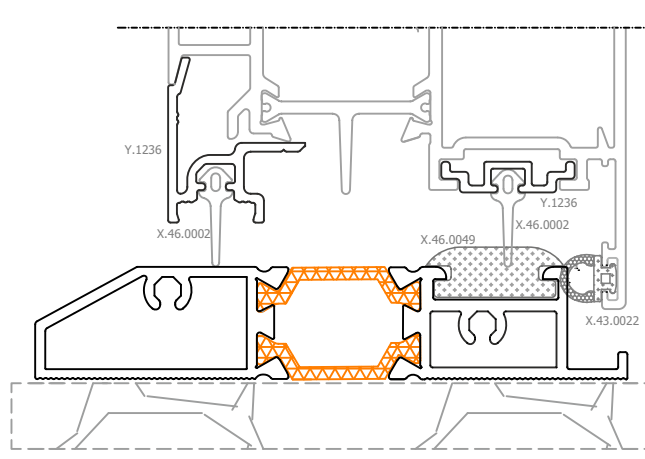
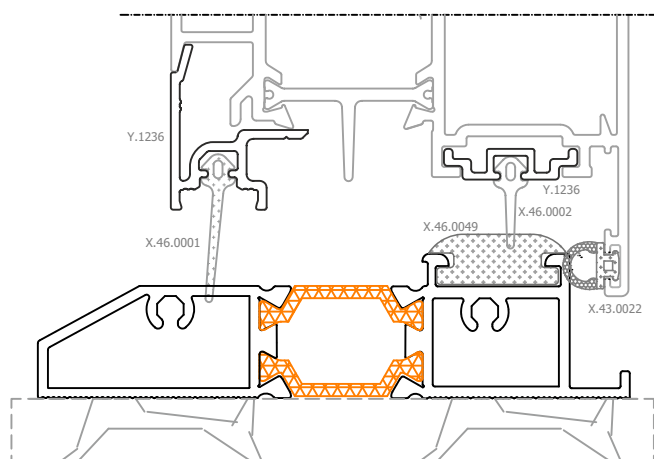
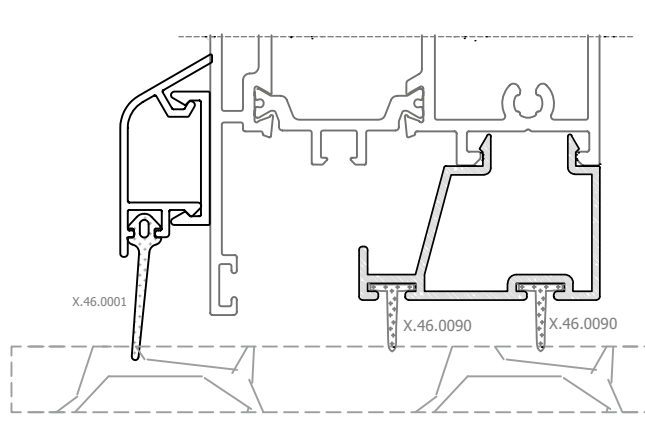
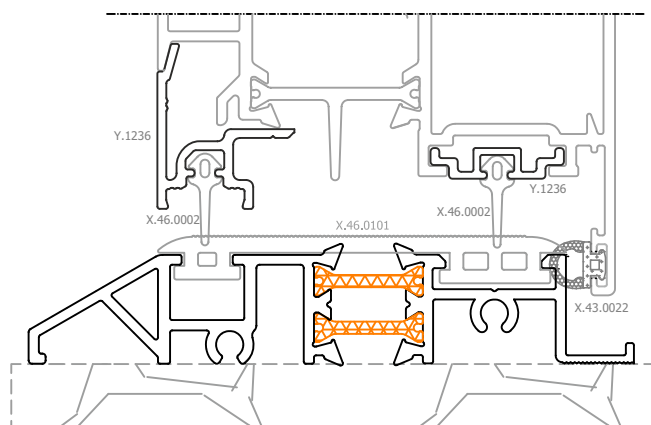
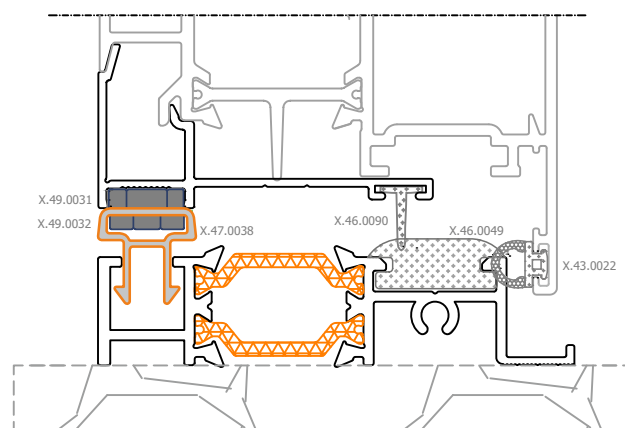
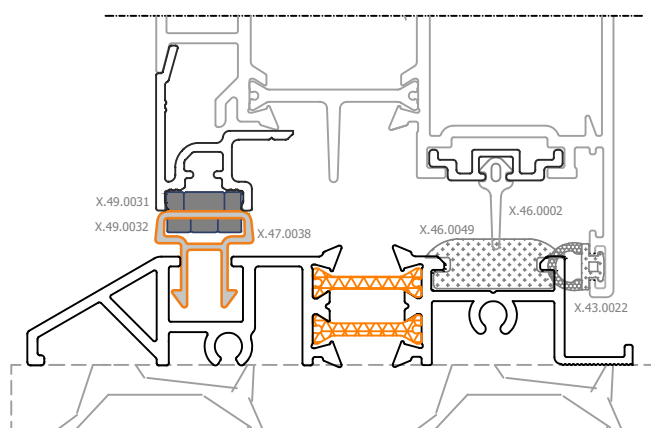
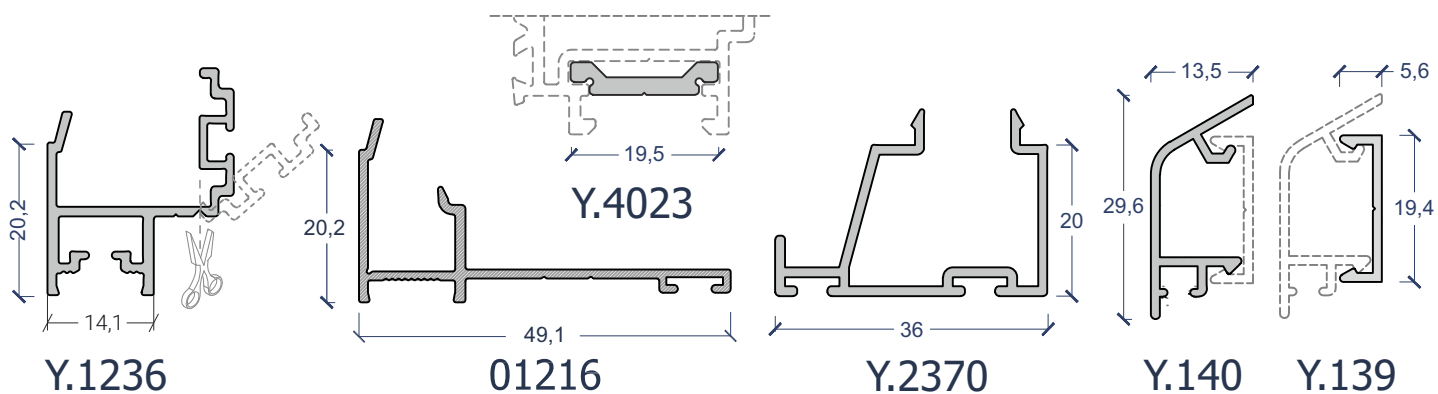
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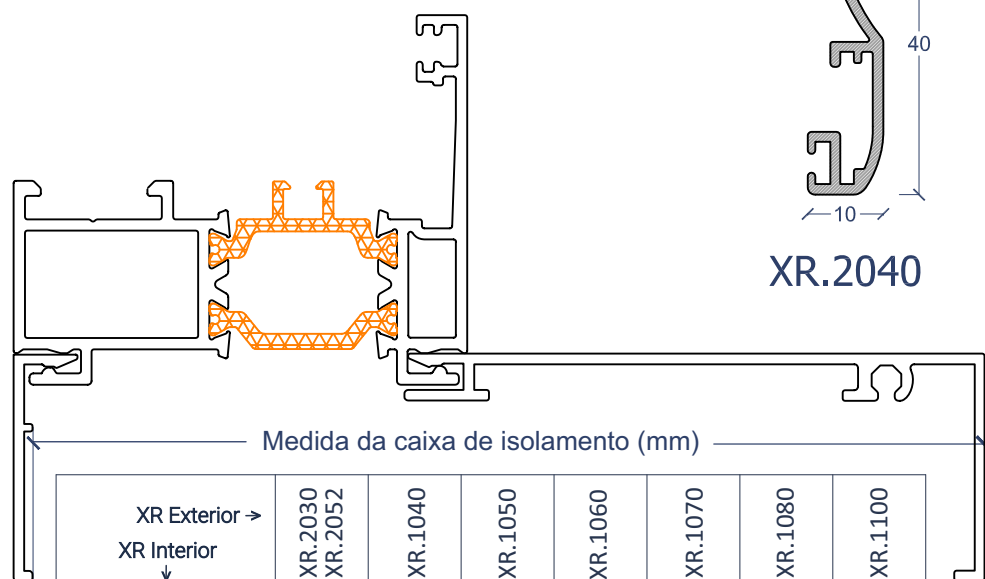
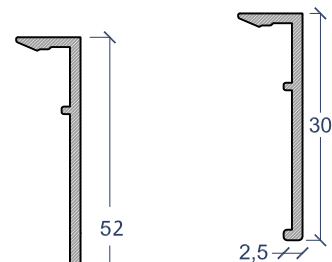
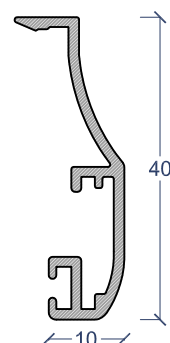
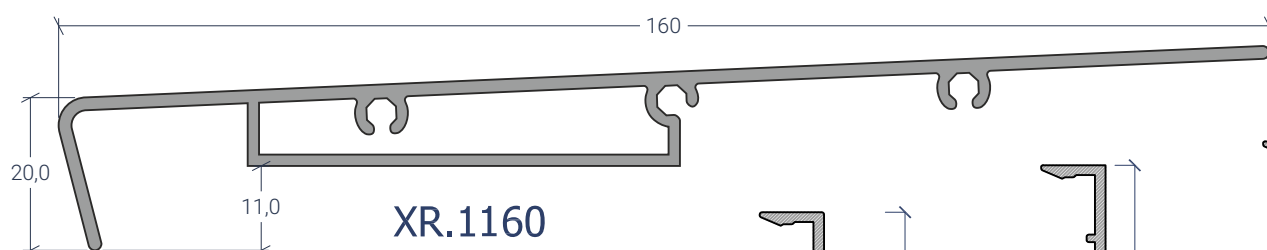
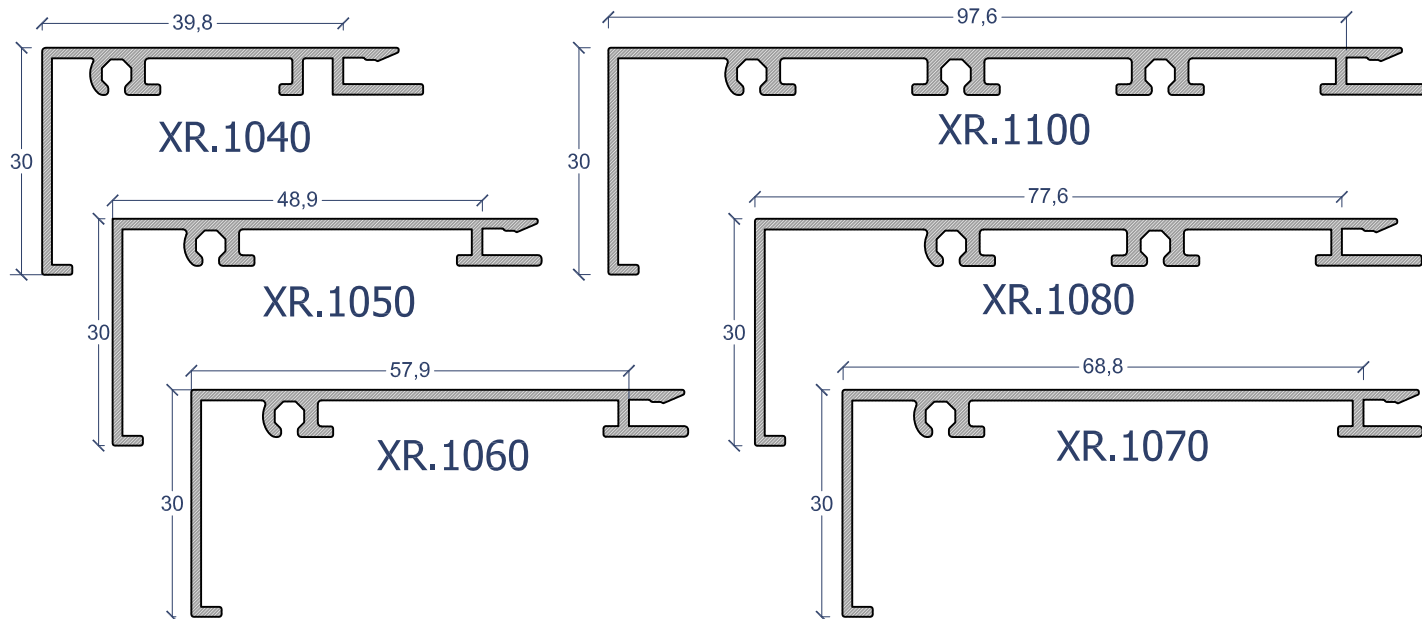


R6813

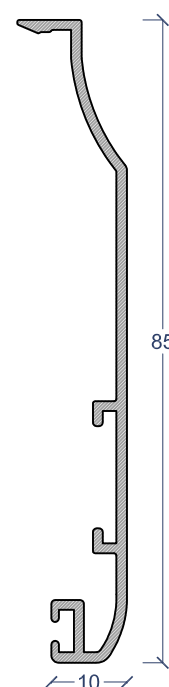


R6046





XR.2052

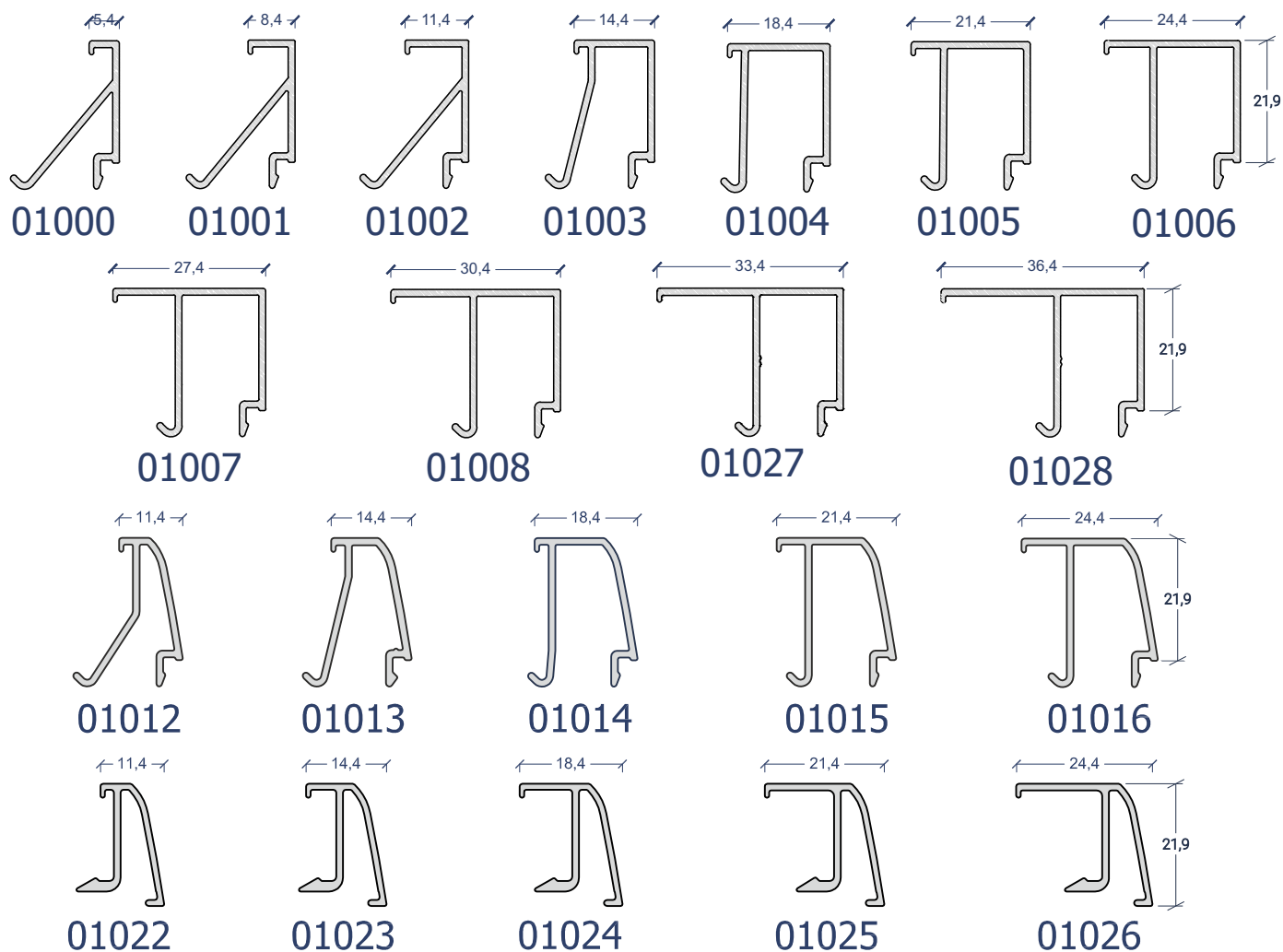


XR.2060

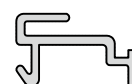
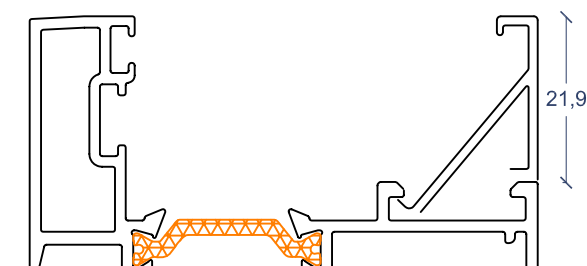
XR.2085

Medida da caixa de isolamento (mm)

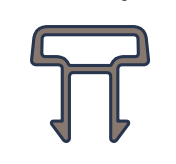
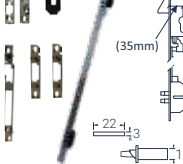
XR Exterior → XR Interior ↓	XR.2030 XR.2052	XR.1040	XR.1050	XR.1060	XR.1070	XR.1080	XR.1100
XR.2030	58	98	107	116	127	136	156
XR.2040/52/60/85	56	96	105	114	125	134	154
XR.1040	96	136	145	154	165	174	194
XR.1050	105	145	154	163	174	183	203
XR.1060	114	154	163	172	183	192	212
XR.1070	125	165	174	183	194	203	223
XR.1080	134	174	183	192	203	212	232
XR.1100	154	194	203	212	223	232	252



53,3	Rectos	Curvos	Mola
16,9 36,4	01028		
19,9 33,4	01027		
22,9 30,4	01008		
25,9 27,4	01007		
28,9 24,4	01006	01016	01026
31,9 21,4	01005	01015	01025
34,9 18,4	01004	01014	01024
38,9 14,4	01003	01013	01023
41,9 11,4	01002	01012	01022
44,9 8,4	01001		
47,9 5,4	01000		

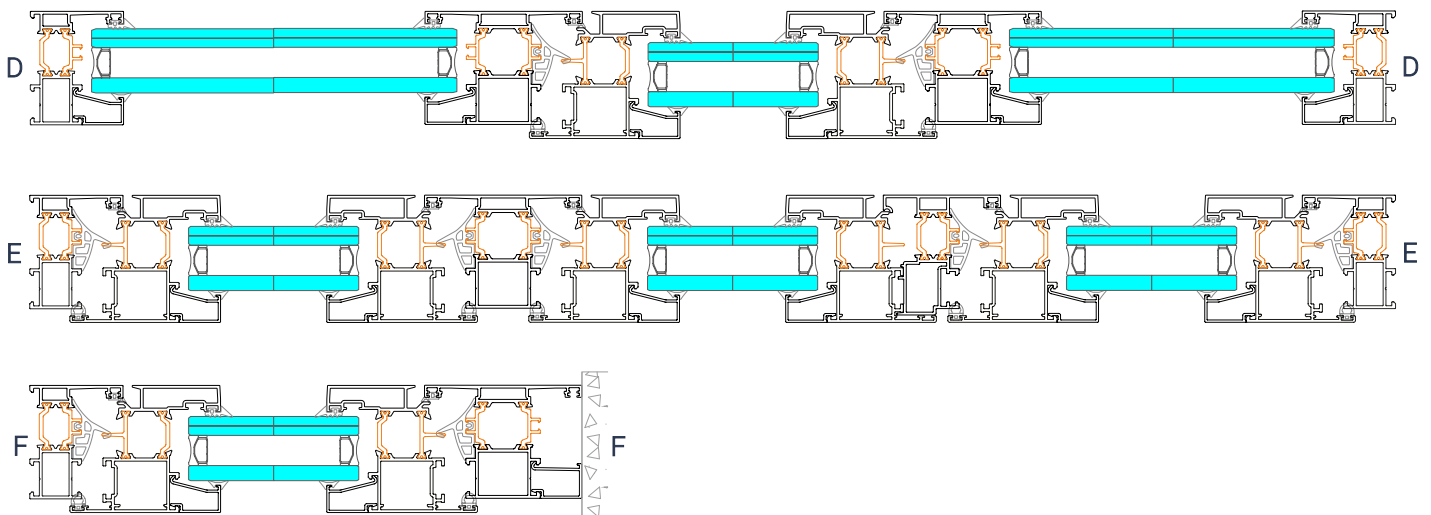
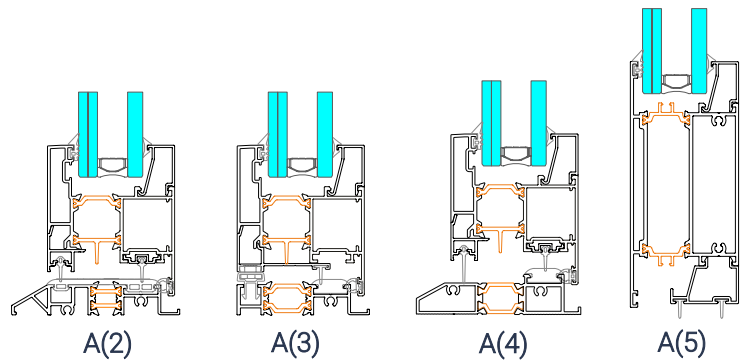
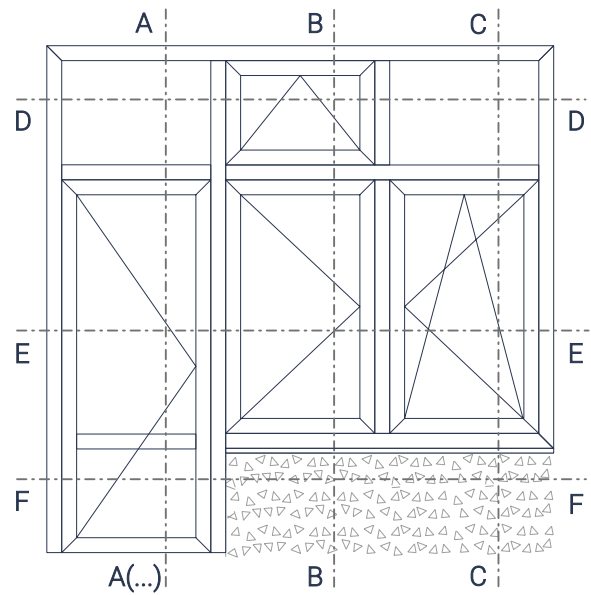
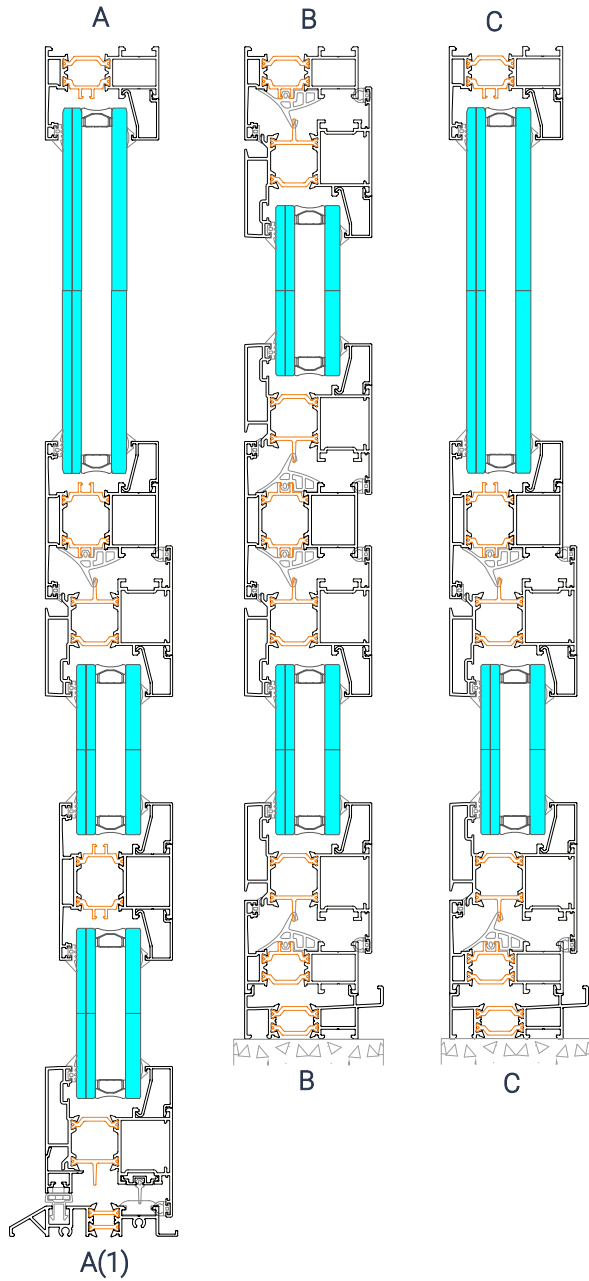


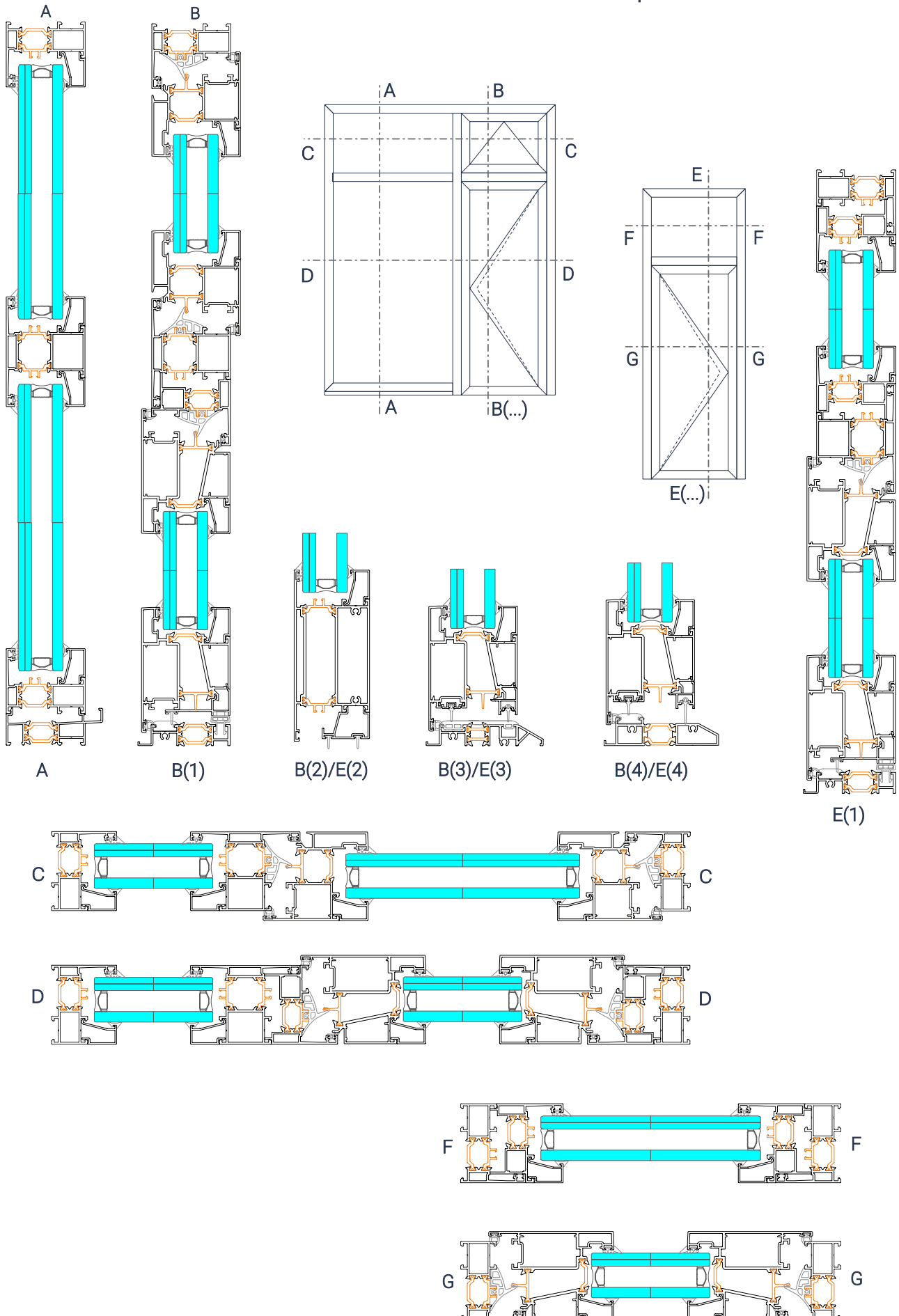
Y.2012

X.15.0005 Esq. R26 PC8 (23x14) 	X.17.0008 Esq. Alinh. (2x9) Parafuso 	X.41.0043 Vedante Central Alas 60 	X.46.0101 Vedante Soleira R6016 EPDM 	X.50.0068 Topo inv. curvo R6005 	X.19.0024 Esq. Xarreta 68mm 
X.15.0006 Esq. R26 PC8 (23x26) 	X.17.0020 Esq. Alinh. (1,7x5) 	X.41.0047 Canto Vulcanizado 	X.46.0049 Ved. Soleira Magnética 	X.50.0087 Topo inv. recto R6205 	X.19.0049 Esq. Xarreta 34mm 
X.15.0009 Esq. R26 PC8 (23x40) 	X.17.0036 Esq. Alinh. (1x12,7) 	X.42.0021 Vedante aro fixo 	X.49.0031 Magnético superior 	X.52.0012 Goteira c/ deflector 	X.55.0040 Fixad. Esq XR 1040/80/100 
X.15.0014 Esq. R26 PC8 (15x14) 	X.17.0037 Esq. Alinh. (1,5x20) 	X.43.0022 Vedante aro móvel 	X.49.0032 Magnético inferior 	X.52.0051 Topo sol. cond. R6006/26 	X.55.0042 Fixador Esq XR 1060 
X.15.0016 Esq. R26 PD8 (23x26) 	X.17.0044 Esq. Alinh. R6024 (13x31) 	X.44.0030 Vedante ext vidros 	X.47.0078 PVC Porta-magnético 	X.50.0035 Topo pingadeira Y.140 	X.55.0043 Fixador Esq XR 1050 
X.15.0017 Esq. R26 PD8 (23x14) 	X.18.0017 União Trav. (22x14) 	X.45.0051 Vedante 06045 Pivot 	X.46.0001 Vedante da pingadeira EPDM 	X.67.1069 Cilindro Standard 30x60 	X.55.0044 Fixador Esq XR 1070 
X.17.0071 Esq. Alinh. XR (1,8x18) 	X.18.0018 União Trav. (22x26) 	X.46.0090 Vedante de pingante 	X.46.0002 Vedante de pingadeira EPDM 	X.67.1076 Cilindro Segurança 30x60 	X.38.2063 Fechadura de 3 pontos GNS 7715 Alu I 35mm 
X.38.2060 Fechadura de prumo GNS 7716 Alu I 35 mm 					

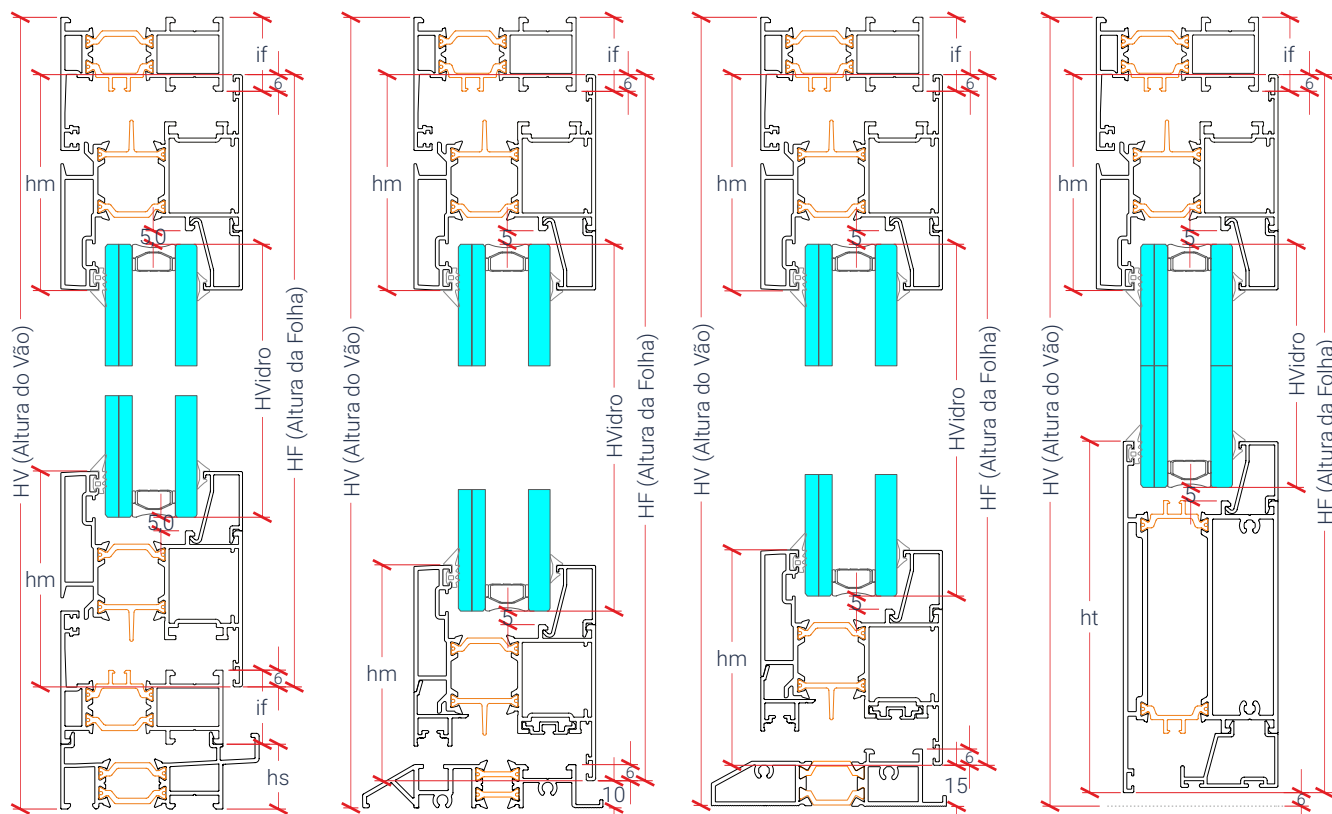
Acessórios de manobra:

Dobradiças, Cremones, Sistemas de movimento e fecho, etc. Ver catálogo de acessórios por manobra.





medidas de corte



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

$$HF = HV - if - 4$$

$$HF = HV - if - 9$$

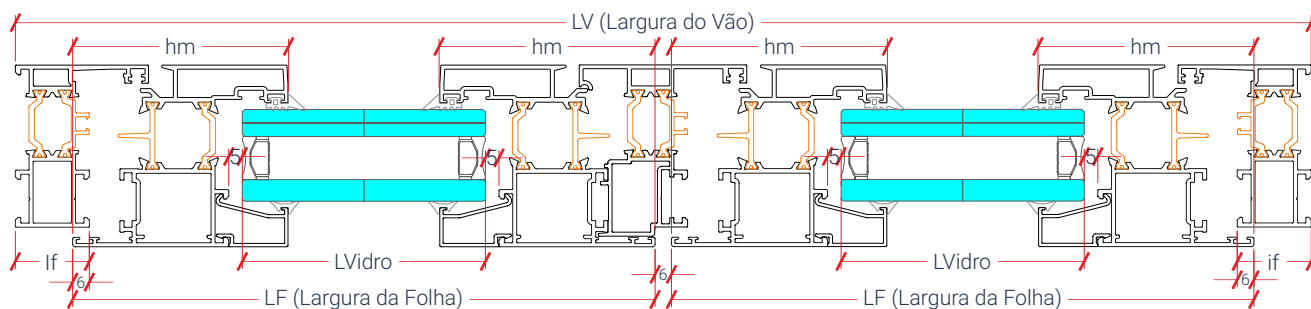
$$HF = HV - if$$

$$HVideo (*) = HF + 24 - 2x hm$$

$$HVideo (*) = HF + 24 - (hm + ht)$$

$$HVideo (\#) = HF + 34 - 2x hm$$

$$HVideo (\#) = HF + 34 - (hm + ht)$$



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

$$LVideo (*) = LF + 24 - 2x hm$$

$$LVideo (\#) = LF + 34 - 2x hm$$

LEGENDA:

HV - Altura do Vão

LV - Largura do Vão

HF - Altura da Folha

LF - Largura da Folha

nF - N° de folhas

LVideo - Largura do Vidro

HVideo - Altura do Vidro

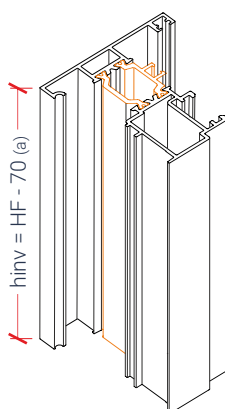
if - Altura interior do aro fixo

hs - Altura da soleira de condensação

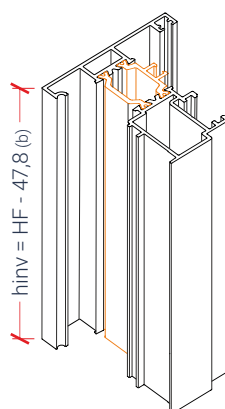
hm - Altura do aro móvel

ht - Altura da travessa

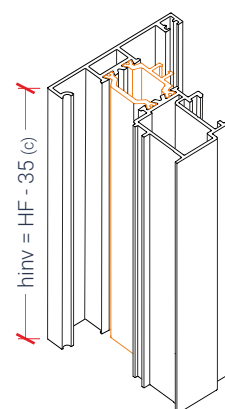
hinv - Altura do inversor central



hinv = HF - 70 (a)



hinv = HF - 47,8 (b)



hinv = HF - 35 (c)

(a) - c/aro fixo a toda a volta; (b) - c/soleira de porta; (c) - s/aro e sem soleira

(*) - Com bite 01000 ou 01001 (#) - Com qualquer dos outros bites