



EcoPlus 70

EP70

*Sistema de batente CE 70mm
com rotura térmica thremofoam*

LOUSALU[®]

Plus 70 - Desempenho / Performance

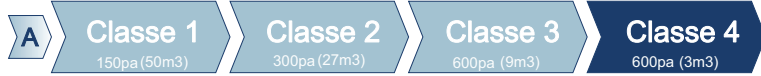


ITT - Ensaio de tipo inicial - Organismo notificado n.º
 Norma EN 14351-1

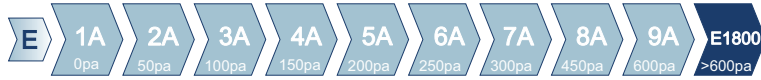
1668 - Ensatec
 ETI - Essai de type initial - Laboratoire notifié n.º.



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: 1230 x 1480 mm Certificado de ensaio/Certificat d'essai n.º 244712
 Essai réalisé sur une fenêtre de deux ouvrants à la française de:

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

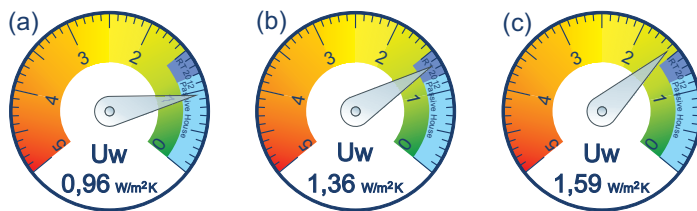
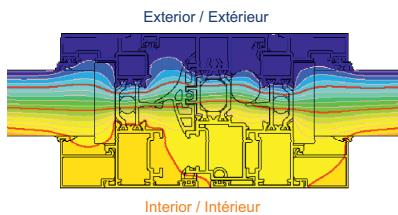
Unidade de vidro (IGU)*	Ψ	Ug	g	Tlg	Rw (C;Ctr)
(a) GuardianSun LamiGlass 44.1+16 Argon 90%+Float4+ClimaGauard Premiun2 4mm	0,044	0,5	0,37	62%	41(-2;-6)
(b) GuardianSun LamiGlass 44.1+16 Argon 90%+Float 4mm	0,049	1,0	0,41	69%	38(-2;-5)
(c) GuardianSun LamiGlass 44.1+16 Ar+Float 4mm	0,049	1,3	0,41	69%	38(-2;-5)

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

$$U_w = \frac{\sum AgUg + \sum AfUf + \sum lg\Psi g}{\sum Ag + \sum Af}$$



Transmissão Térmica
 Transmittance Thermique
 UNE-EN 10077-2



Atenuação Acústica
 Isolation Acoustique
 EN 14351-1+A1 (Anexo B)

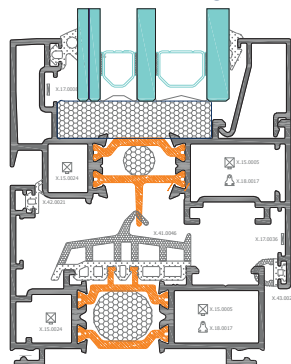
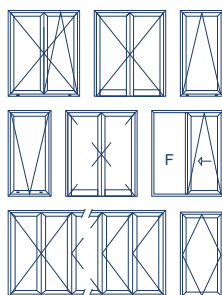
Rw (C;Ctr) com vidro / avec vitrage

- (a) 36 (-2;-5)
- (b) 35 (-2;-5)
- (c) 35 (-2;-5)



Tipologia e Classe energética / Typologie et classe énergétique

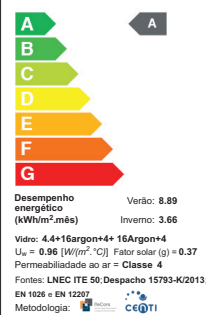
Tipologia construtiva
 Typologie constructive



ETIQUETTE D'EFFICACITE ENERGETIQUE FENETRES & PORTES	
Zones Climatiques France Métropolitaine	
Z1	Z2
A	A
B	B
C	C
D	D
E	E
F	F
G	G
Confort d'été	
A	B
Confort d'hiver	
FR	

Desempenho energético de:

JOB22F - 2000 x 2200 - Plus 70



Avec vitrage (a)

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.

Plus 70

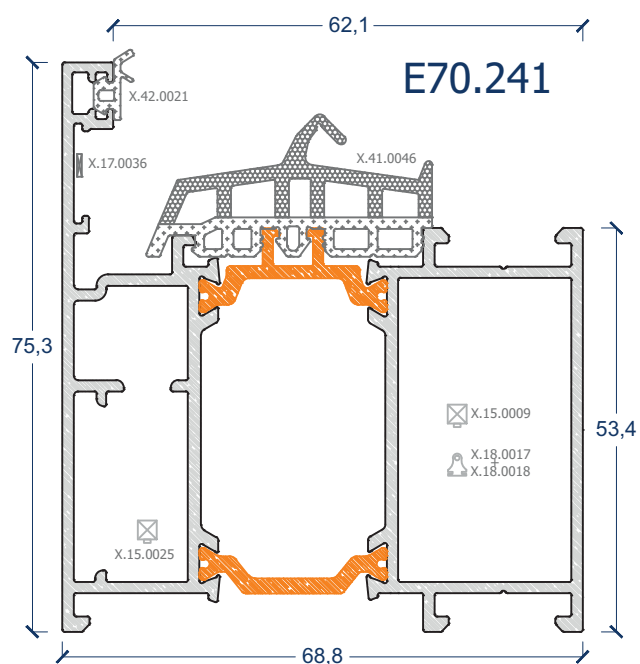
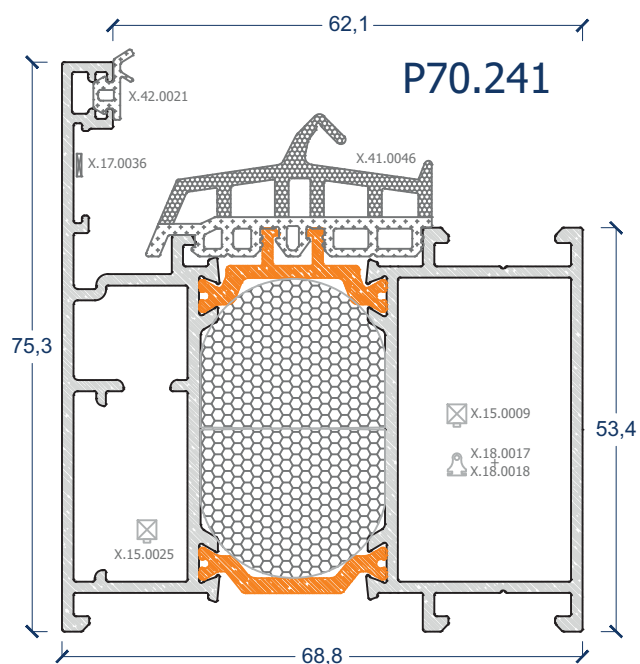
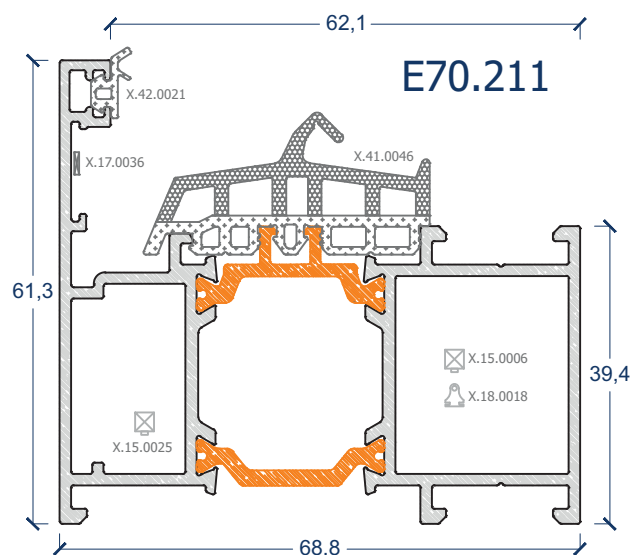
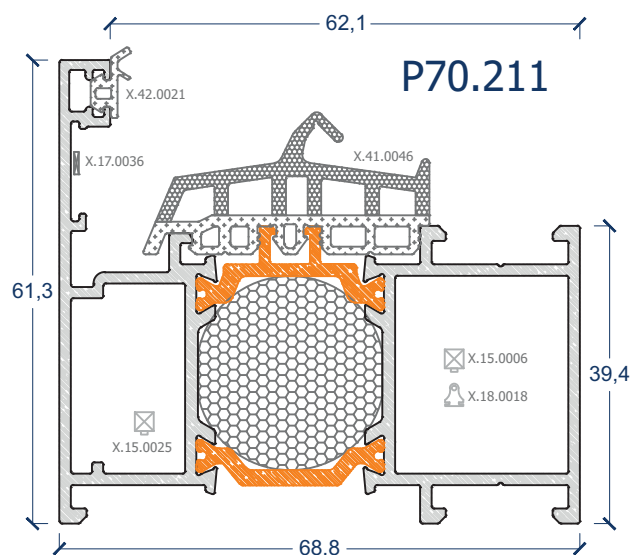
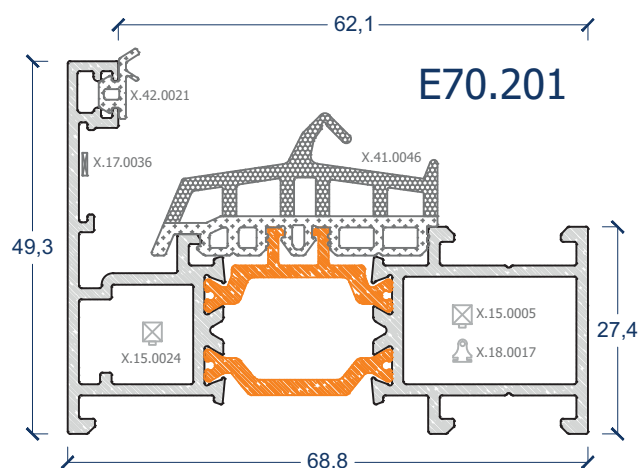
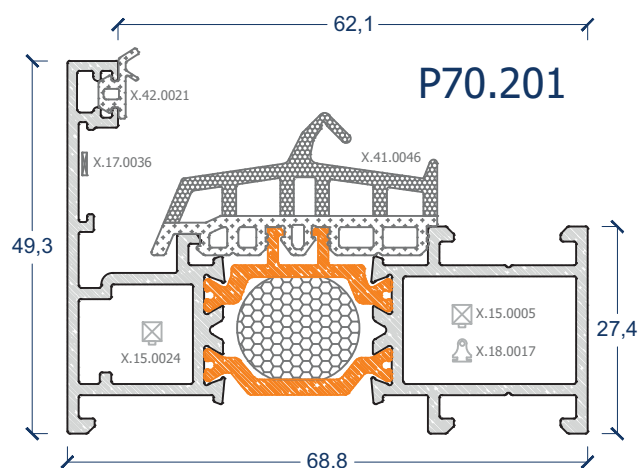


rpt 25 thermofoam

EP70 - Eco/Plus 70



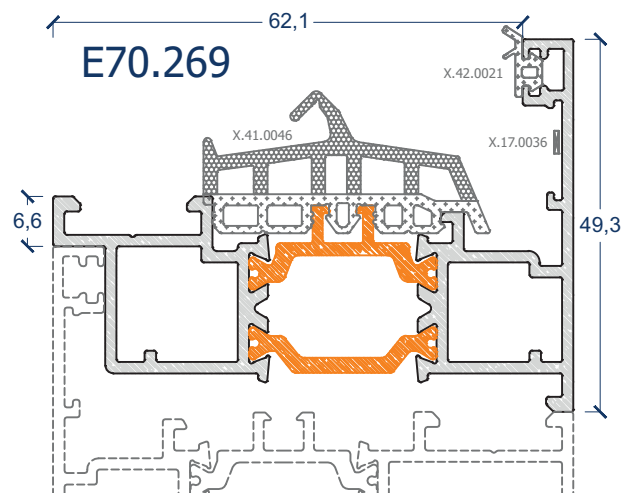
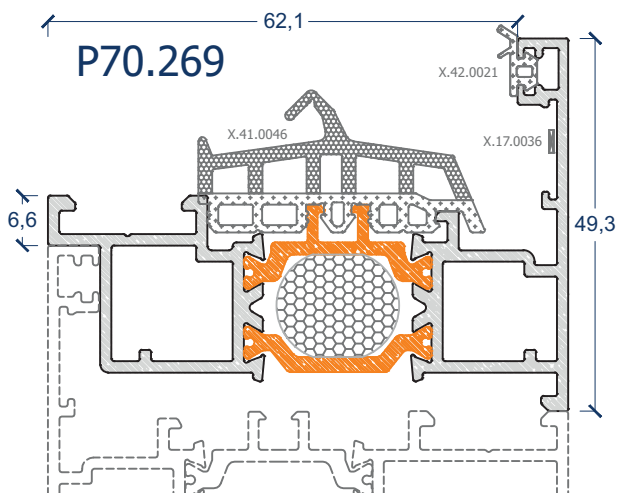
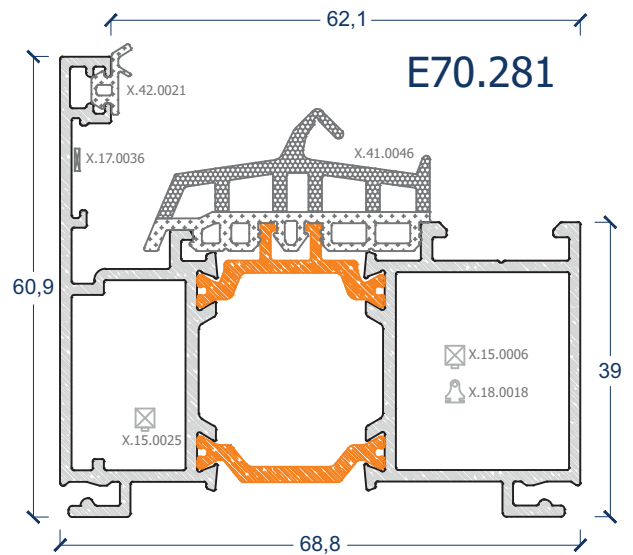
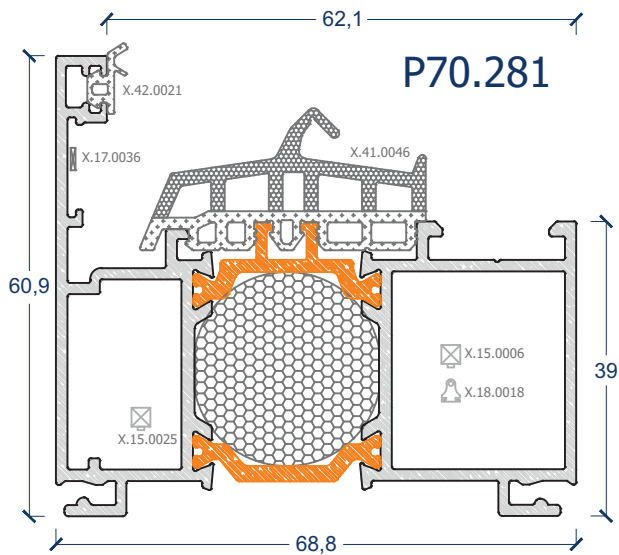
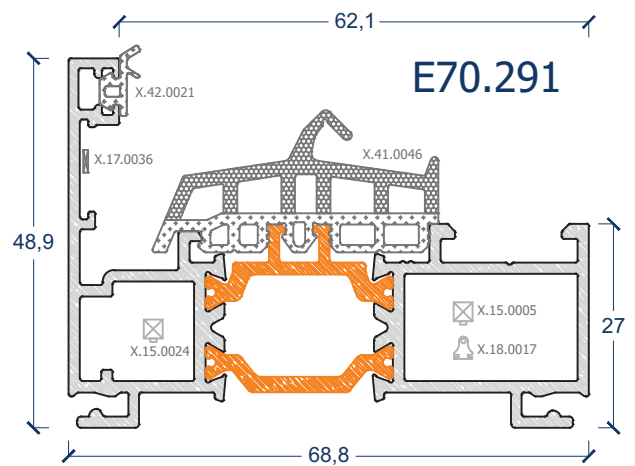
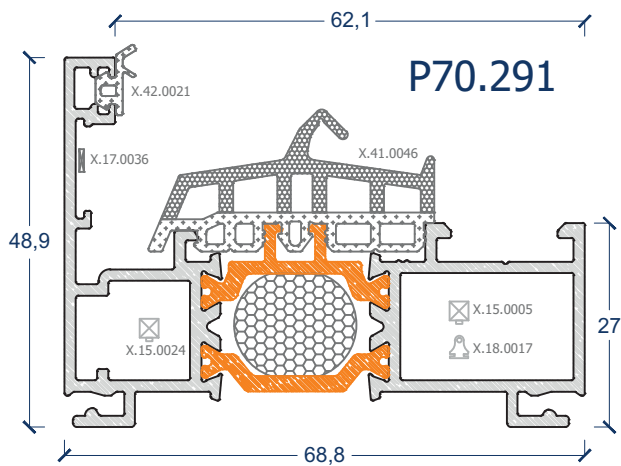
Perfis do aro fixo



EP70 - Eco/Plus 70



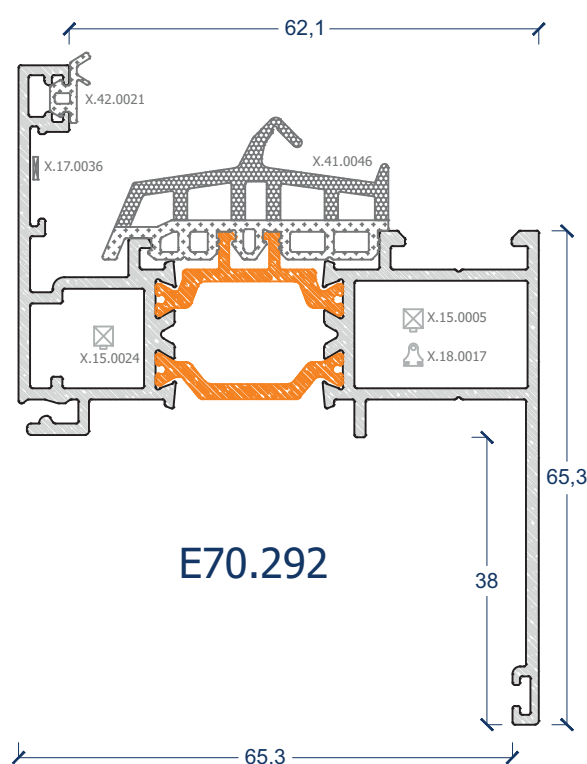
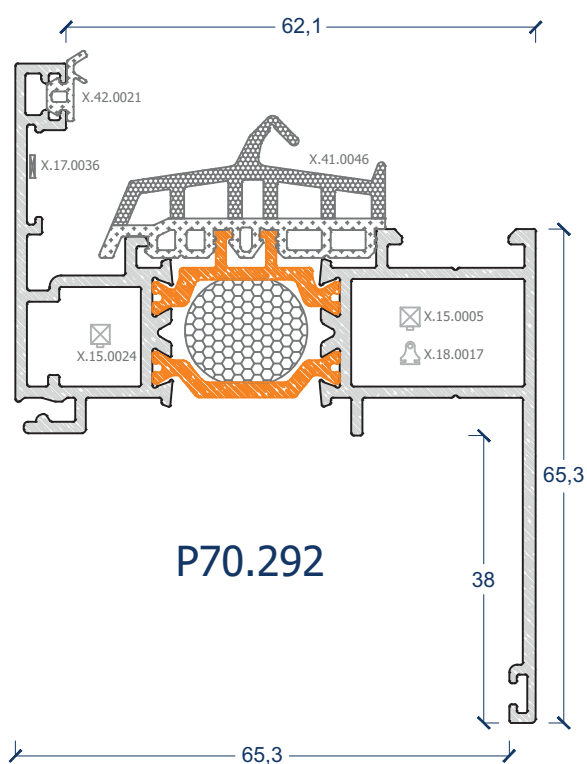
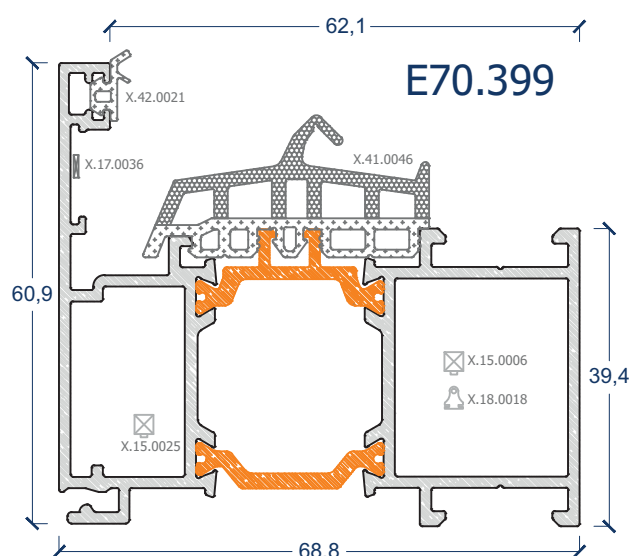
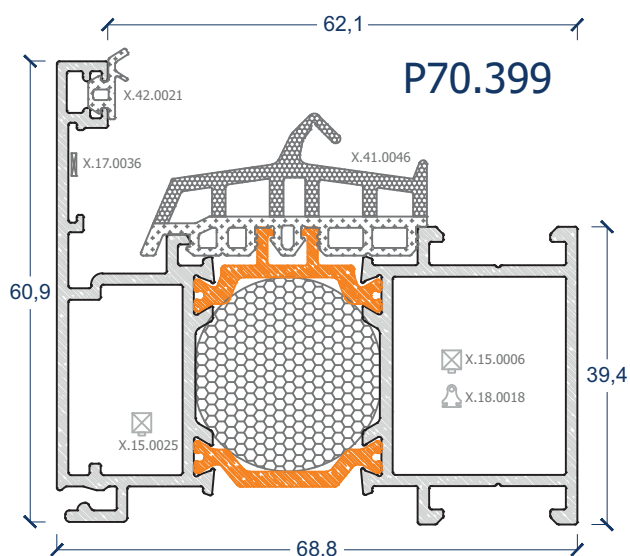
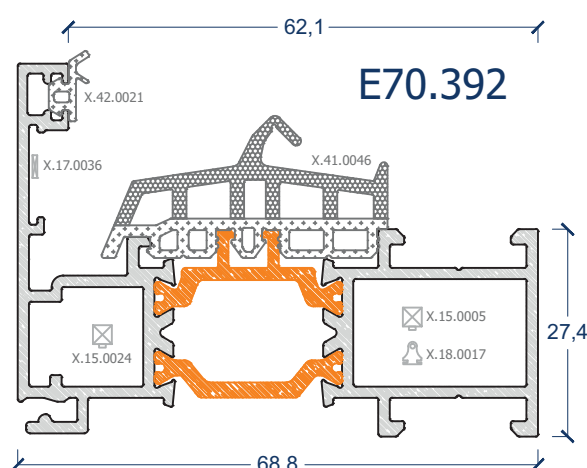
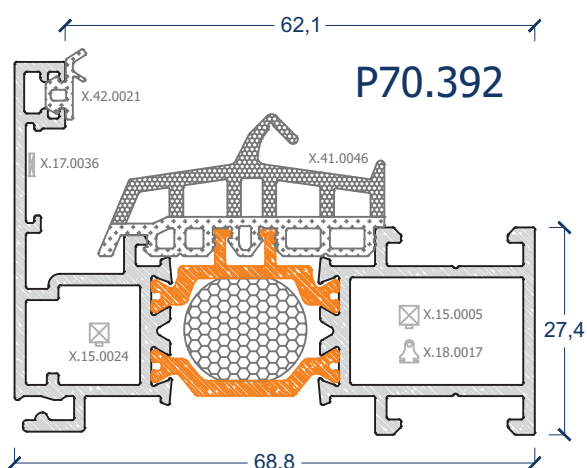
Perfis do aro fixo



EP70 - Eco/Plus 70



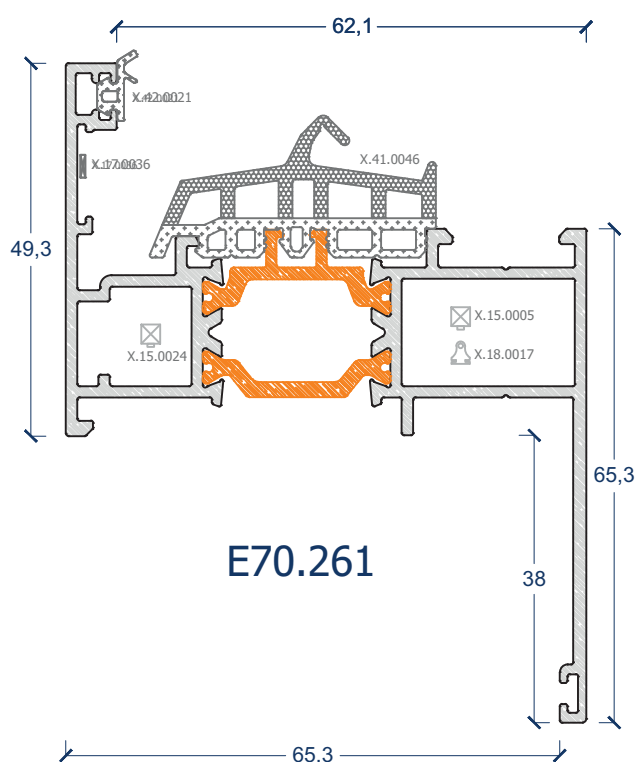
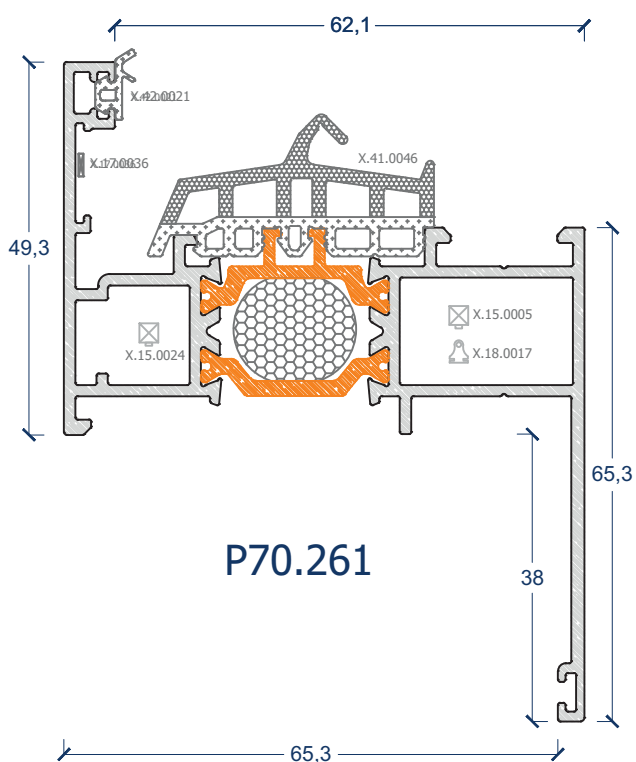
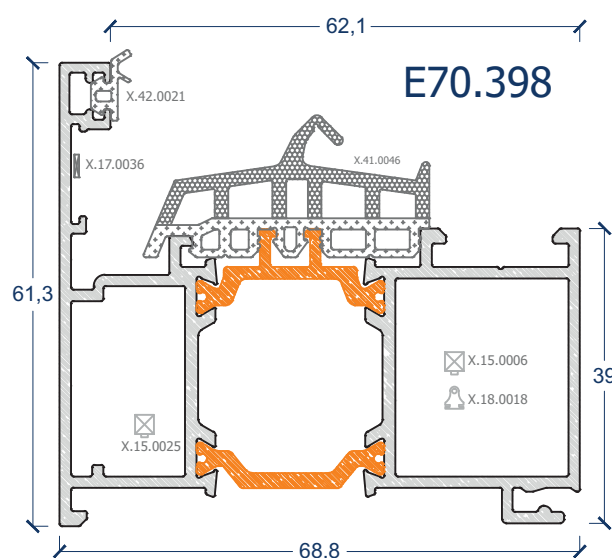
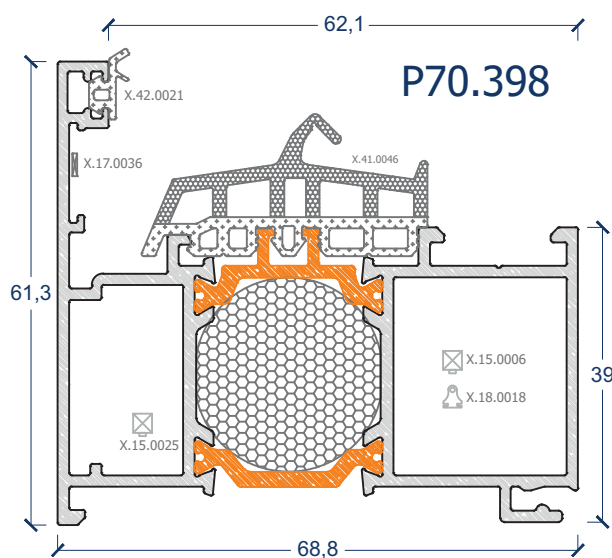
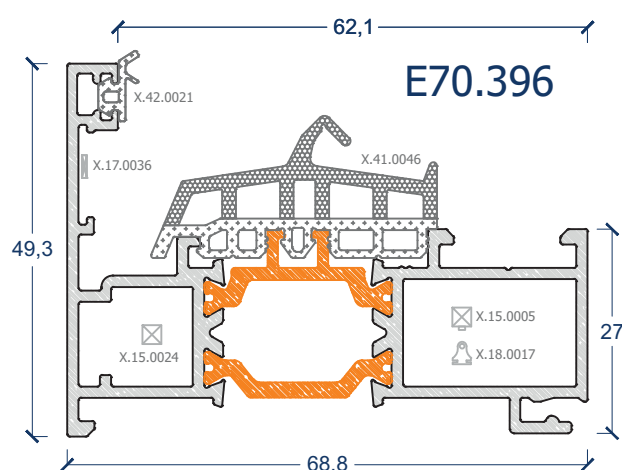
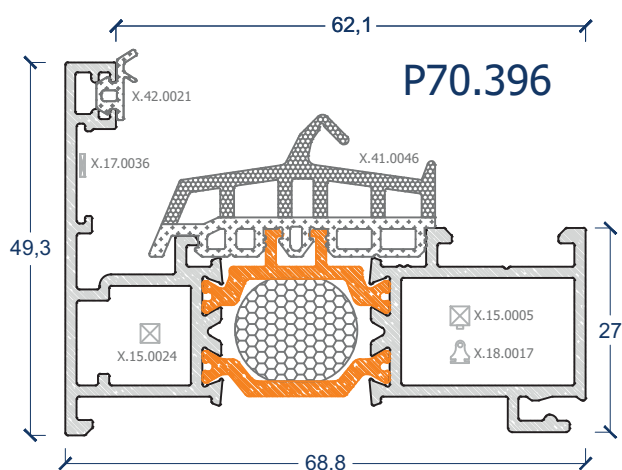
Perfis do aro fixo



EP70 - Eco/Plus 70



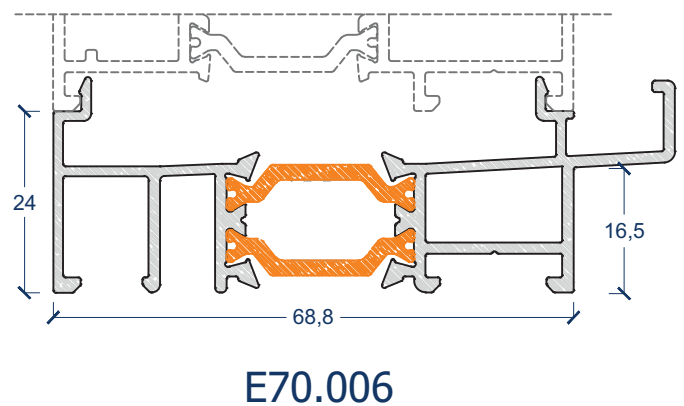
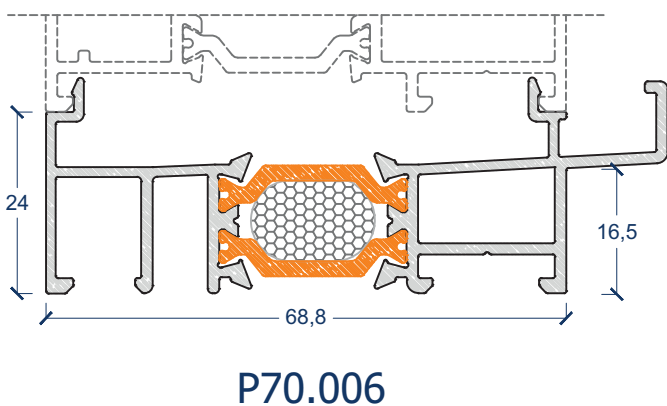
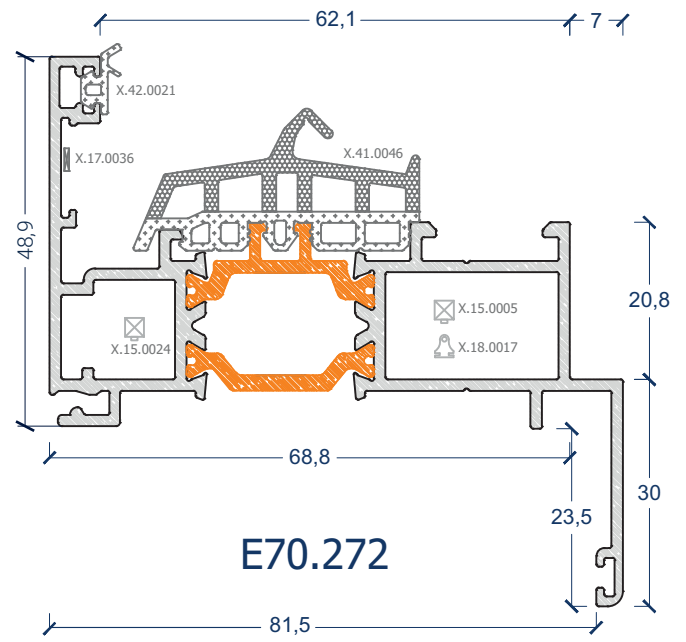
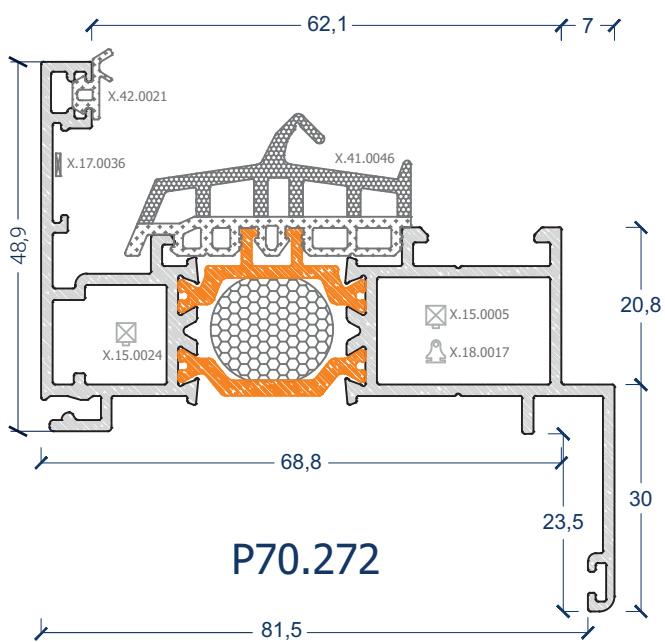
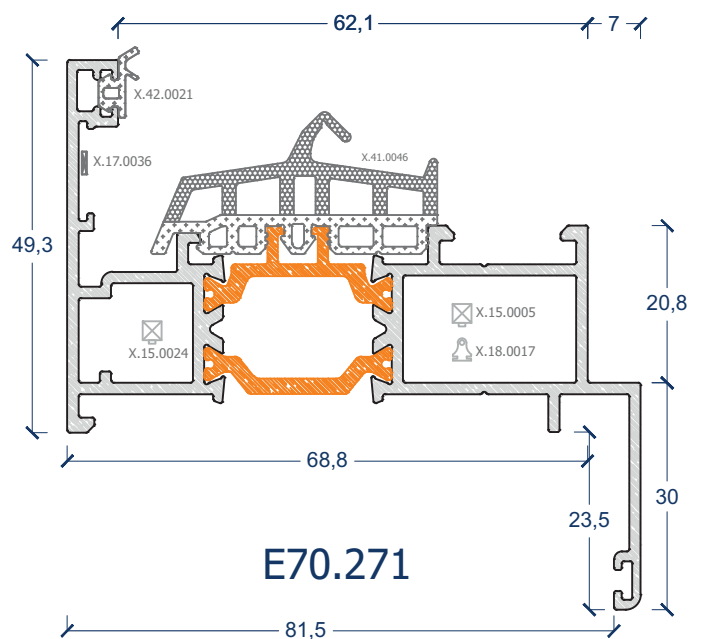
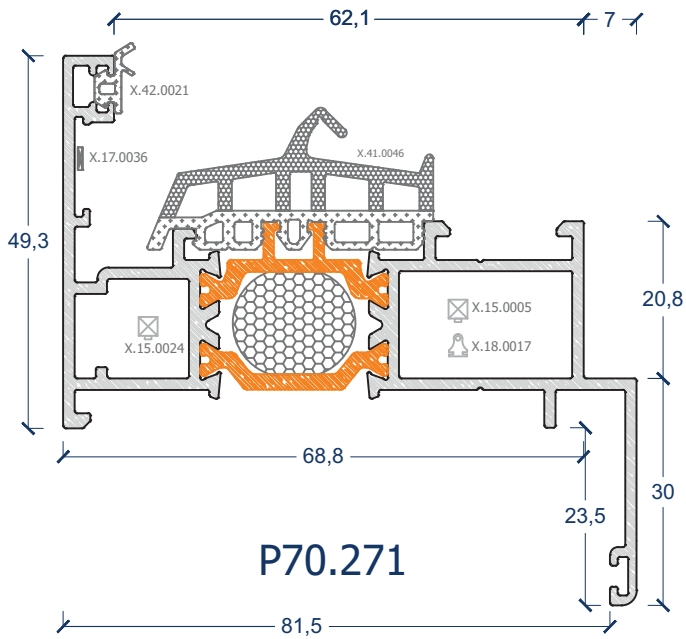
Perfis do aro fixo



EP70 - Eco/Plus 70



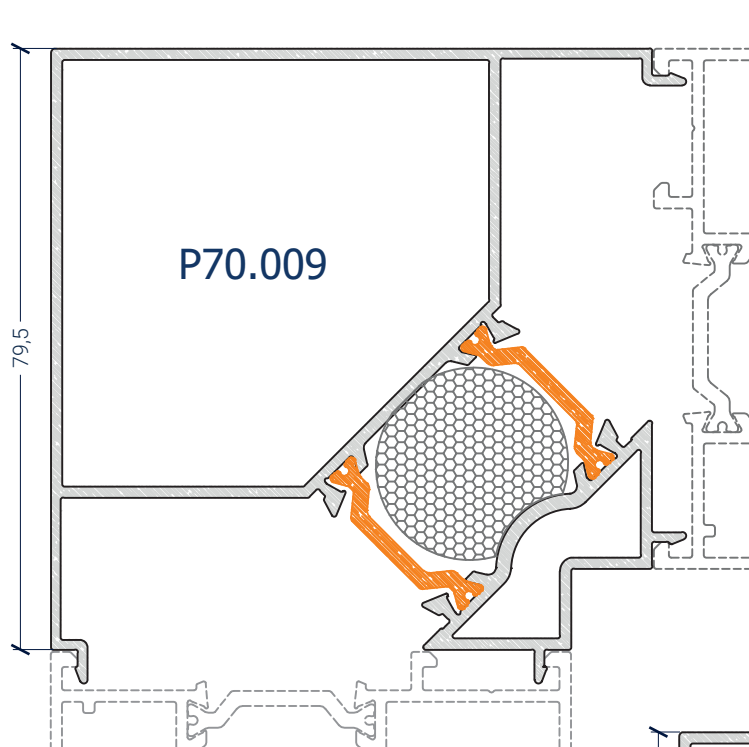
Perfis do aro fixo



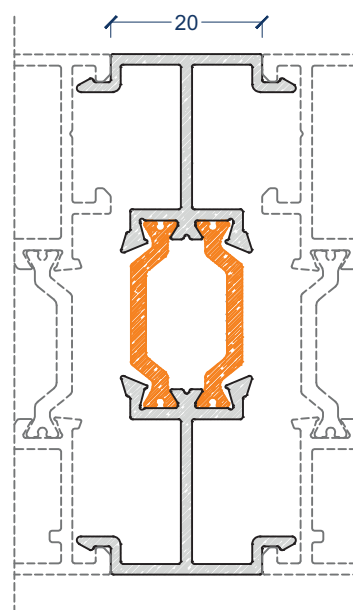
EP70 - Eco/Plus 70



Perfis de união e soleira

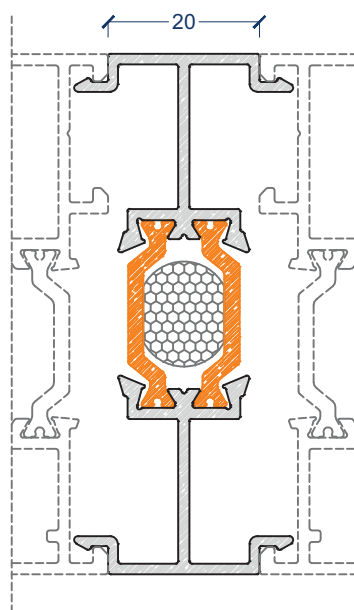


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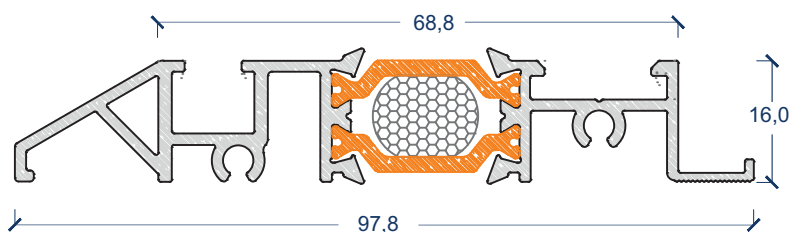
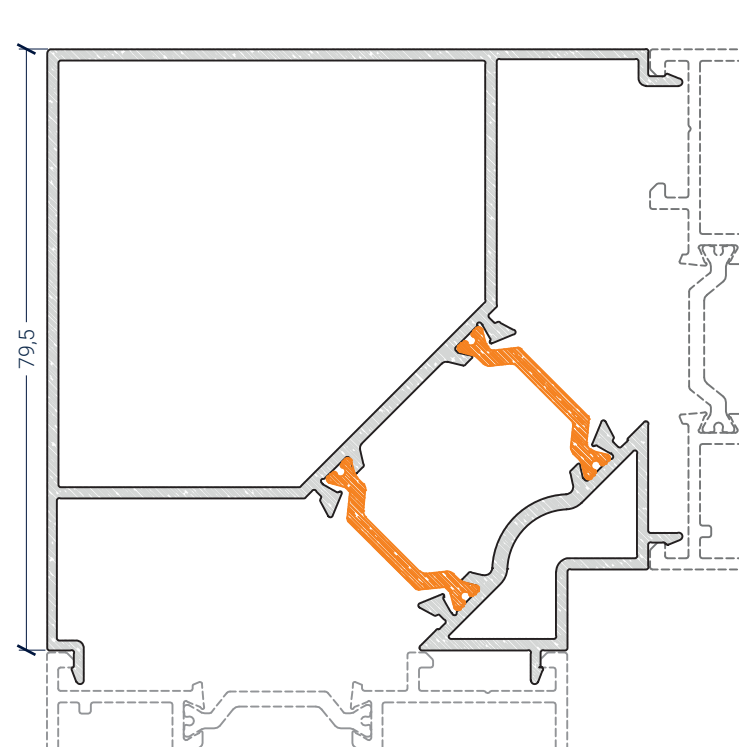


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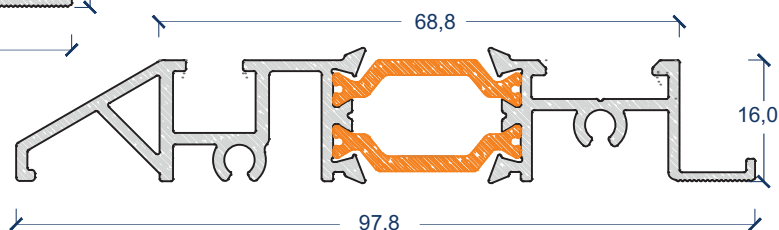
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P70.008



P70.016

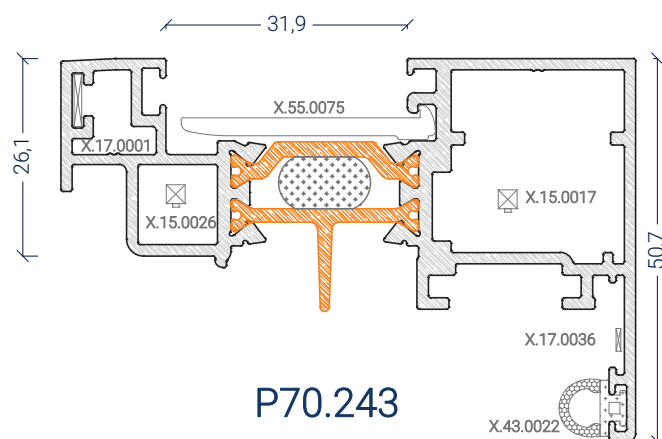


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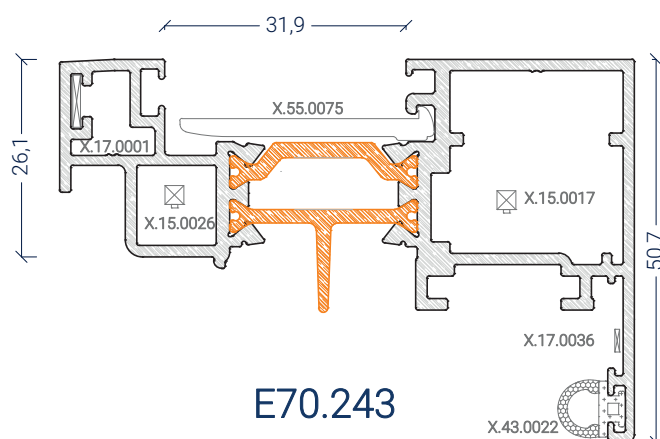
EP70 - Eco/Plus 70



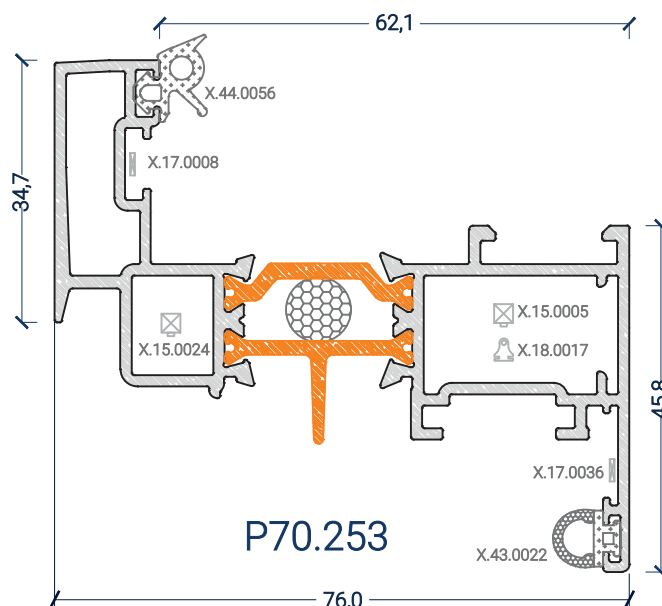
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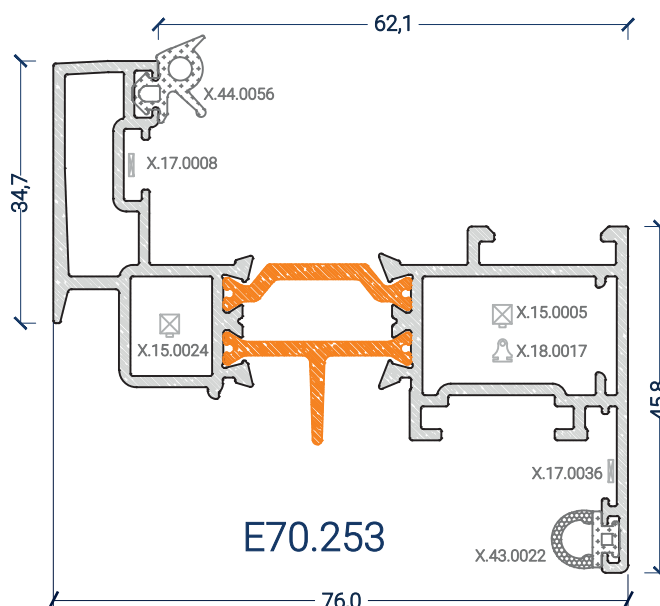
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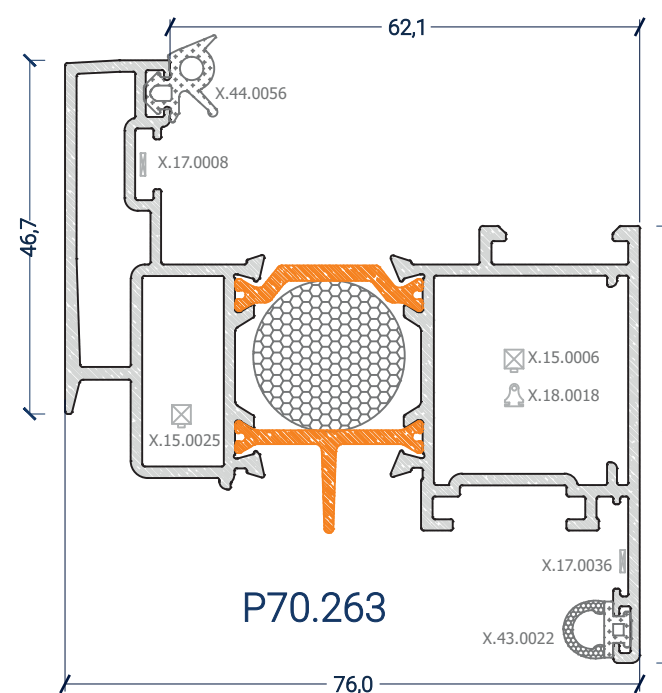
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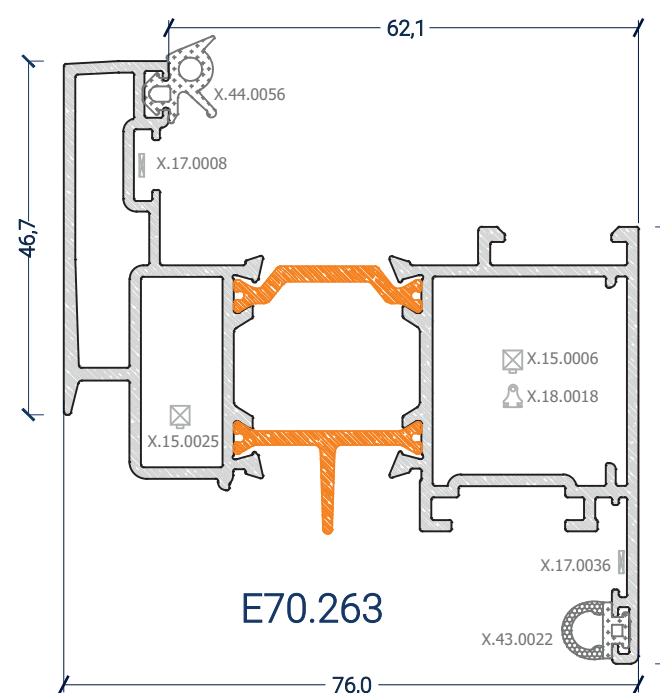
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E70.253



P70.263

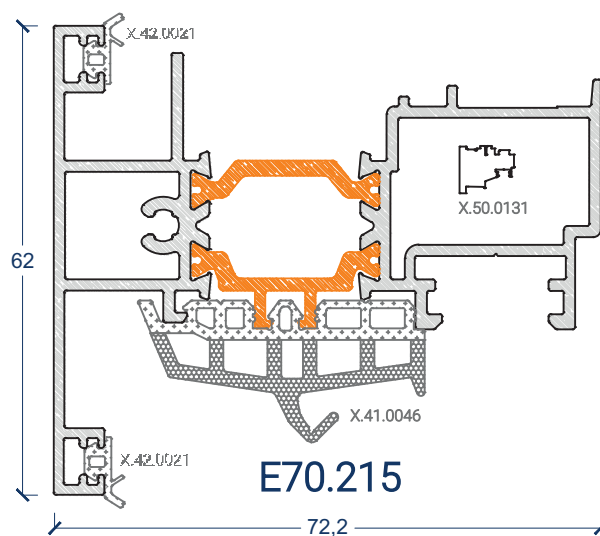
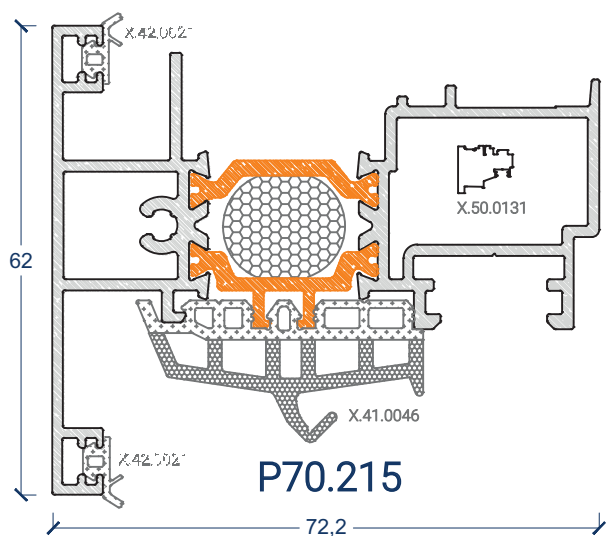
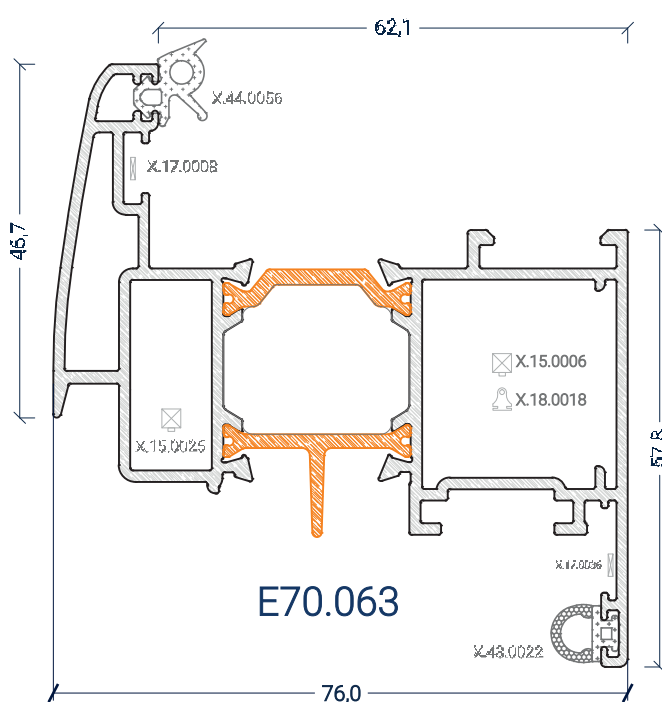
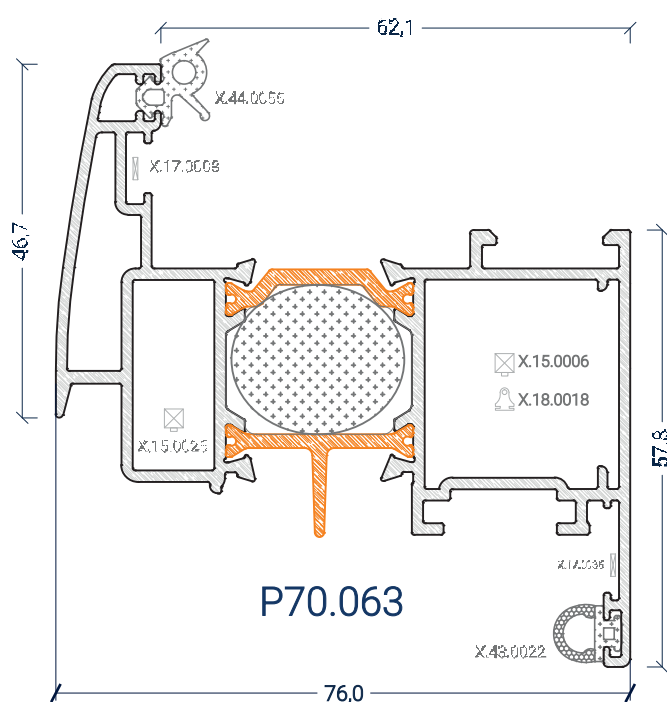
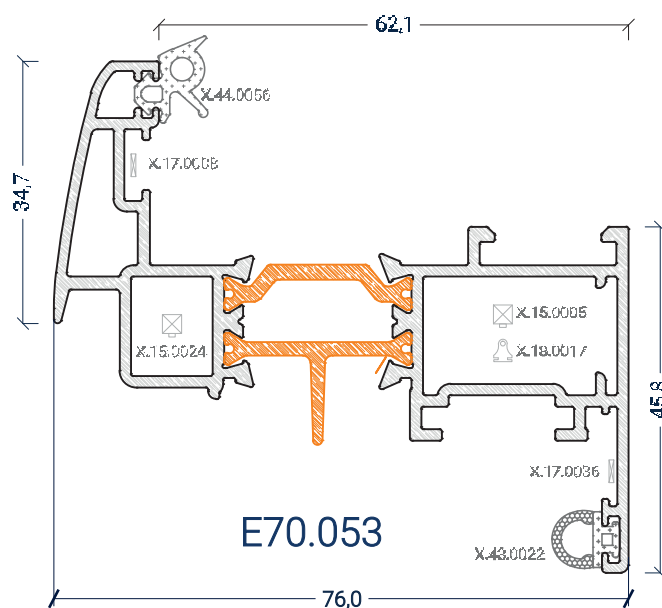
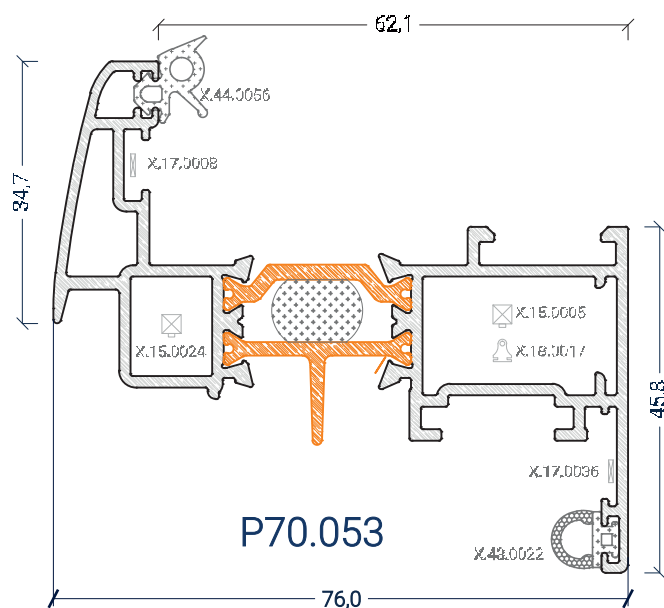


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EP70 - Eco/Plus 70



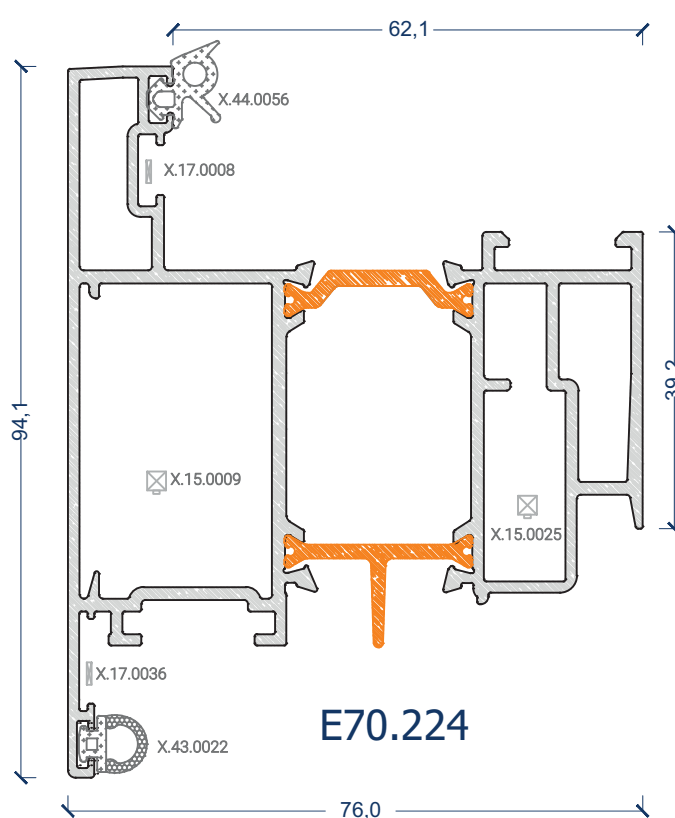
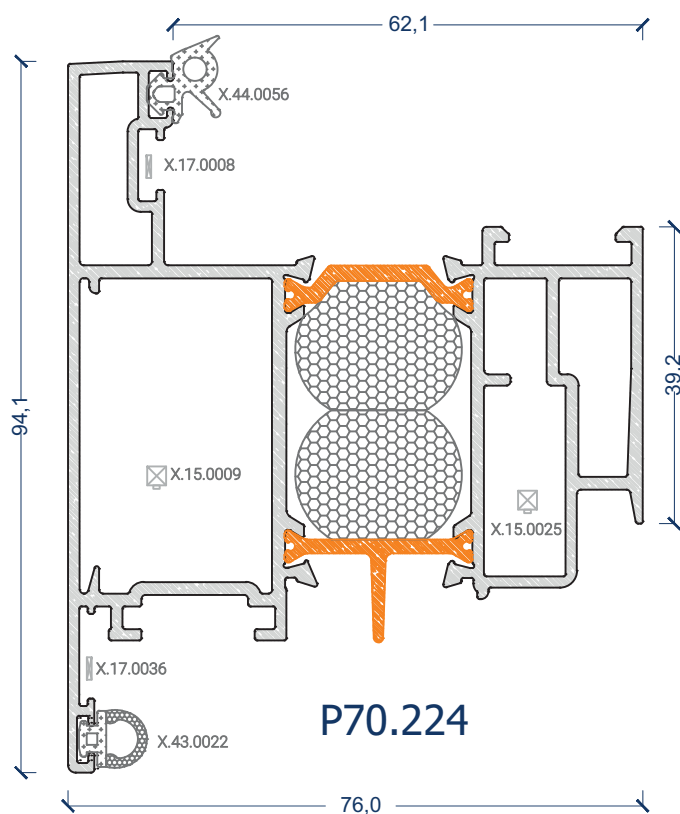
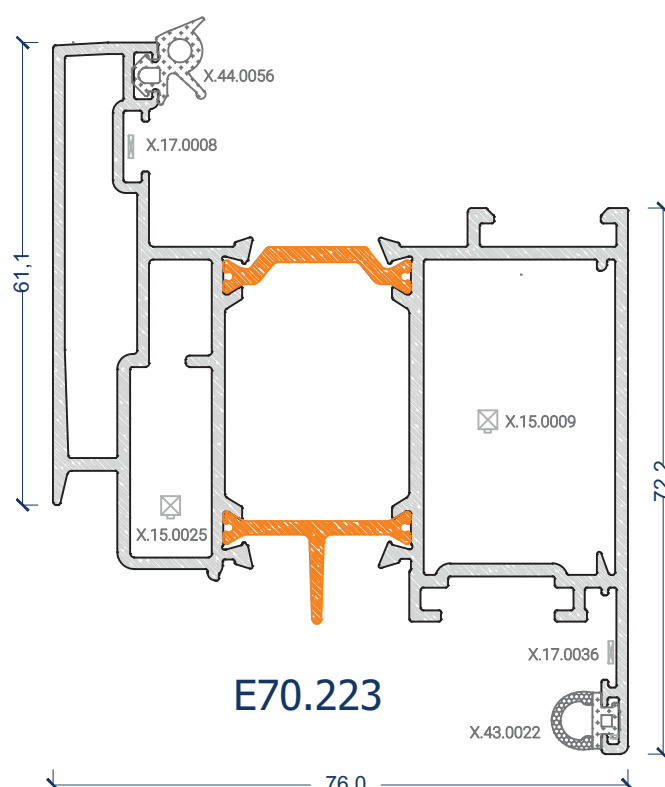
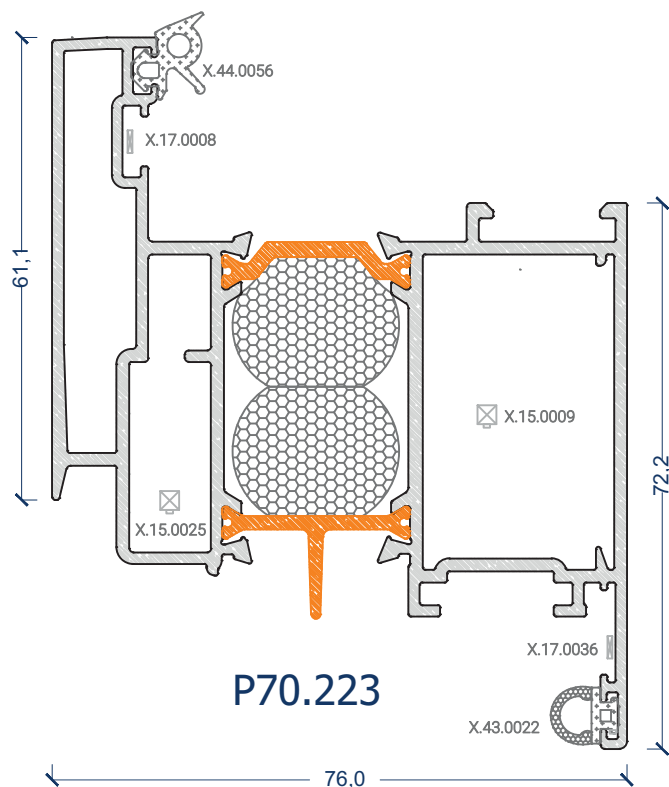
Perfis do aro móvel



EP70 - Eco/Plus 70



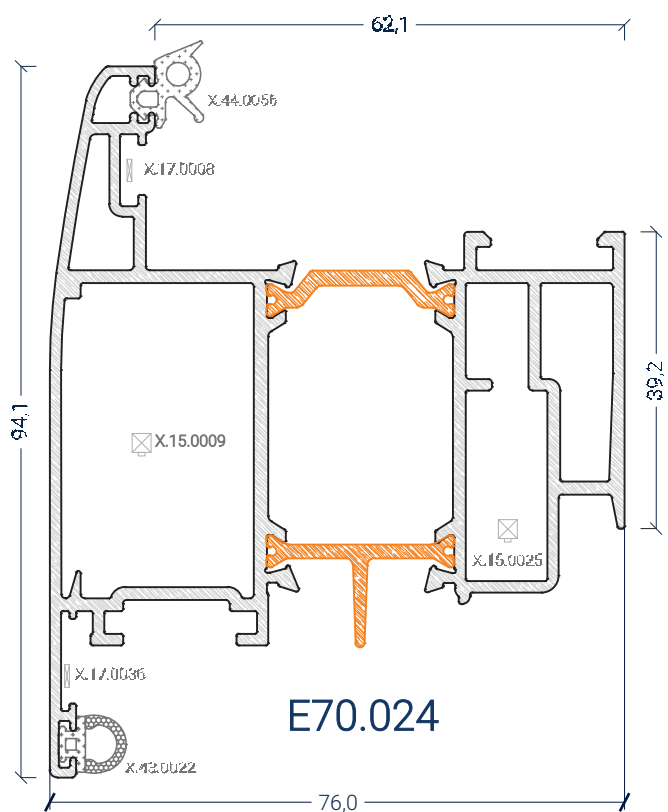
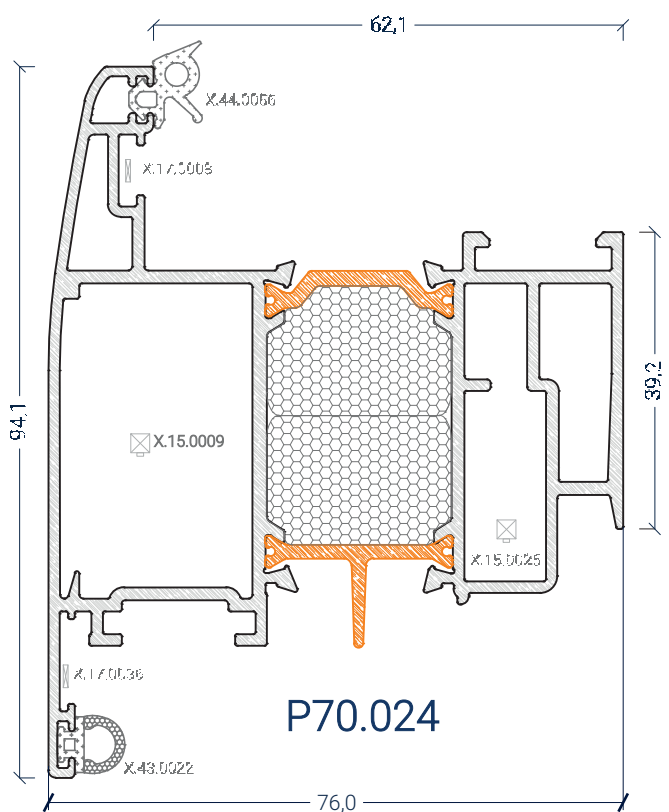
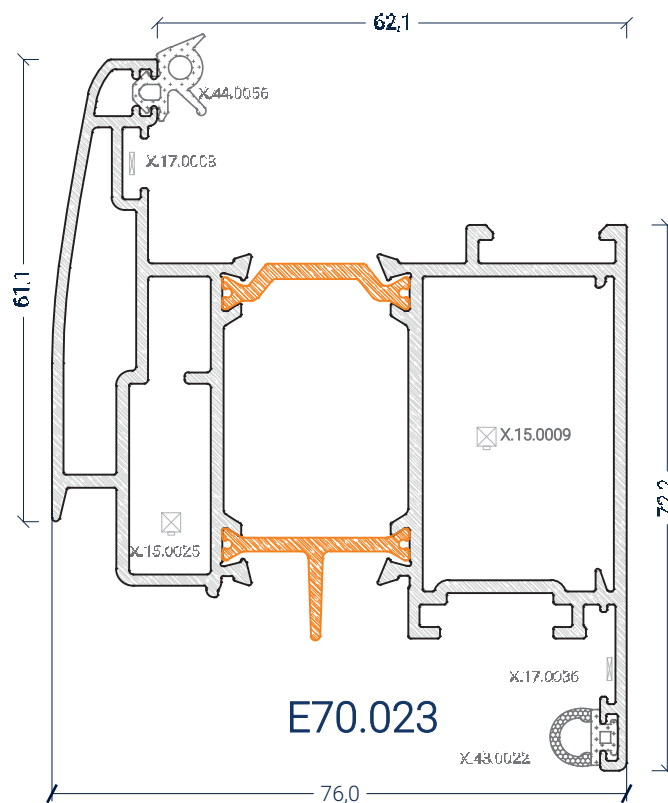
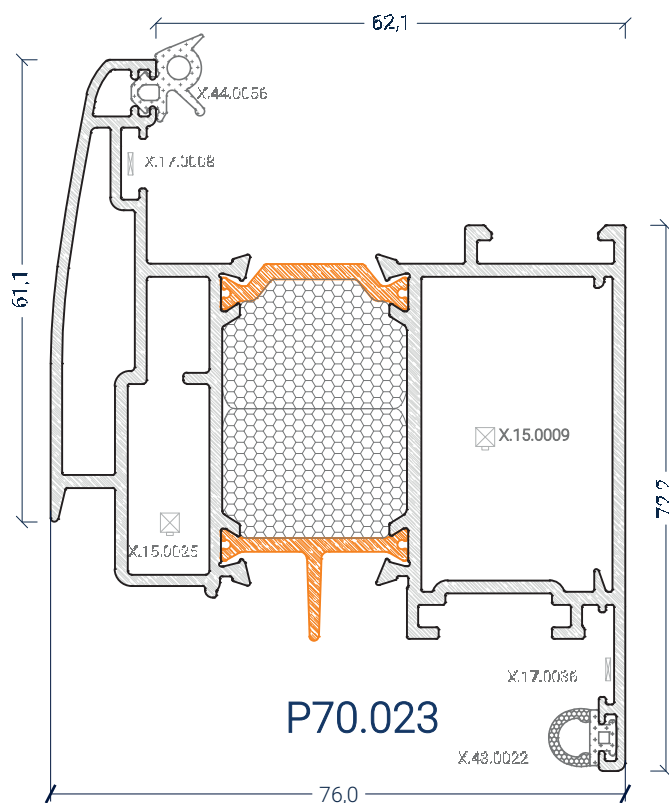
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EP70 - Eco/Plus 70



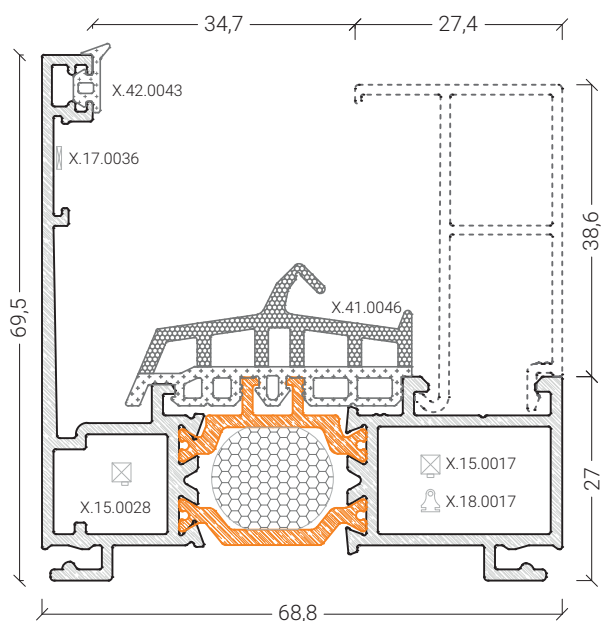
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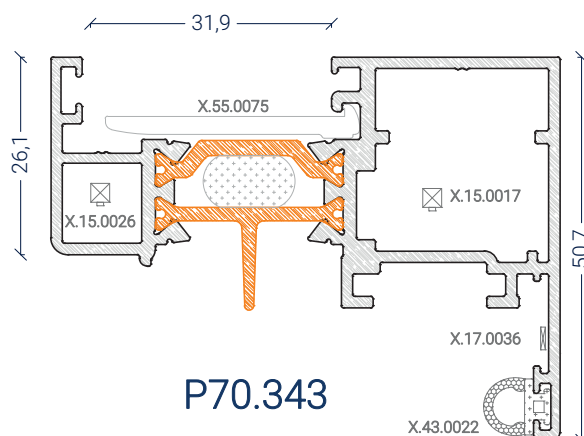
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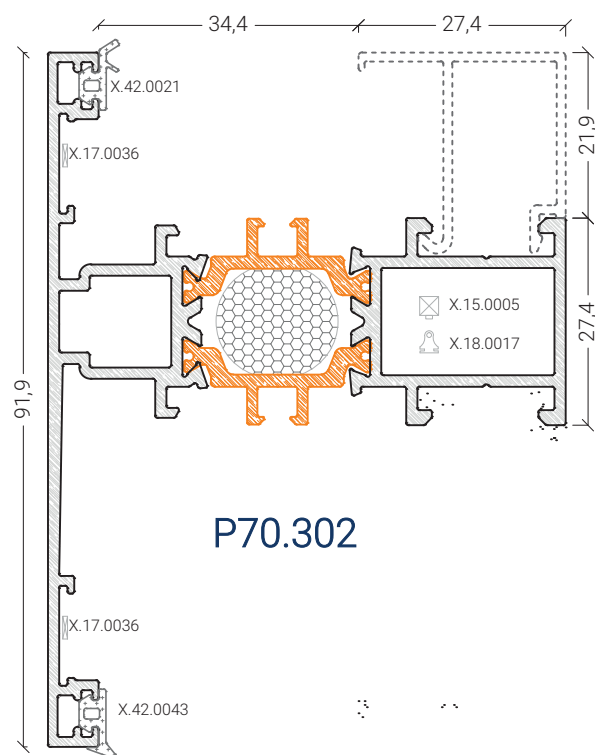
Perfis de folha oculta



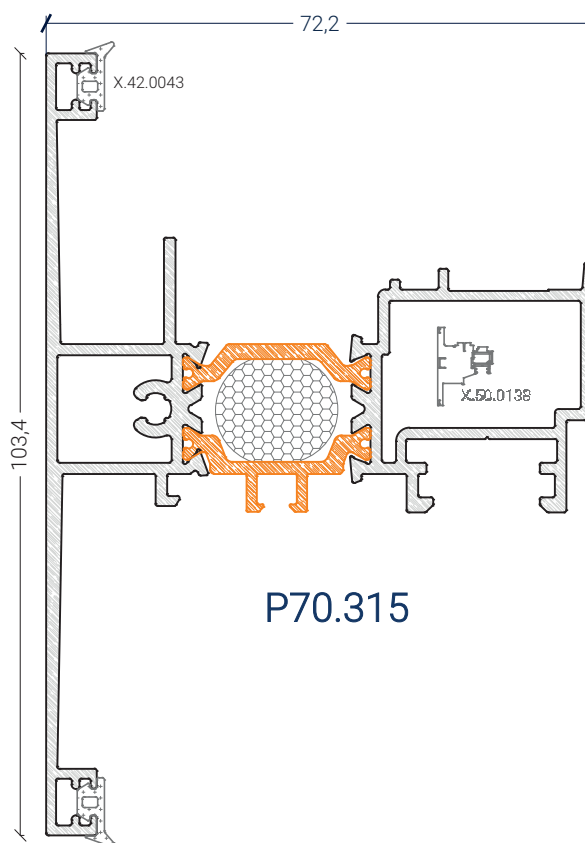
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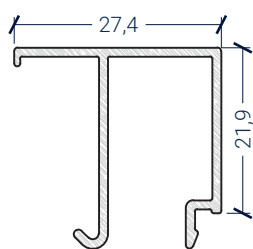
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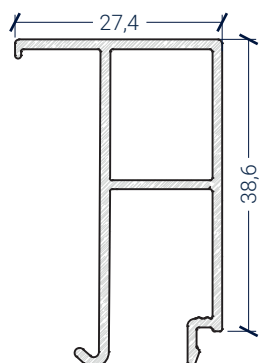
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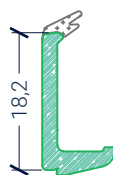
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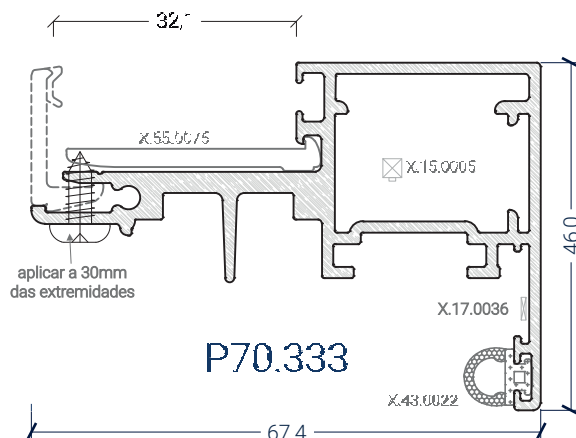
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06537



Y.0233

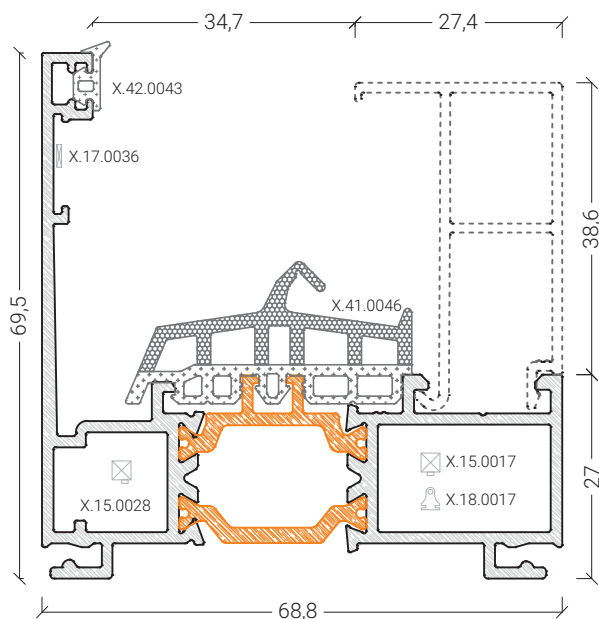


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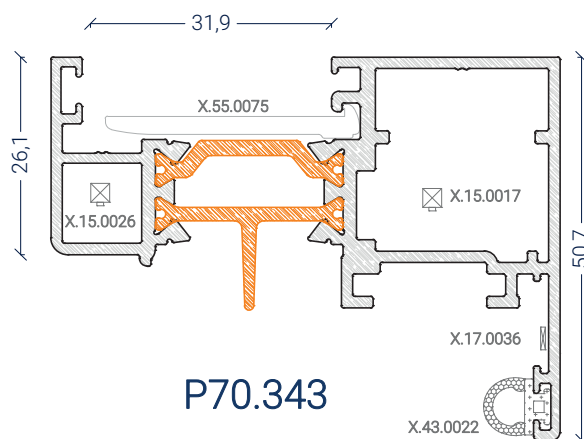
EP70 - Eco/Plus 70



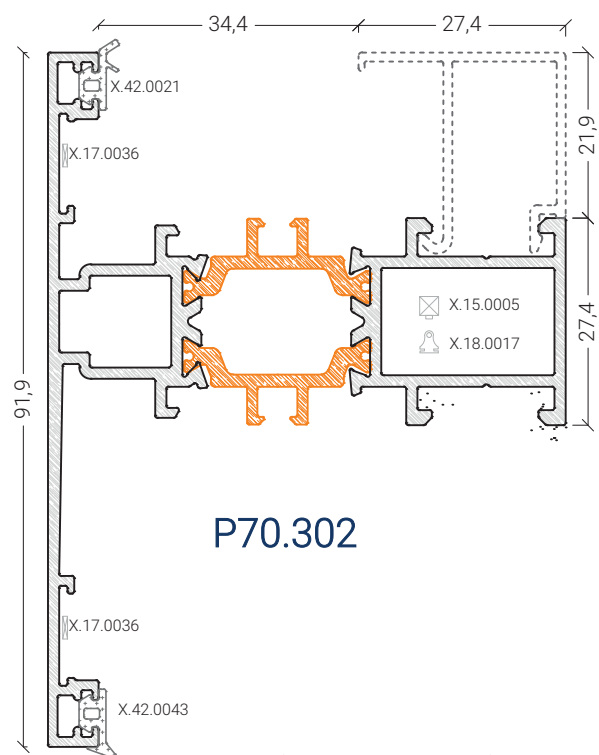
Perfis de folha oculta



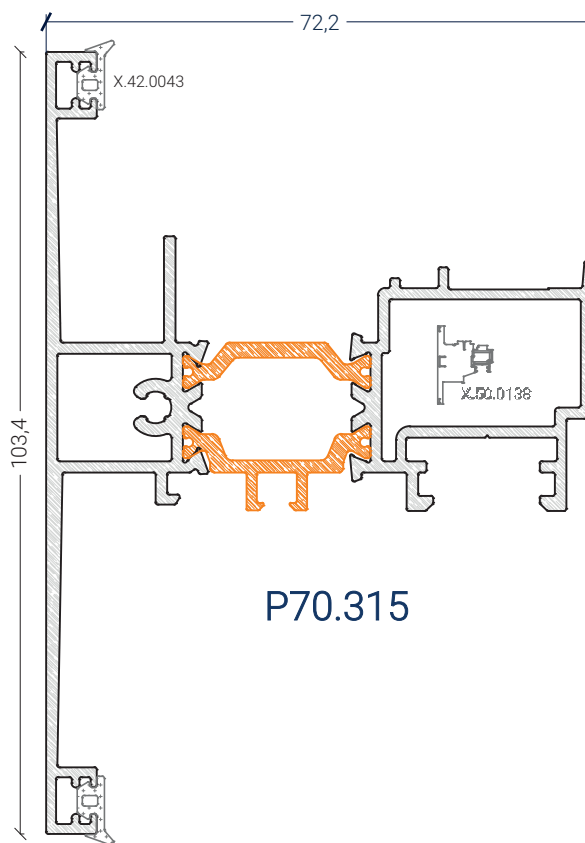
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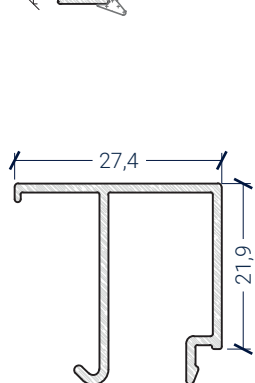
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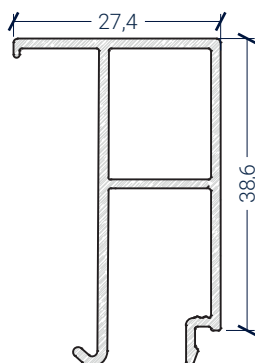
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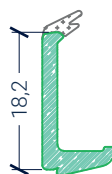
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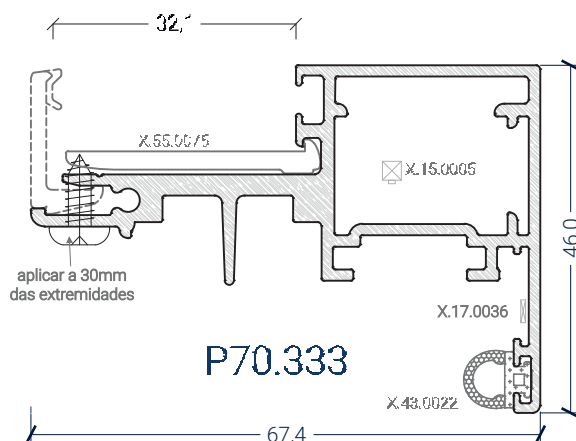
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06537



Y.0233

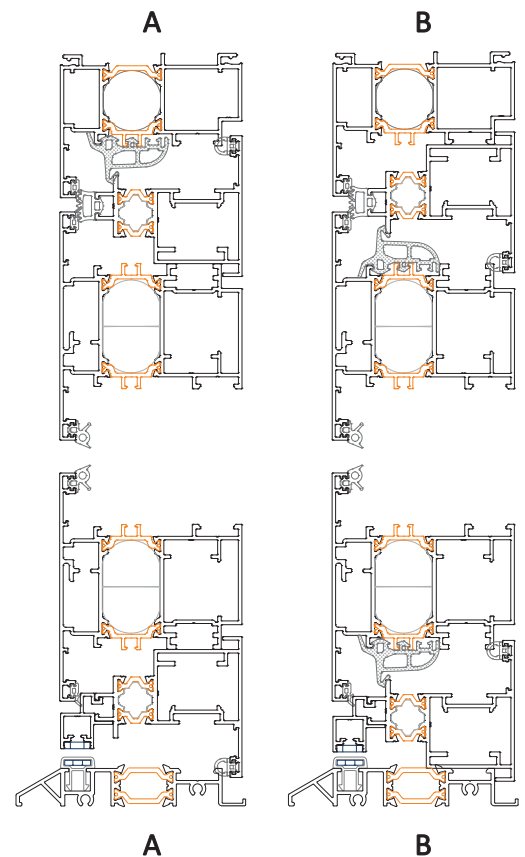
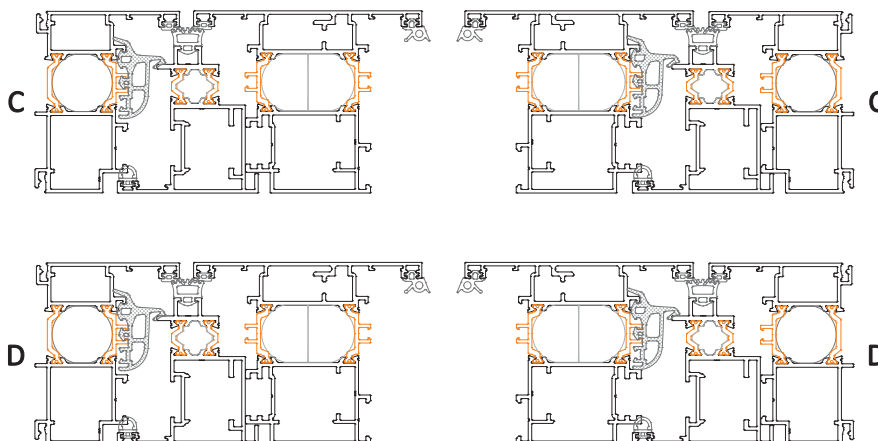
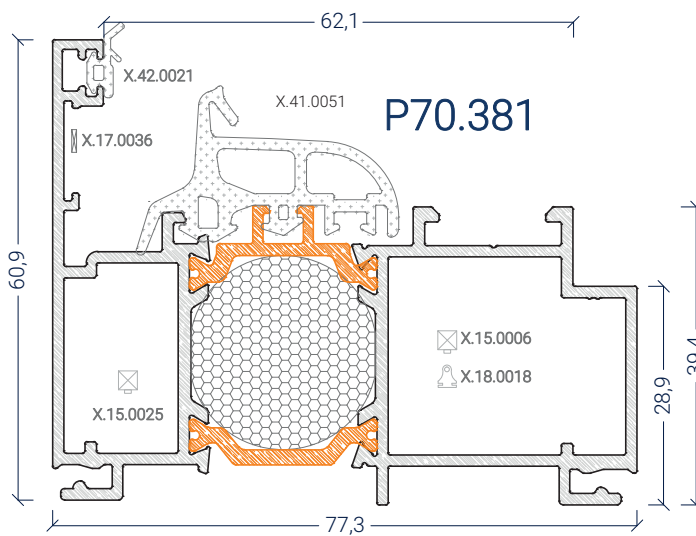
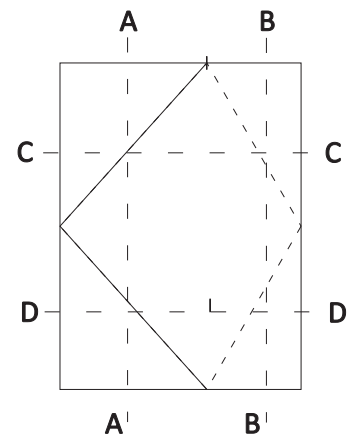
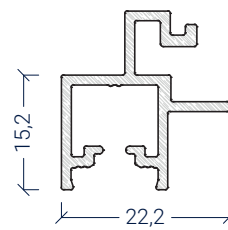
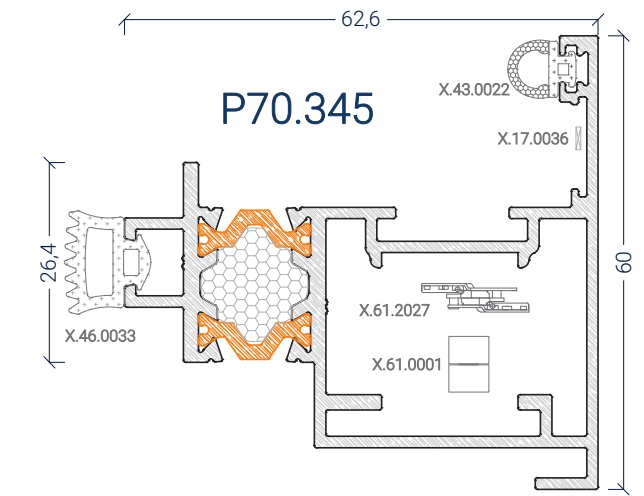
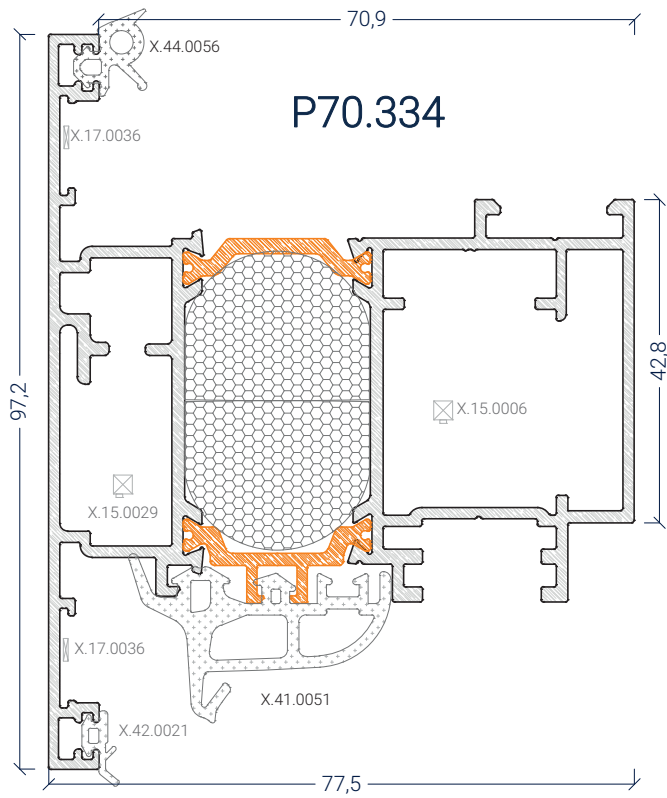


P70.333

EP70 - Eco/Plus 70



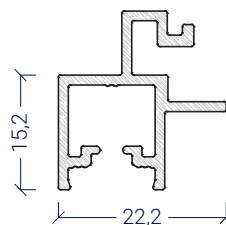
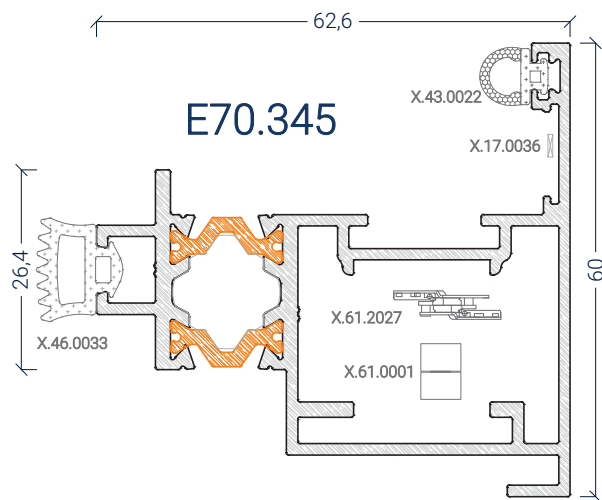
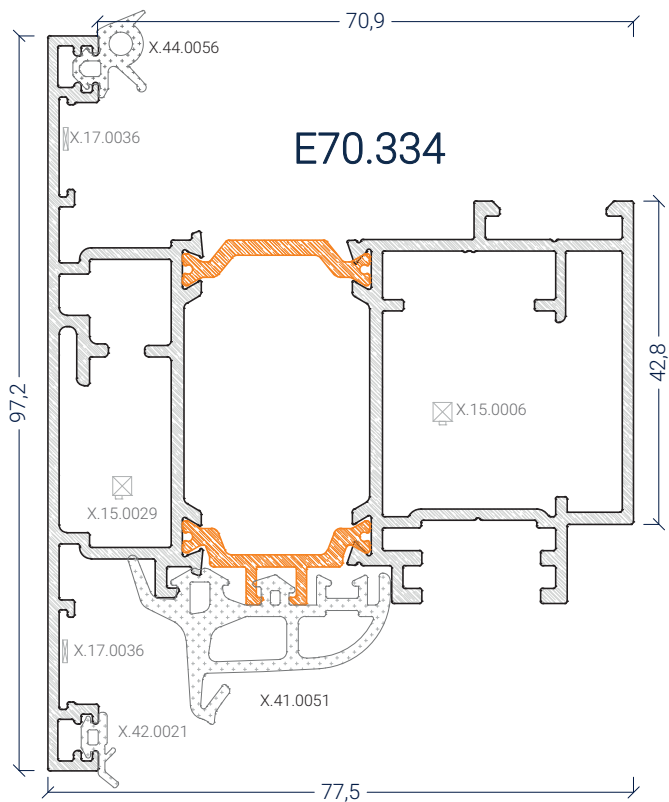
Perfis pivotantes



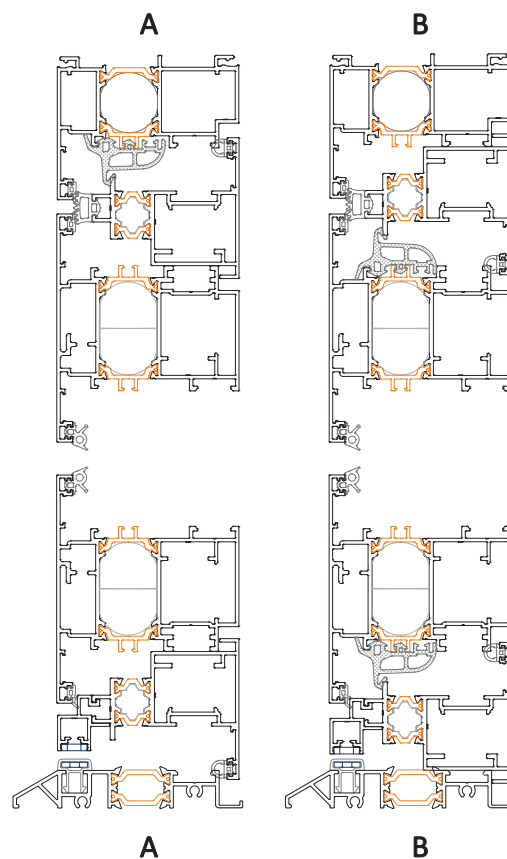
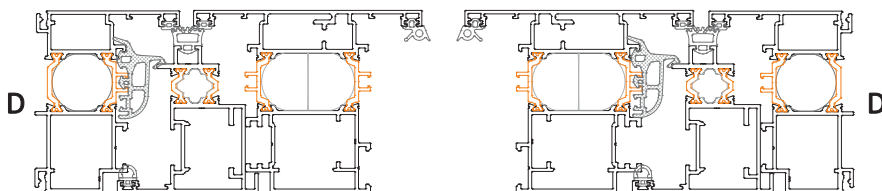
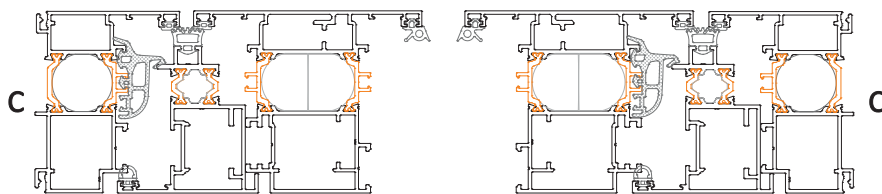
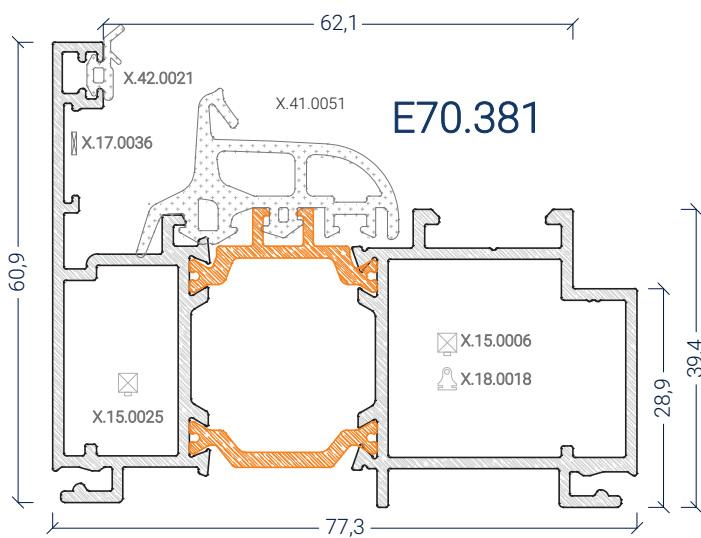
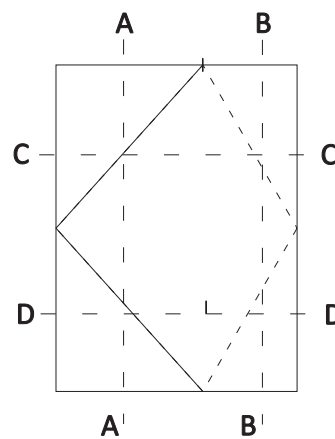
EP70 - Eco/Plus 70



Perfis pivotantes



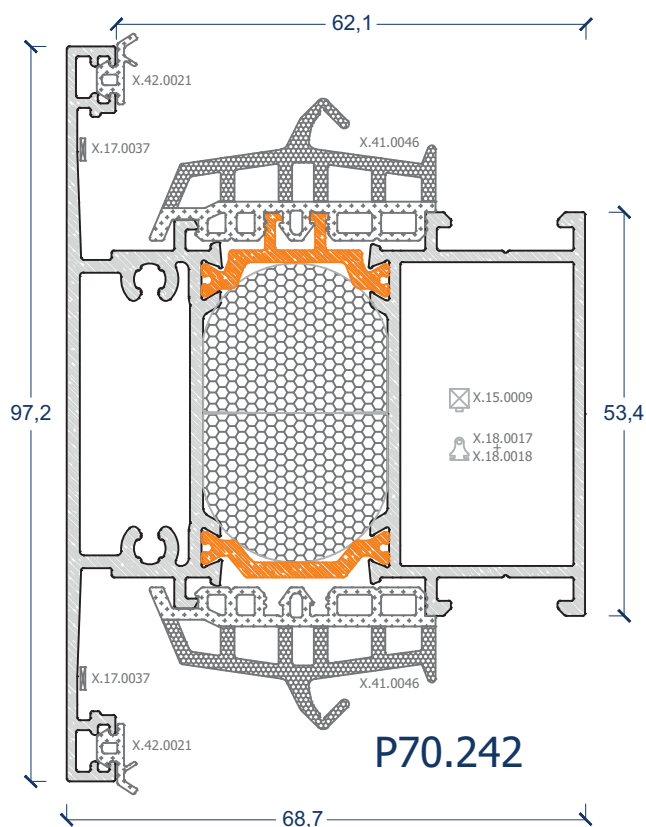
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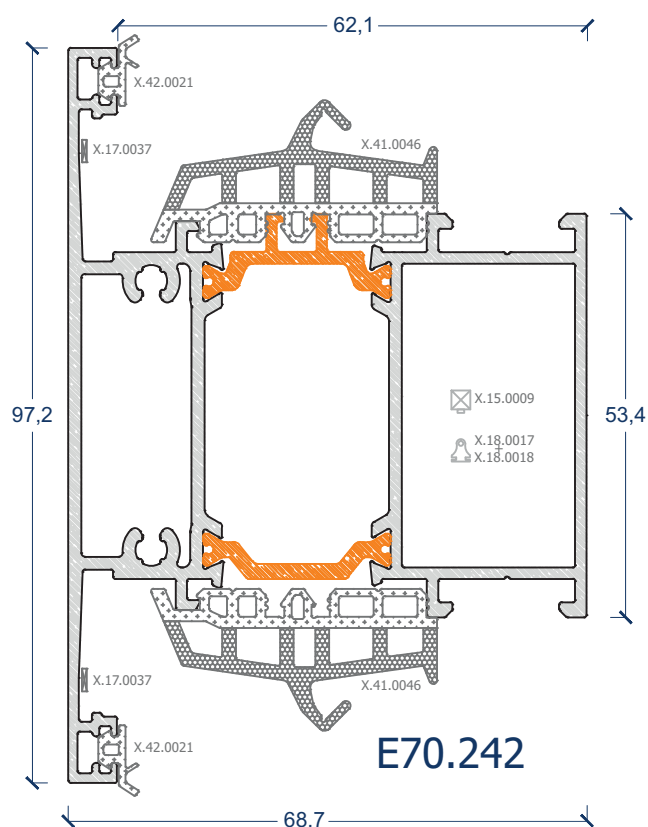
EP70 - Eco/Plus 70



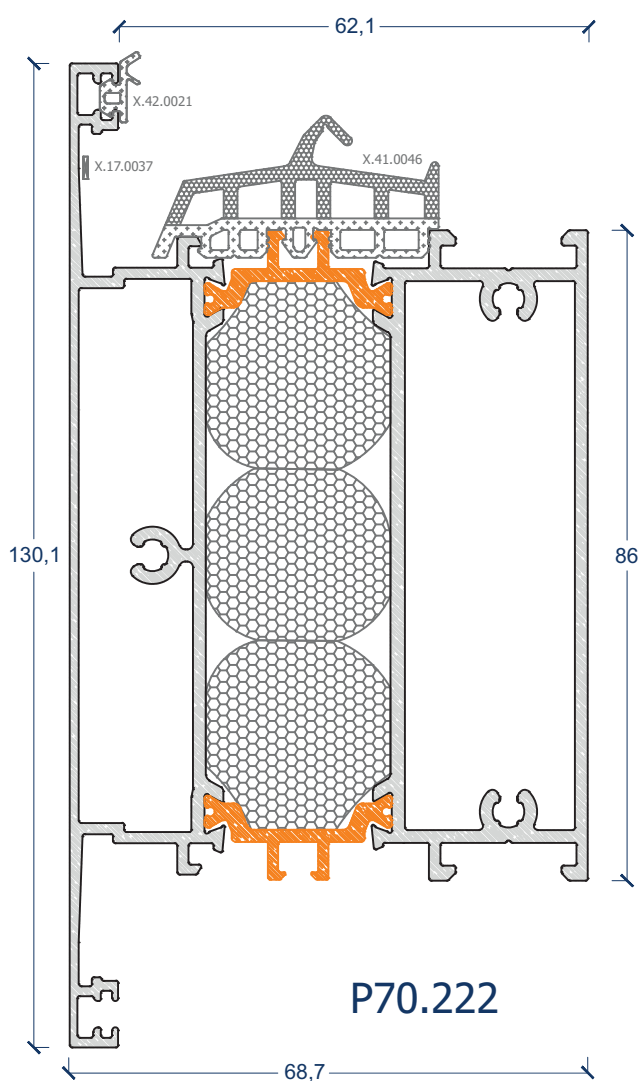
Montantes e travessas



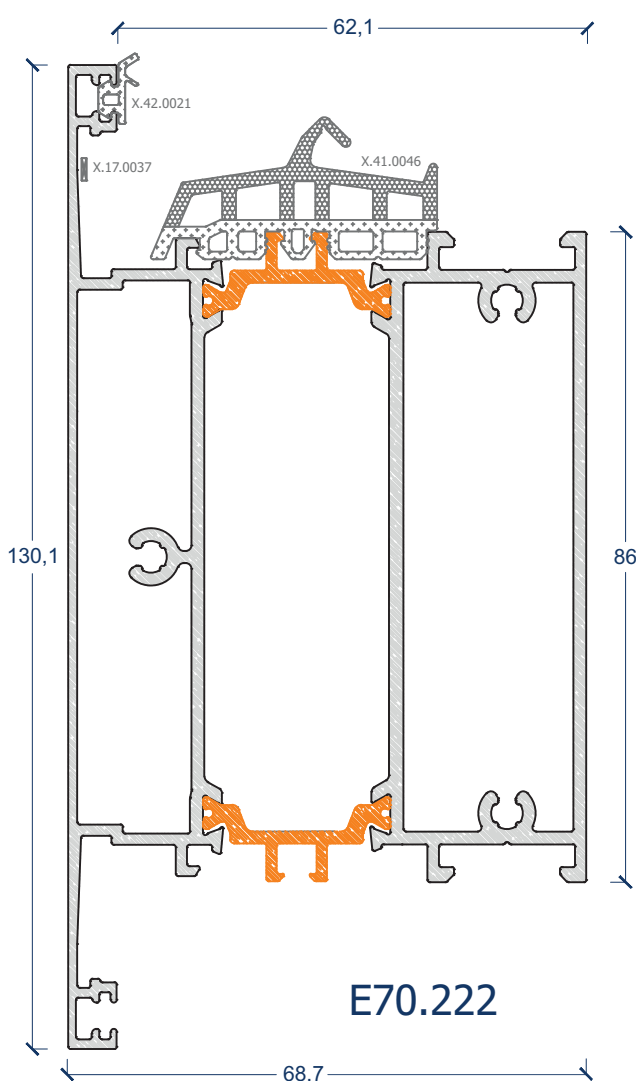
P70.242



E70.242



P70.222

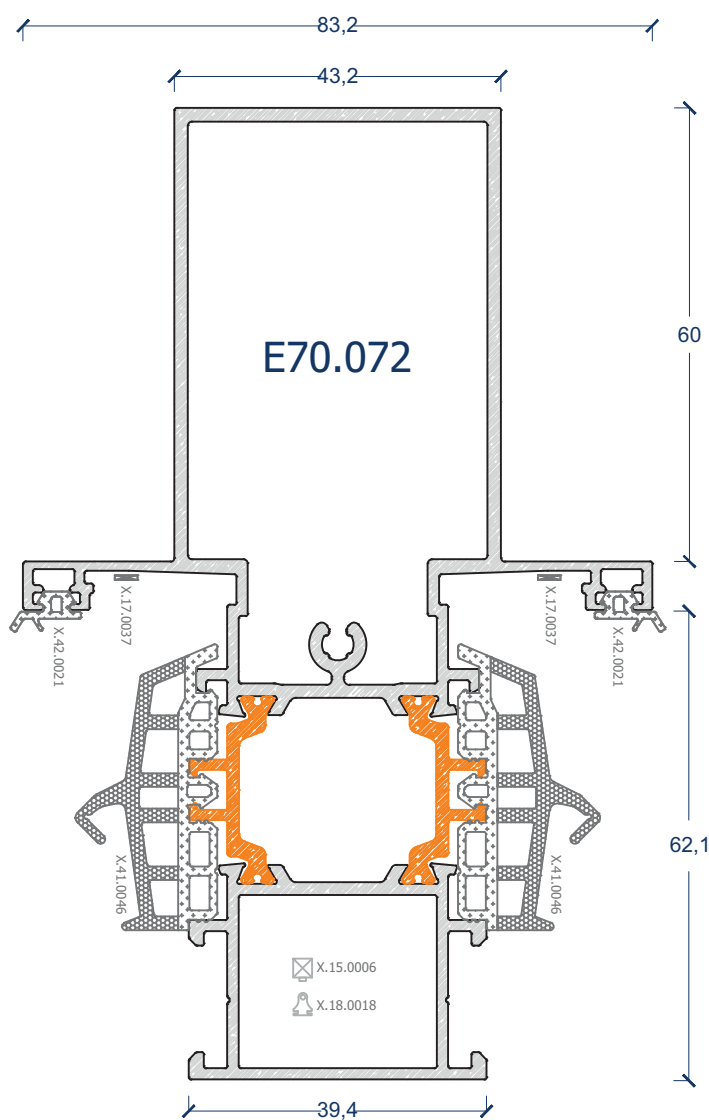
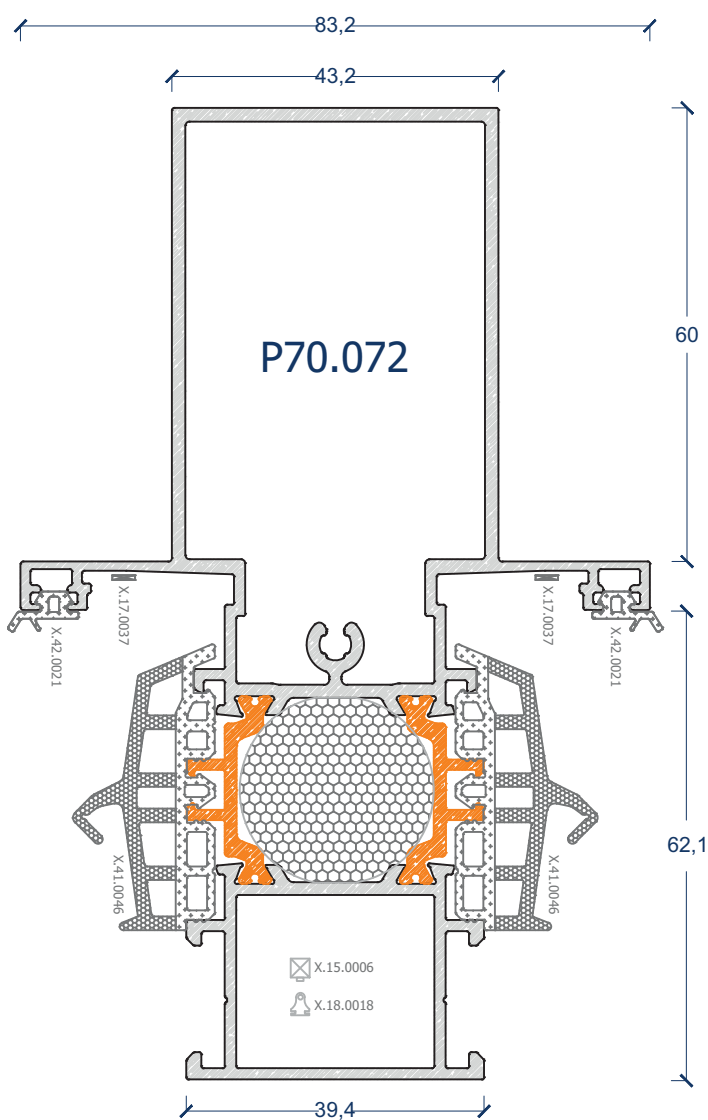
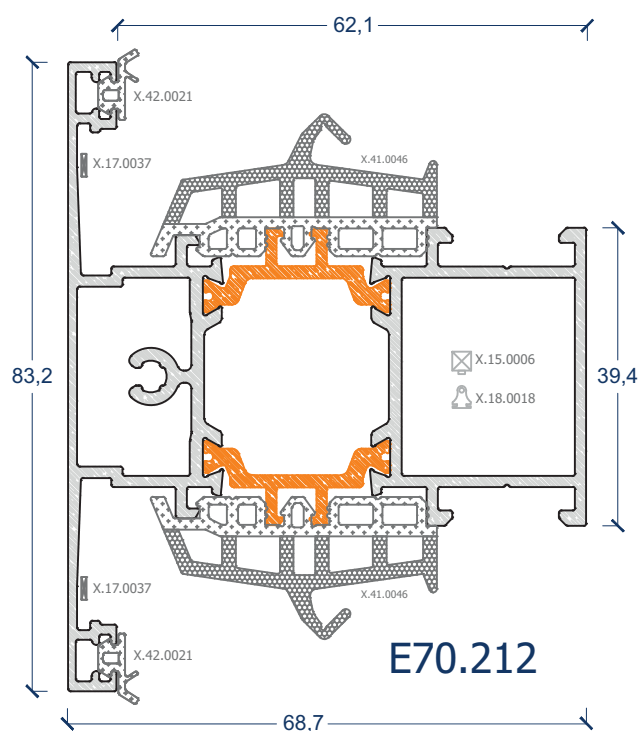
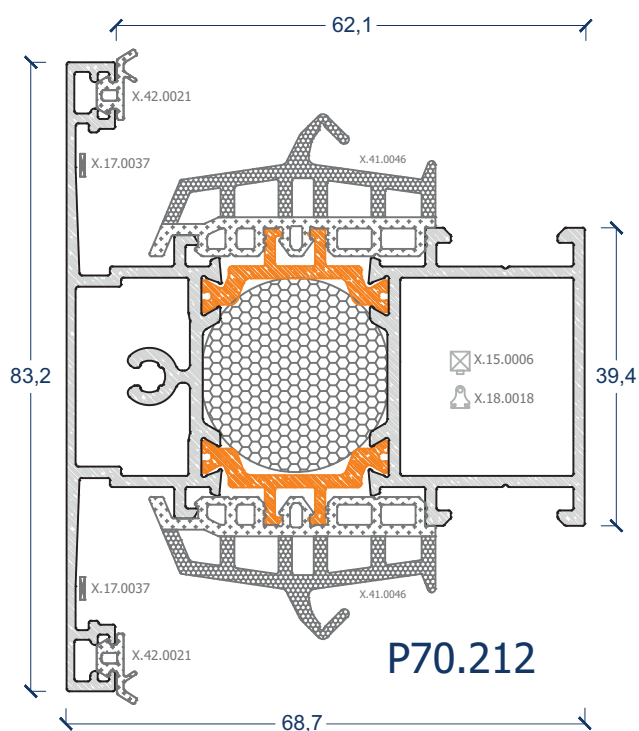


E70.222

EP70 - Eco/Plus 70



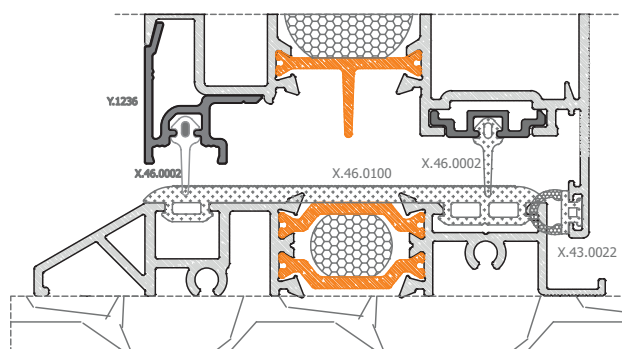
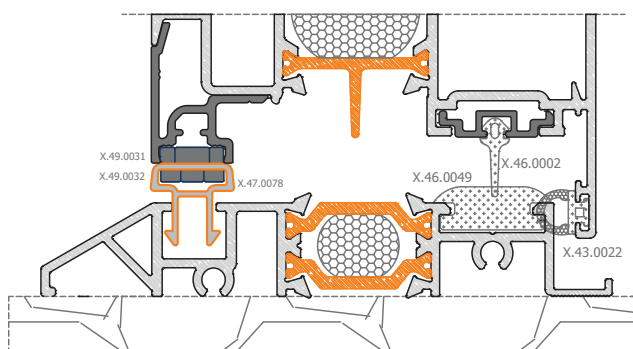
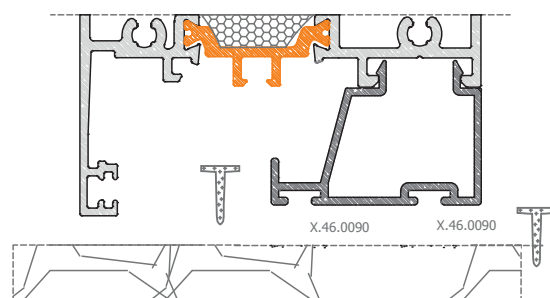
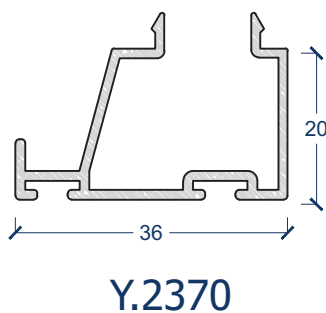
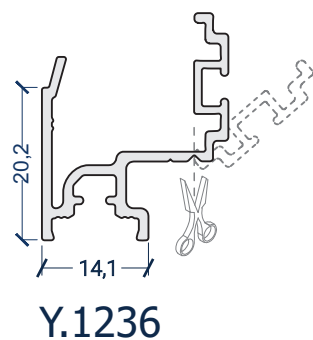
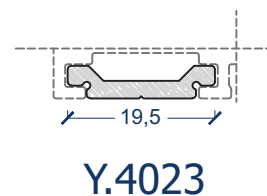
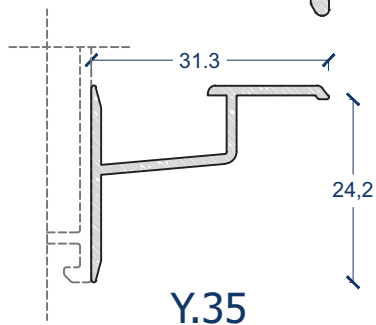
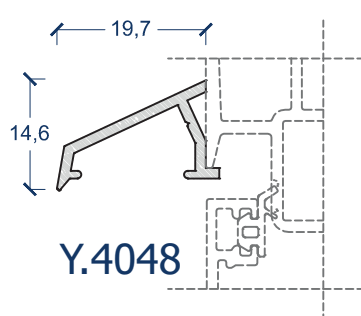
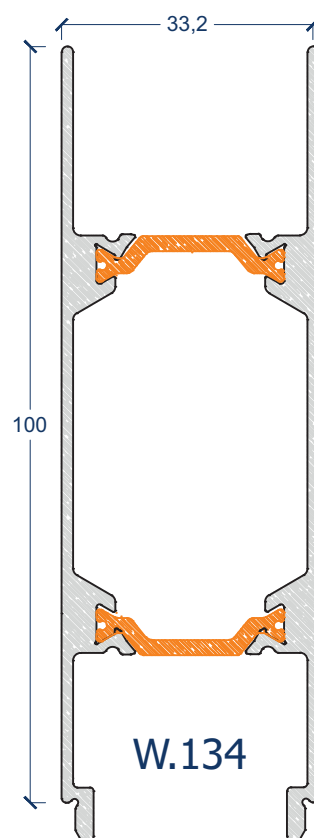
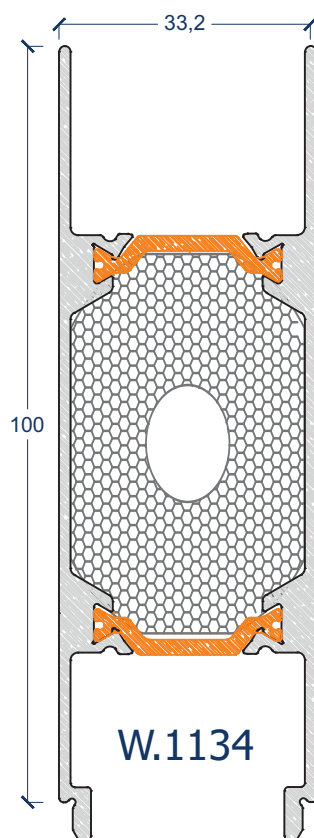
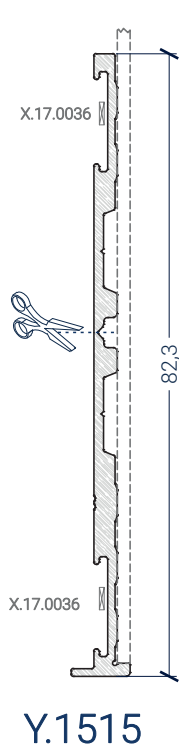
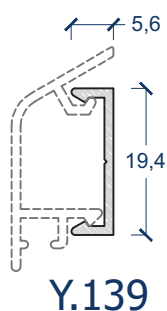
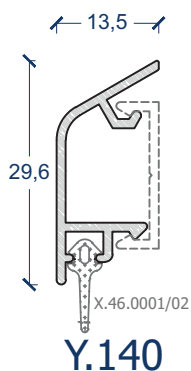
Montantes e travessas



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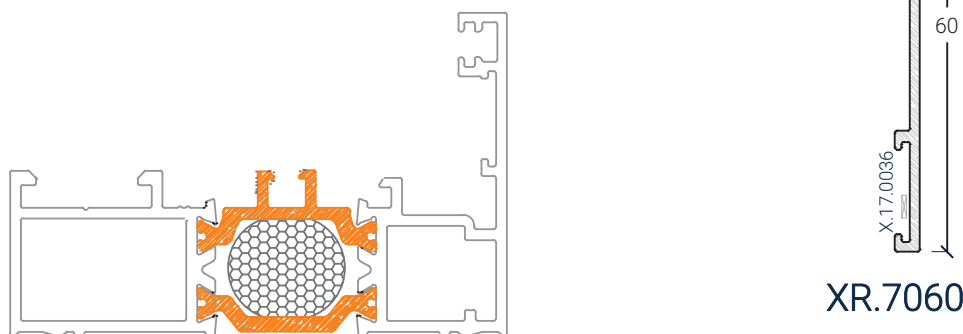
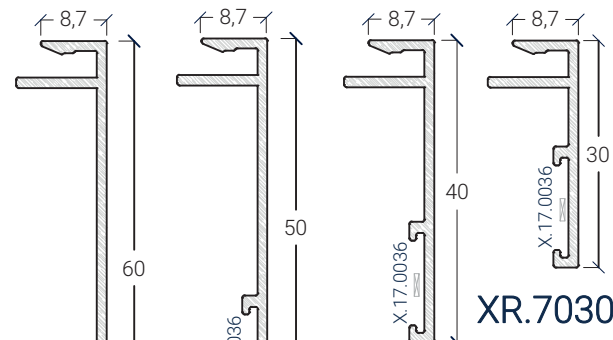
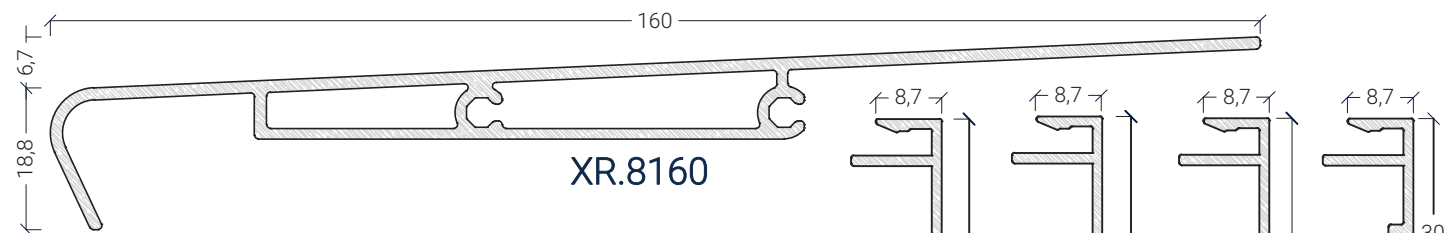
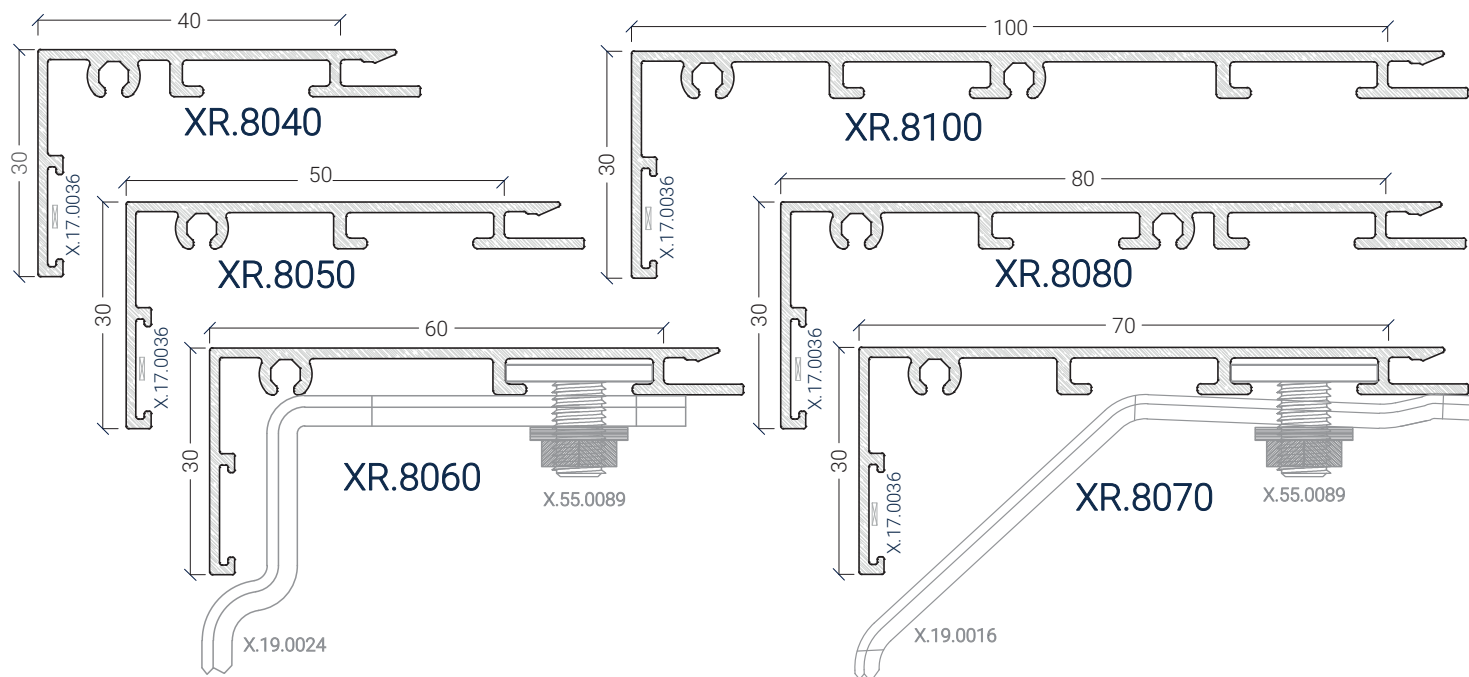
Perfis complementares



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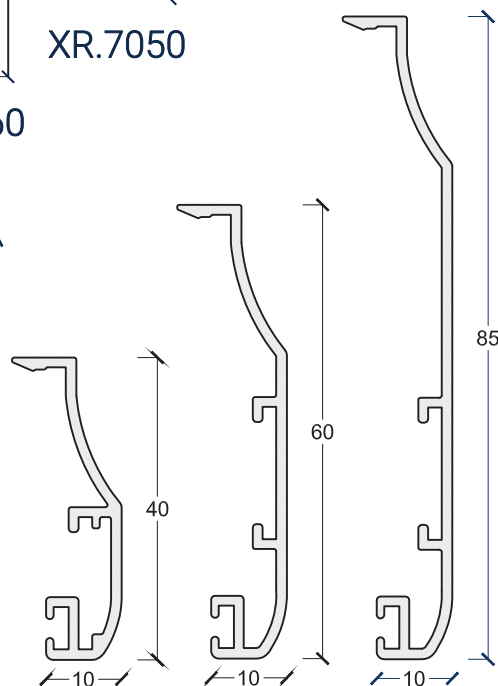
Xarriots



Caixa de Isolamento

Tabela de caixas de isolamento

XR (exterior) / XR (interior)	XR.7030 a 7060	XR.8040	XR.8050	XR.8060	XR.8070	XR.8080	XR.8100
XR.7030 a 7060 e 2040/60/85	70	110	120	130	140	140	170
XR.8040	110	150	160	170	180	180	210
XR.8050	120	160	170	180	190	190	220
XR.8060	130	170	180	190	200	200	230
XR.8070	140	180	190	200	210	210	240
XR.8080	150	190	200	210	220	220	250
XR.8100	170	210	220	230	240	240	270

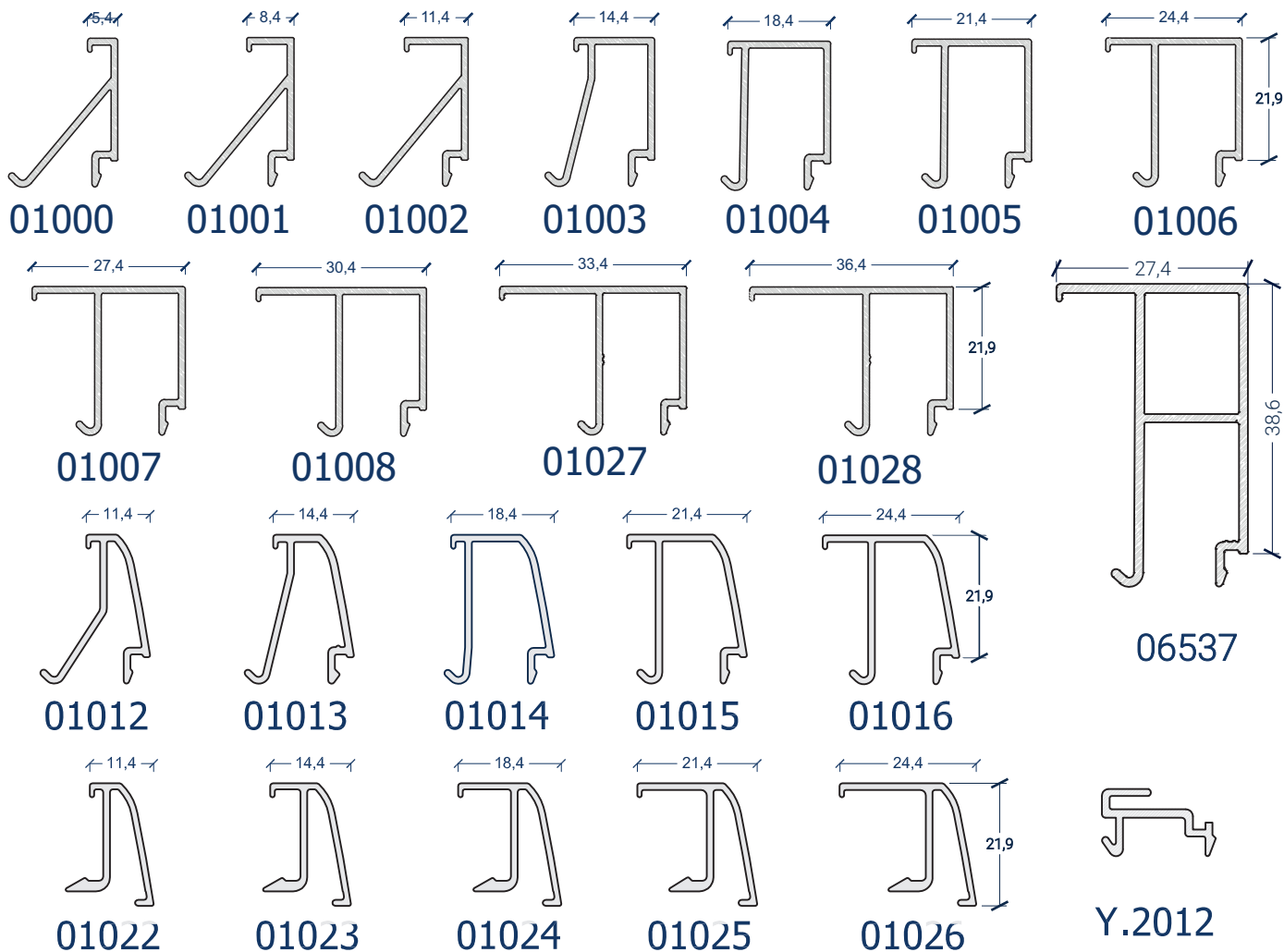


XR.2040 XR.2060 XR.2085

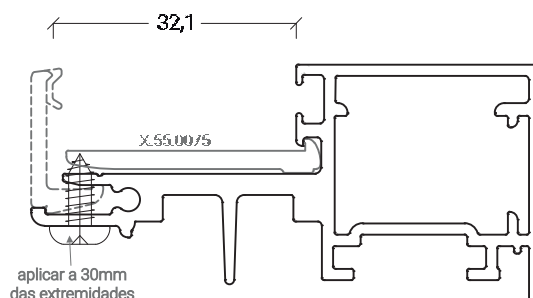
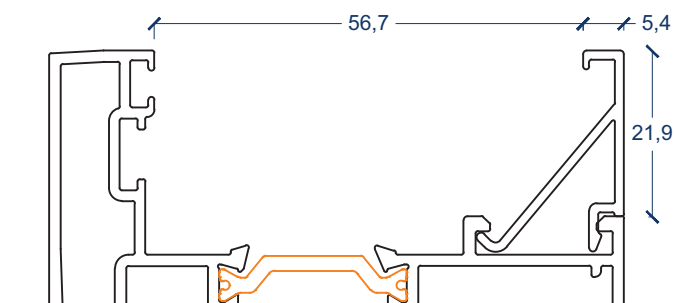
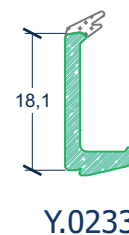
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Bites



Rectos	Curvos	Mola
62,1		
25,7	36,4	01028
28,7	33,4	01027
31,7	30,4	01008
34,7	27,4	01007
37,7	24,4	01006 01016 01026
40,7	21,4	01005 01015 01025
43,7	18,4	01004 01014 01024
47,7	14,4	01003 01013 01023
50,7	11,4	01002 01012 01022
53,7	8,4	01001
56,7	5,4	01000



EP70 - Eco/Plus 70



Acessórios

<p>X.15.0005 Esq. R26 PC8 (23x14)</p>	<p>X.15.0028 Esq. R26 PD5 (10x13)</p>	<p>X.18.0017 União Trav. (22x14)</p>	<p>X.46.0033 Vedante 06045 Pivot</p>	<p>X.50.0131 Topo inversor P70.215</p>	<p>X.50.0035 Topo pingadeira Y.140</p>
<p>X.15.0006 Esq. R26 P8C (23x26)</p>	<p>X.15.0029 Esq. R26 PD5 (10x25)</p>	<p>X.18.0018 União Trav. (22x26)</p>	<p>X.41.0051 Ved. Central Pivotante</p>	<p>X.50.0138 Topo inversor P70.315</p>	<p>X.55.0075 Suporte de vidro f. oculta</p>
<p>X.15.0009 Esq. R26 PC8 (23x40)</p>	<p>X.17.0001 Esq. Alinhamento 1.2x7</p>	<p>X.41.0046 Ved. Central P 70</p>	<p>X.46.0100 Vedante Soleira P70.016 EPDM</p>	<p>X.52.0012 Goteira c/ deflector</p>	<p>X.38.2063 Fechadura de 3 pontos GNS 7715 Alu I 35mm</p>
<p>X.15.0016 Esq. R26 PD8 (23x26)</p>	<p>X.17.0008 Esq. Alinh. (2x9) Parafuso</p>	<p>X.41.0049 Canto Vulcanizado</p>	<p>X.46.0049 Ved. Soleira Magnética</p>	<p>X.52.0051 Topo sol. cond. R6006/26</p>	
<p>X.15.0017 Esq. R26 PD8(23x14)</p>	<p>X.17.0020 Esq. Alinh. (1,7x5)</p>	<p>X.42.0021 Vedante aro fixo</p>	<p>X.49.0031 Magnético superior</p>	<p>X.19.0024 Esq. fixador Xarriots</p>	<p>X.38.2060 Fechadura de prumo GNS 7716 Alu I 35 mm</p>
<p>X.15.0024 Esq. R26 PC5 (10x13)</p>	<p>X.17.0036 Esq. Alinh. (1x12,7)</p>	<p>X.43.0022 Vedante aro móvel</p>	<p>X.49.0032 Magnético inferior</p>	<p>X.19.0016 Esquadro XR Gr</p>	<p>X.38.1070 Cilindro Standard 30x70</p>
<p>X.15.0025 Esq. R26 PC5 (10x25)</p>	<p>X.17.0037 Esq. Alinh. (1,5x20)</p>	<p>X.44.0030 Vedante ext vidros</p>	<p>X.47.0078 PVC Porta-magnético</p>	<p>X.55.0089 Fixador Esquadro XR</p>	<p>X.38.1077 Cilindro Segurança 30x70</p>
<p>X.15.0026 Esq. R26 PC5 (10x10)</p>	<p>X.17.0071 Esq. Alinh. XR (1,8x18)</p>	<p>X.44.0056 Ved. exterior vidros EPDM</p>	<p>X.46.0001 Vedante da pingadeira EPDM</p>	<p>X.46.0002 Vedante de pingadeira EPDM</p>	<p>X.46.0090 Vedante de pingante</p>

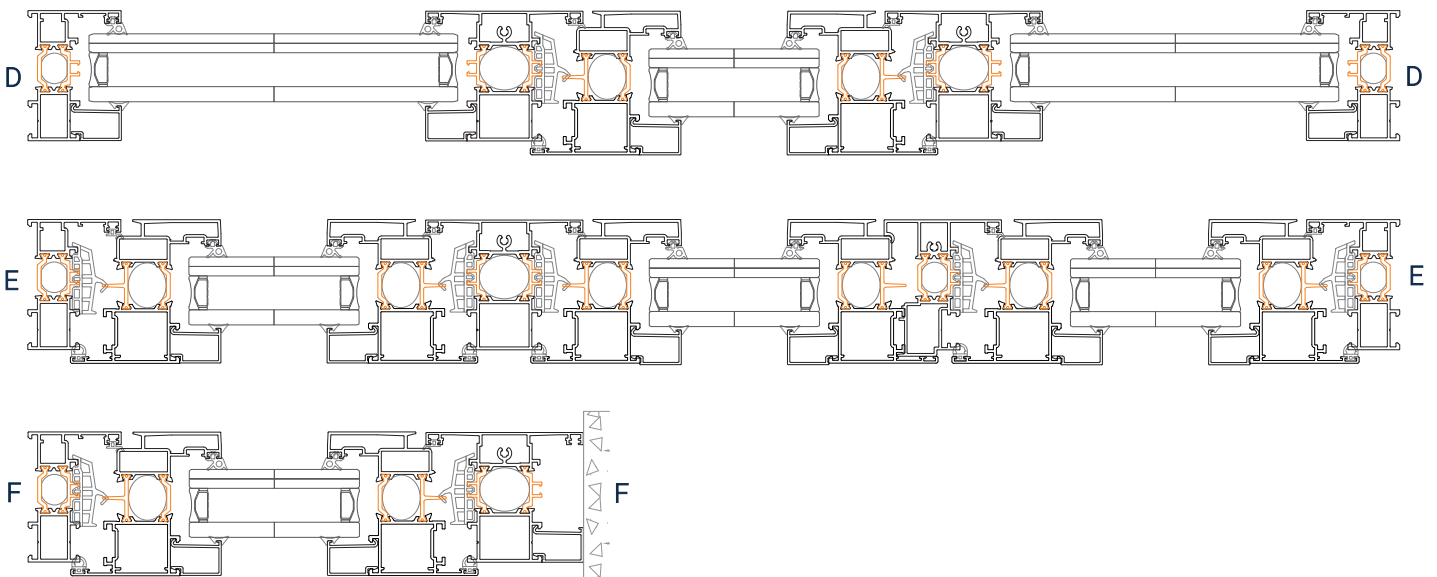
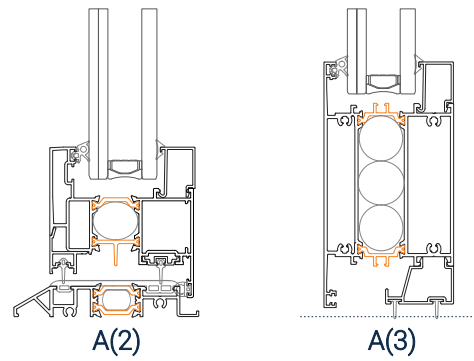
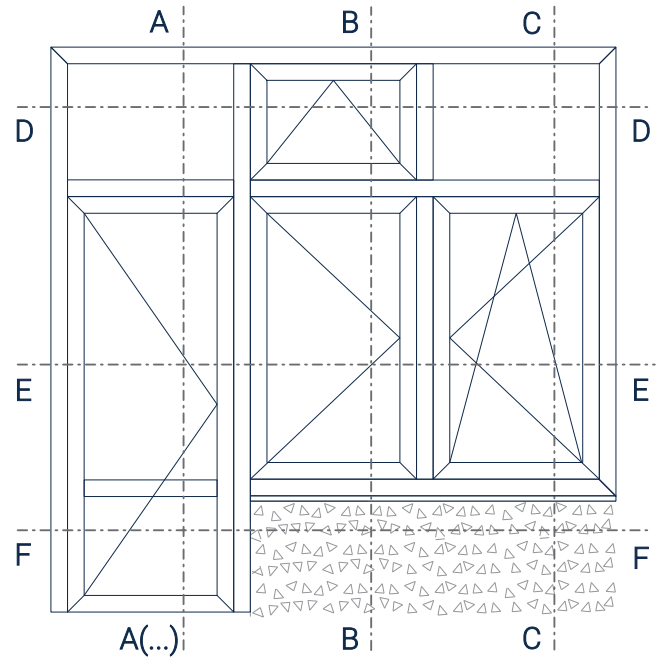
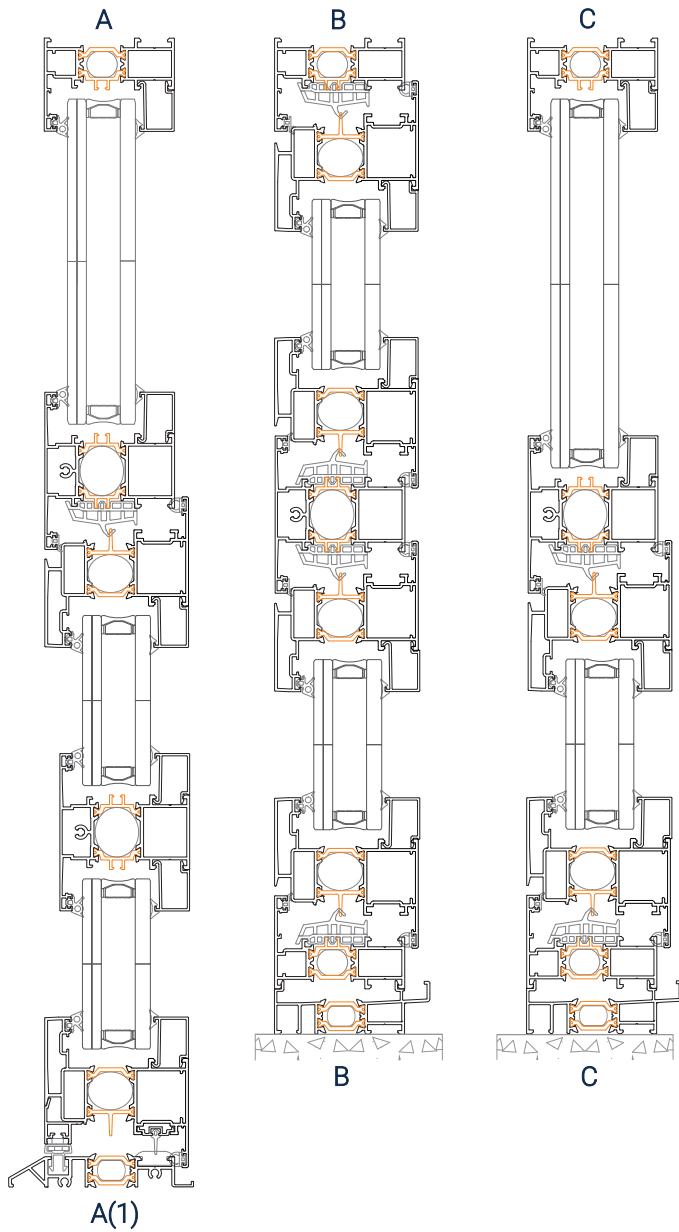
Acessórios de manobra:

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

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Pormenores de construção

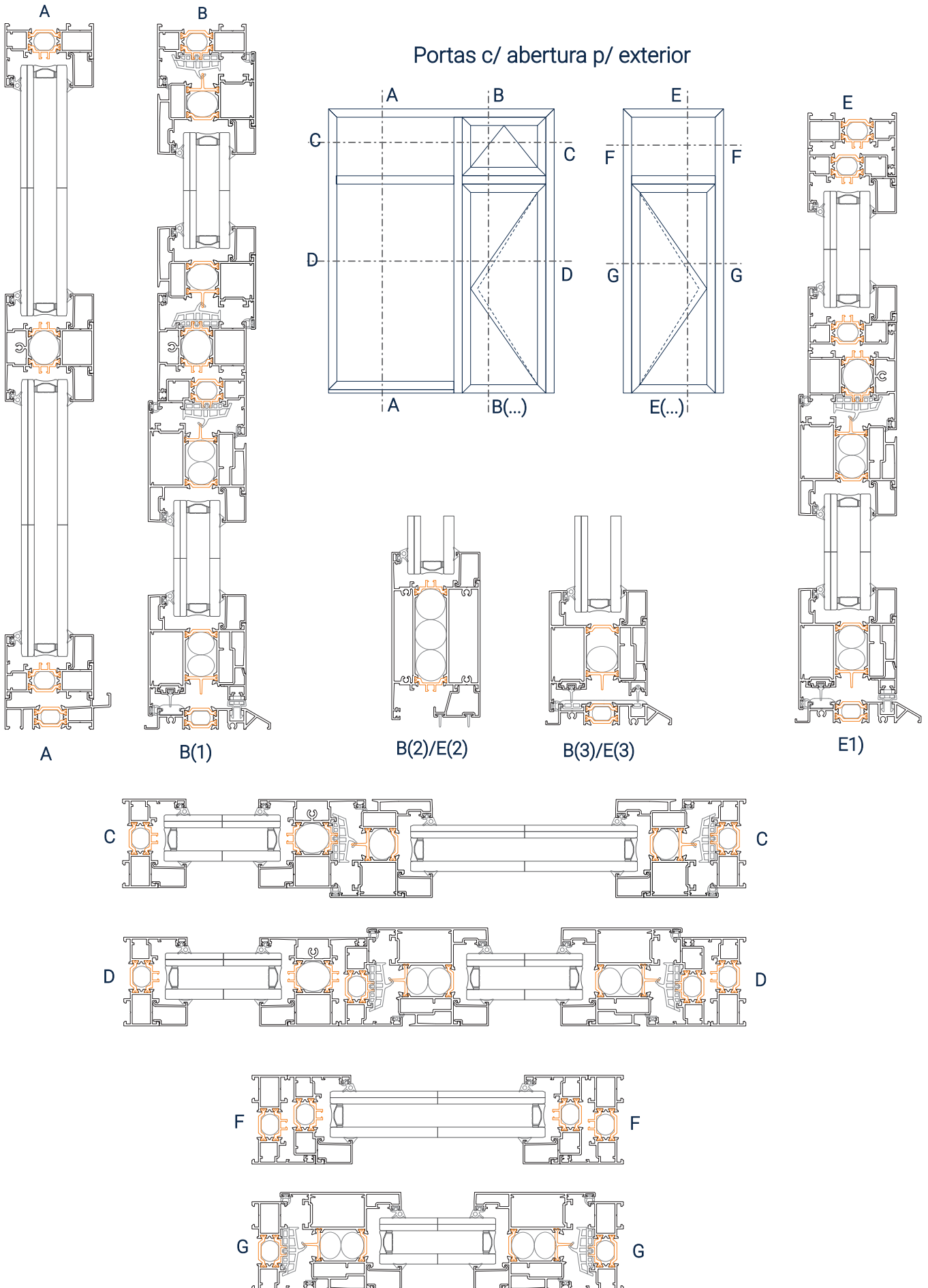


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Pormenores de construção

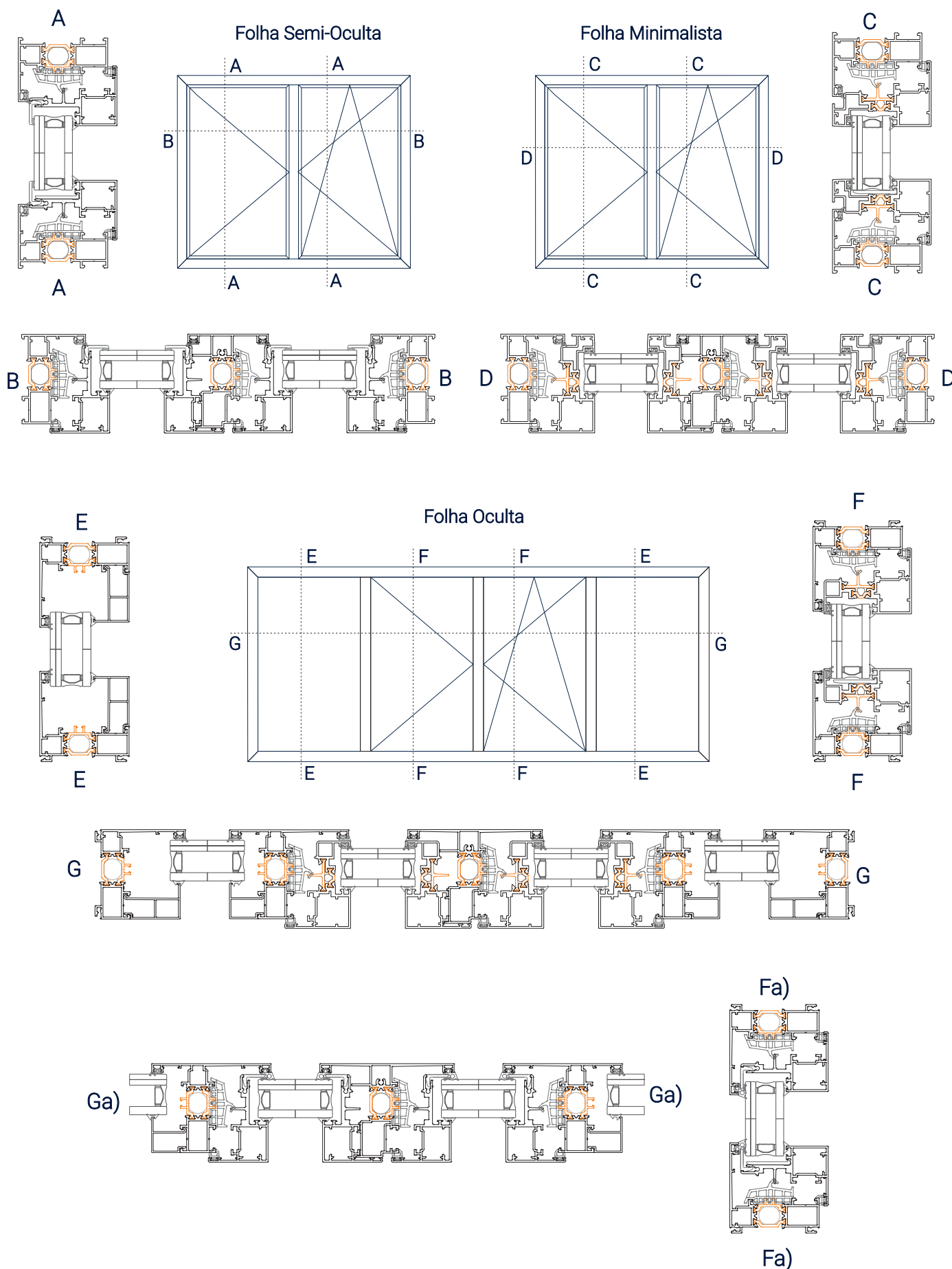
Portas c/ abertura p/ exterior



EP70 - Eco/Plus 70



Pormenores de construção

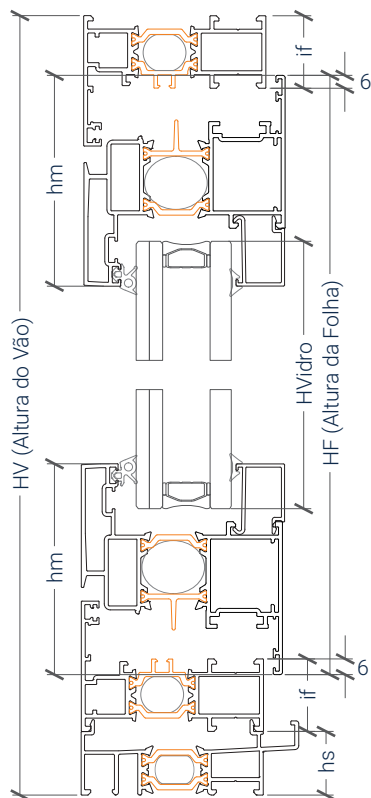


a) - Com móvel P70.333

EP70 - Eco/Plus 70

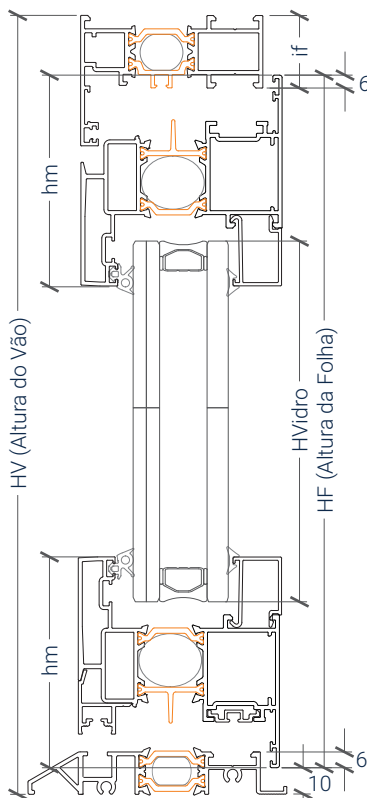


Medidas de corte



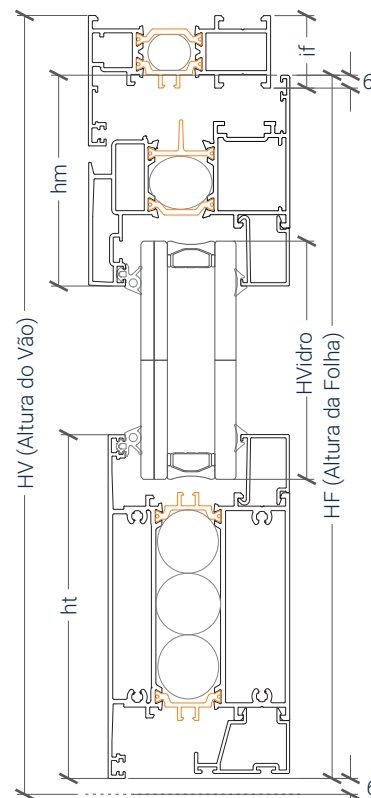
$$HF = (HV+12) - (2x\ if +\ hs)$$

$$H\text{Vidro} = HF + 34 - 2x\ hm$$



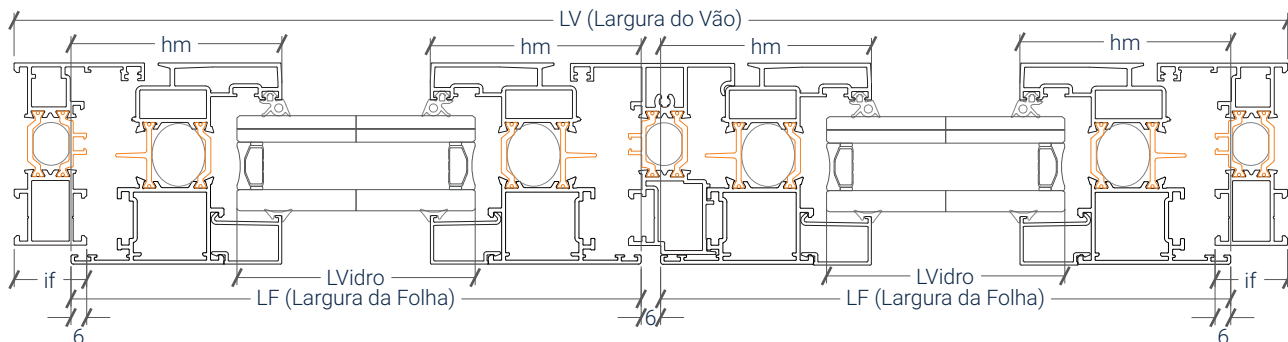
$$HF = HV - if - 4$$

$$H\text{Vidro} = HF + 34 - 2x\ hm$$



$$HF = HV - if$$

$$H\text{Vidro} = HF + 34 - (hm + ht)$$

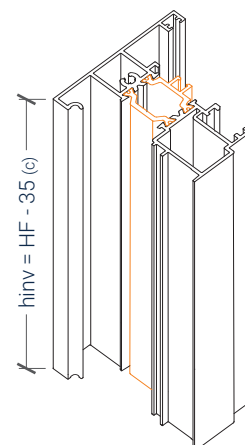
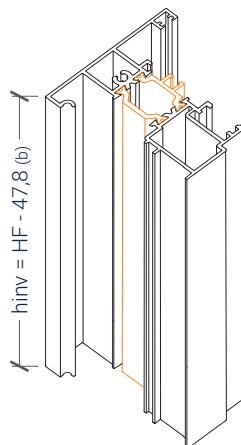
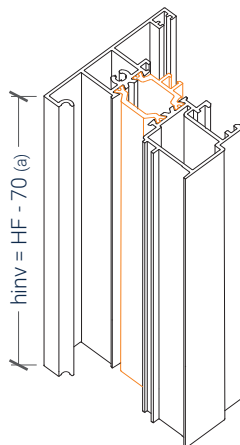


$$LF = \frac{(LV+12 - 2x\ if) - ((nF - 1)x\ 6)}{nF}$$

$$L\text{Vidro} = LF + 34 - 2x\ hm$$

LEGENDA:

- HV - Altura do Vão
- LV - Largura do Vão
- HF - Altura da Folha
- LF - Largura da Folha
- nF - N° de folhas
- 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
- hin - Altura do inversor central



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