



01

SIGMA

sistema de correr RPT

julho . 2026 - Revisão 1 (R1)



Extrusel

Sigma é um **sistema minimalista** com rotura de ponte térmica vertical.

As vistas de alumínio reduzidas permitem responder à **arquitetura contemporânea** criando uma ligação desobstruída com o exterior e possibilitando ocultar perimetralmente o aro fixo através de três sistemas: A **Sigma Clássica** com soleira embutida tradicional, a **Sigma Plus** com soleira oculta a partir de um perfil de alumínio e ainda a **Sigma Max** com soleira oculta no pavimento utilizado.

Sigma permite **envidraçamentos de 12 m²** e **vidros até 600 Kg**.



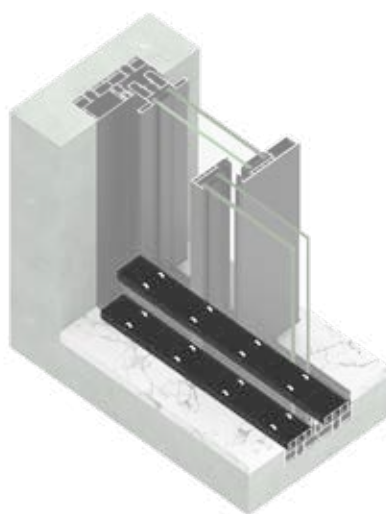
Sigma Clássica



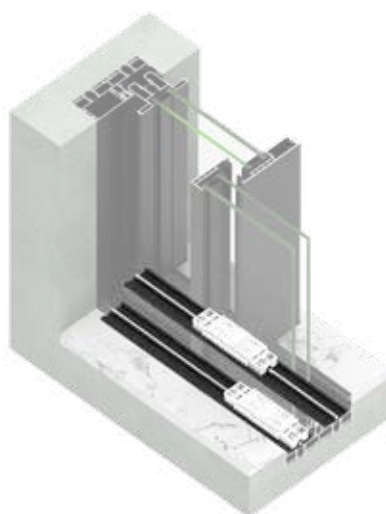
Sigma Plus



Sigma Max



Porta Rolamentos

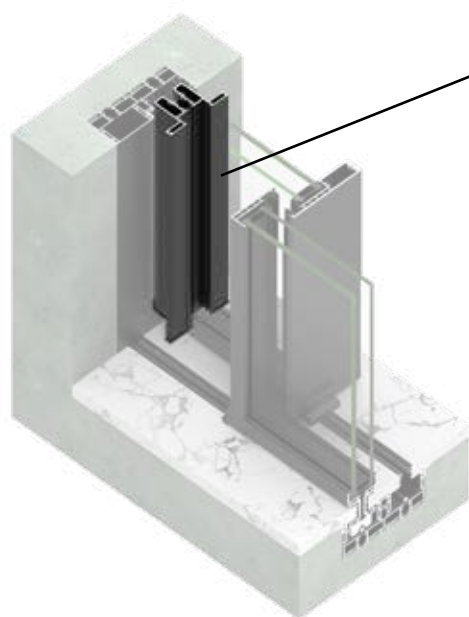


Rodízios

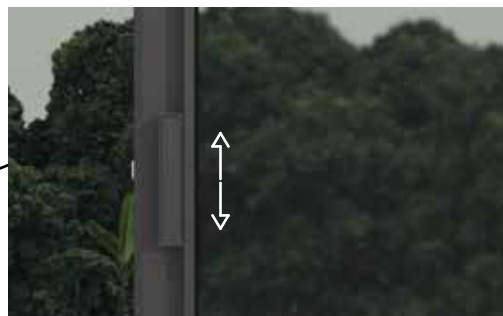
A **suspensão e movimentação das folhas** ocorre entre duas opções:

Combinando a utilização de duas calhas de latão nas folhas e **porta rolamentos no aro fixo**. Estes porta rolamentos podem assumir diferentes distâncias entre rolamentos dependendo do peso exigido;

Aplicação de **rodízios na folha** que deslizam sobre um varão de inox, limitando o peso por folha a 300Kg.



Perfil Lateral c/ Aba

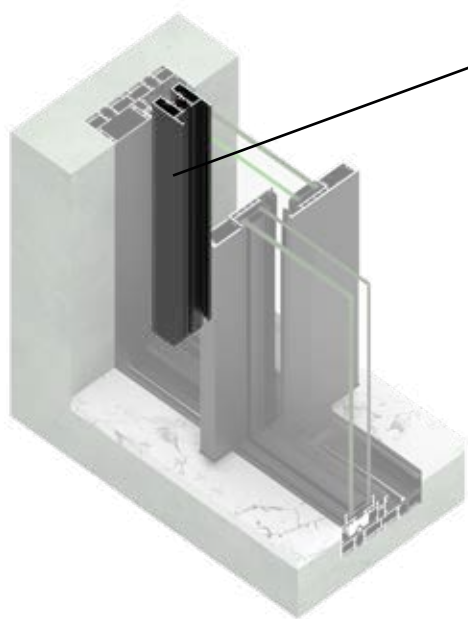


Fecho c/ Afinação

O **modo de fecho** varia de duas maneiras face a escolha do perfil lateral:

O **perfil lateral com aba** permite a integração de um fecho, com tratamento de superfície à cor, que fica quase invisível integrando-se na estética do sistema. O fecho é compatível com uma ferragem multiponto que **permite afinação**;

O **perfil lateral reto** assume um puxador de linhas minimalistas, também permite tratamento de superfície à cor e a ferragem multiponto neste sistema de fecho **não permite afinação**.



Puxador Minimalista

Perfil Lateral Reto

02

CARACTERÍSTICAS TÉCNICAS

sistema de correr RPT

B.250



Aplicação

Construção Nova / Reabilitação



Tipologias Abertura



Peso máximo* | abertura manual

300 kg p/ folha



Peso máximo* | abertura motorizada

300 kg p/ metro
600 kg p/ folha



Área máxima | folha

12 m²



Rodízios

300 kg p/ folha



Porta rolamentos | 100 x 100

220 kg p/ metro



Porta rolamentos | 50 x 50

300 kg p/ metro



Vista superior | inferior

17 mm



Vista lateral

35 mm



Vista central

25 mm



Enchimento máximo

38 mm

* Outras tipologias/pesos contatar o Departamento Técnico.



Desempenho Acústico

Boletim Ensaio ACL 312/24

37 dB



Coeficiente Transmissão Térmica

Vidro Ug 1.0W /m²K⁻¹**1.3**
EN ISO 10077-1

Vidro Ug

2.8W /m²K⁻¹1.8W /m²K⁻¹1.0W /m²K⁻¹

Janela Uw

3.0W /m²K⁻¹2.1W /m²K⁻¹1.4W /m²K⁻¹

Ensaio Tipo Inicial

Permeabilidade ao ar

(pressão máx. ensaio / EN12207)

Classe **4**

Estanquidade à água

(EN12208)

Classe **8A**

Resistência ao vento

(EN12210)

Classe **C4****Boletim de ensaio: CXL 013/24. Organismo notificado nº 2211**

Dimensão: 3090 mm x 2280 mm. Janela composta por duas folhas de correr.



Perfis Alumínio

Liga EN-AW 6060

EN 573-3 | EN 755-2
EPM T6

PA 6.6 GF 25

25%fibra de vidro
34 mmComprimento Nominal **6500 mm**Espessura Nominal **1.5 mm** $R_{p0.2} \geq 120 \text{ MPa}$ $R_m \geq 160 \text{ MPa}$ $A_{50mm} \geq 6\%$ 

Tratamentos

Anodização

Acabamento Acetinado e Polido

Lacagem

Acabamento mate | brilhante | acetinado | texturado

Lacagem Decorativa

Efeito Madeira

Perfil	Ref.	Área		Inércia		Pág.	Perfil	Ref.	Área		Inércia		Pág.
		Anod.	Polir	lxx	lyy				Anod.	Polir	lxx	lyy	
	B.250.010	90,36	35,10	26,77	226,21	26		B.250.130	95,07	29,55	27,46	241,71	28
	B.250.020	21,54	6,20	1,58	11,06	31		B.250.140	55,56	11,50	13,99	37,98	29
	B.250.030	45,46	27,80	49,06	23,86	32		B.250.150	46,94	22,60	12,67	30,68	29
	B.250.041	20,51	10,40	15,04	1,00	33		B.250.160	65,12	21,40	18,98	91,48	34
	B.250.051	30,12	20,00	86,54	5,42	33		B.250.170	66,71	18,50	32,03	71,42	35
	B.250.060	42,26	17,00	14,12	14,21	36		B.250.180	42,74	-	4,84	25,51	41
	B.250.070	35,56	17,30	13,61	17,82	32		B.250.190	74,04	-	7,03	200,87	42
	B.250.080	40,51	22,55	19,39	31,48	32		B.250.200	107,34	-	9,21	659,61	42
	B.250.090	47,66	21,00	29,51	14,34	37		B.250.210	72,49	-	4,80	190,44	43
	B.250.100	134,58	47,60	40,92	765,51	27		B.250.220	74,11	-	6,97	194,51	43
	B.250.110	22,30	6,20	1,61	9,83	31		B.250.230	39,26	-	2,59	21,39	41
	B.250.120	51,25	17,05	13,34	34,16	28		B.250.240	49,50	12,60	9,22	226,03	44

Unidades: Área Anodização (dm²/m)
Área Polimento (dm²/m)
Inércia (cm⁴)

Produto
4

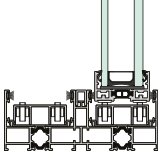
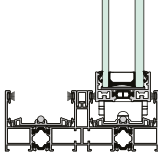
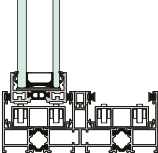
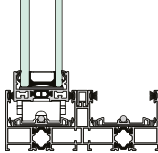
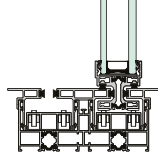
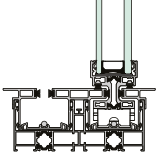
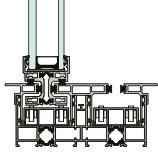
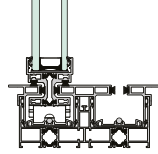
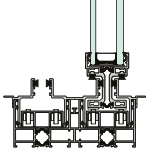
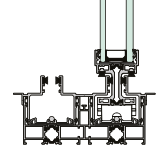
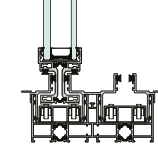
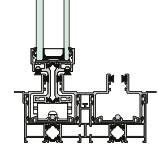
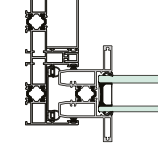
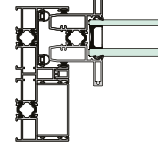
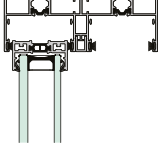
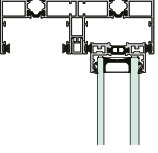
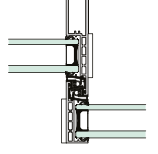
Características Técnicas
12

Perfis
24

Seções
44

Perfil	Ref.	Área Anod.	Polir	Inércia Ixx	Inércia Iyy	Pág.	Perfil	Ref.	Área Anod.	Polir	Inércia Ixx	Inércia Iyy	Pág.
	B.250.001	22,74	-	0,60	4,84	38		B.250.018	12,43	3,70	0,50	0,12	44
	B.250.002	14,47	6,60	0,04	2,41	38		F.010.139	5,89	2,00	0,01	0,16	35
	B.250.003	53,89	-	36,82	57,30	40		B.250.023	18,98	4,00	2,04	1,51	36
	B.250.004	25,94	6,00	0,36	14,88	40		B.250.024	26,56	6,20	3,70	9,71	36
	B.250.005	30,46	5,00	1,36	20,76	40		B.250.025	20,94	0,50	2,34	1,70	37
	B.250.013	23,89	5,60	2,34	10,74	38		B.250.026	35,64	1,00	4,53	11,52	37
	B.250.014	7,25	1,00	0,11	0,08	38		B.095.214	31,04	3,00	1,33	15,78	39
	B.250.015	27,12	4,40	2,90	8,20	39		B.095.215	16,83	6,50	0,09	4,51	39
	B.250.016	26,45	11,90	0,60	52,37	44		B.095.216	27,96	11,20	5,95	8,71	39
	B.250.017	12,01	0,60	0,96	0,87	44		D.012.013	15,00	15,00	2,96	9,01	39

Unidades: Área Anodização (dm²/m)
Área Polimento (dm²/m)
Inércia (cm⁴)

Corte Construtivo	Coef.Trans.Térmica	Corte Construtivo	Coef.Trans.Térmica
	4,46		4,70
	5,23		6,30
	4,87		5,02
	5,70		5,97
	4,40		4,90
	5,10		5,60
	3,70		3,80
	3,30		3,30
	7,00		

Unidades: (Wm²/K)

Radiosity Method ISO 10077-2 : 2017 - FLIXO 18 PRO ®

Produto
4

Características Técnicas
12

Perfis
24

Secções
44

[illegible]

Note

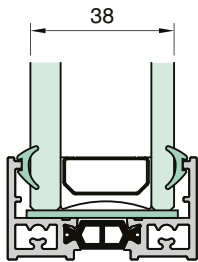
Nesta página são apresentadas as tabelas com o enchimento/dimensão máxima de vidro admissível por solução.

Na calha os rolamentos podem assumir diferentes distâncias entre eles mediante o peso das folhas.

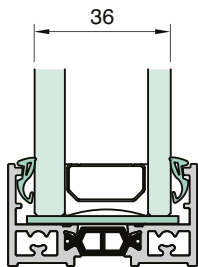
A altura da folha não pode ser 2,5 vezes superior à largura da mesma ($H \leq 2,5L$)

Utilização de Vedante de Cunha

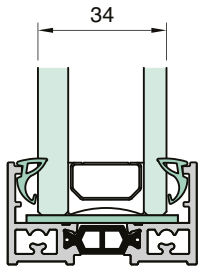
Utilização de Silicone Estrutural



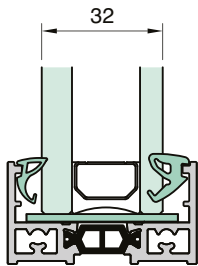
G.001.162



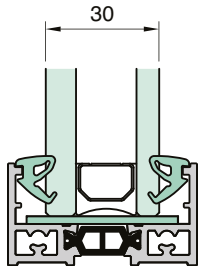
G.001.104



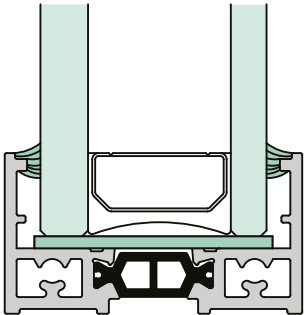
G.001.105



G.001.105
+
G.001.161

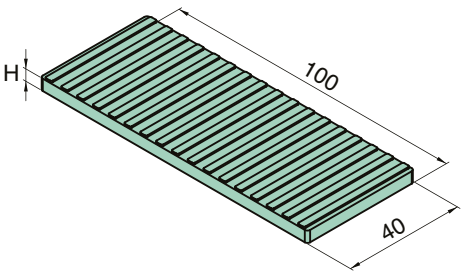


G.001.161

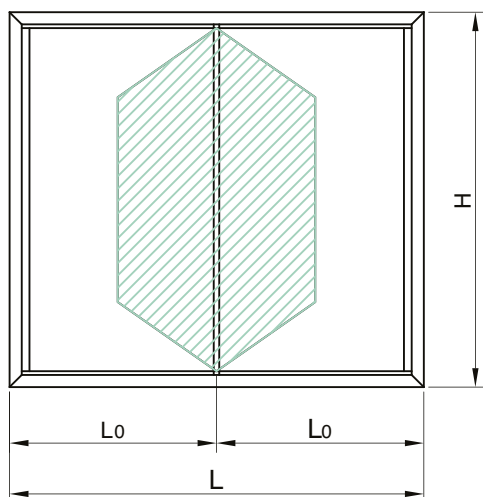


Calços de Vidro

- G.015.033 - H = 2 mm
- G.015.034 - H = 3 mm
- G.015.035 - H = 4 mm



Nota
Para acomodar o vidro é aconselhado o silicone estrutural para vãos mais expostos.



Descrição	Unidade
L Dimensão do vão	m
L ₀ Largura da folha	m
H Altura do vão	m
F Flecha máxima	mm
P Pressão de vento	Pa
E Modulo elástico	N/mm ²
I ₀ Inercia mínima	cm ⁴

Carga Trapezoidal

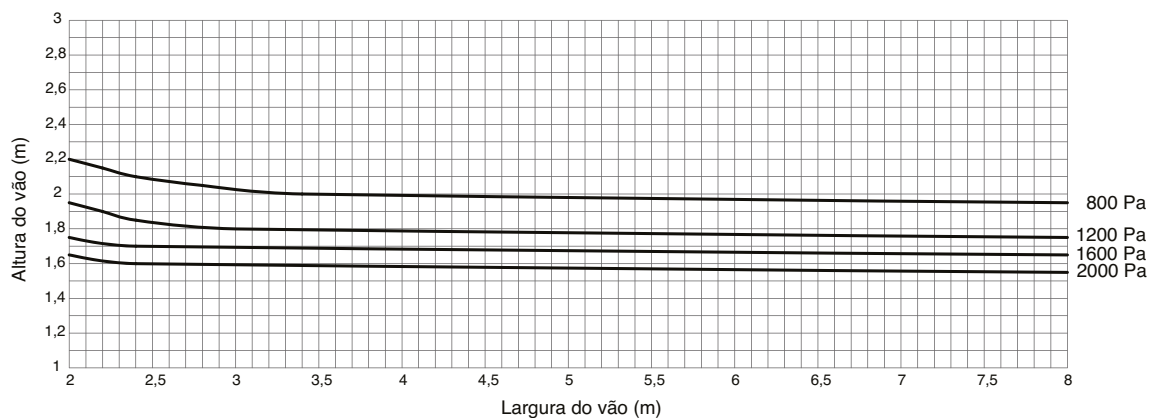
$$I_0 = \frac{P \cdot L_0 \cdot H^4 \cdot [5 - 4 \cdot (L_0/2L)^2]^2}{1920 \cdot E \cdot F}$$

Carga Triangular

$$I_0 = \frac{P \cdot H^5}{120 \cdot E \cdot F}$$

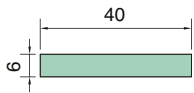
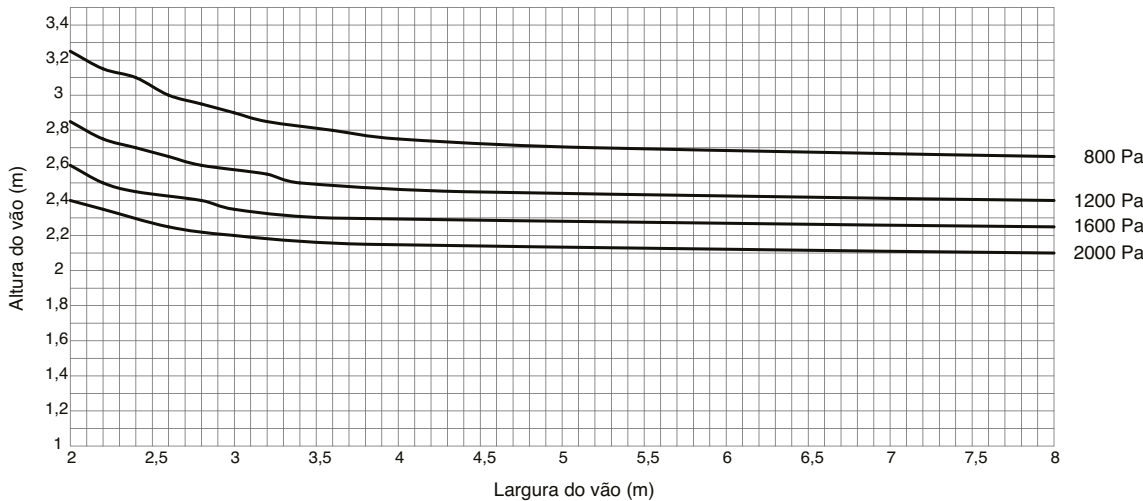


Referência	Inércia I _{xx} (cm ⁴)	Inércia Conjunta (cm ⁴)
B.250.041	15,04	30,08
B.250.041	15,04	



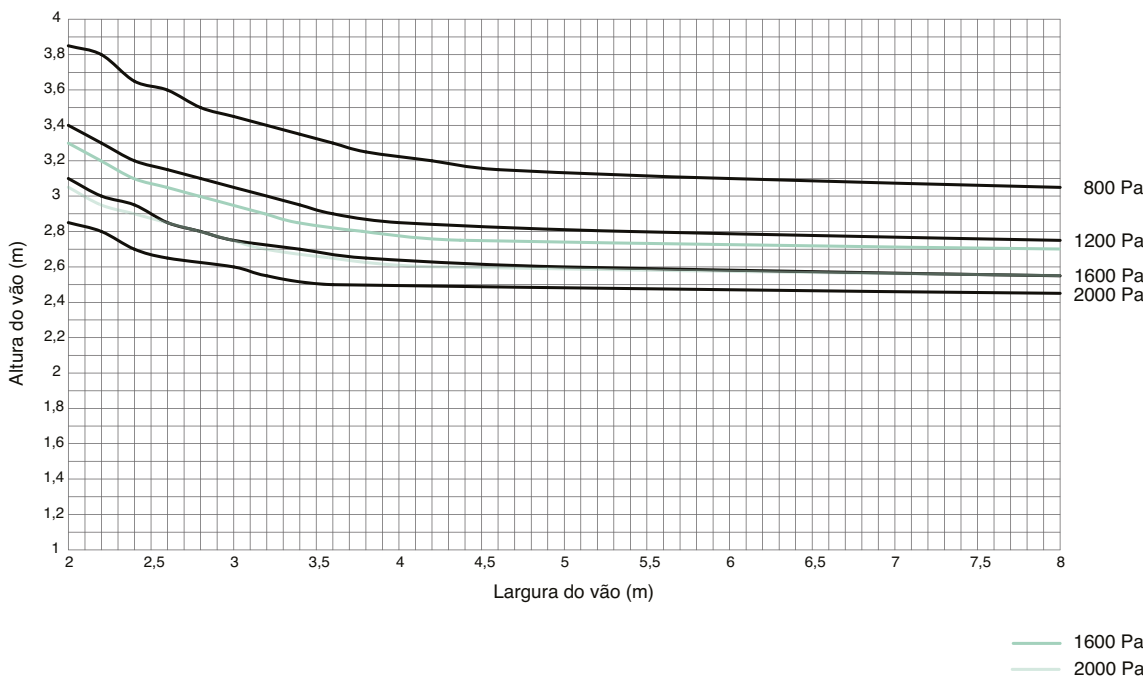


Referência	Inércia Ixx (cm ⁴)	Inércia Conjunta (cm ⁴)
B.250.041	15,04	101,58
B.250.051	86,54	



Reforço - barra de aço

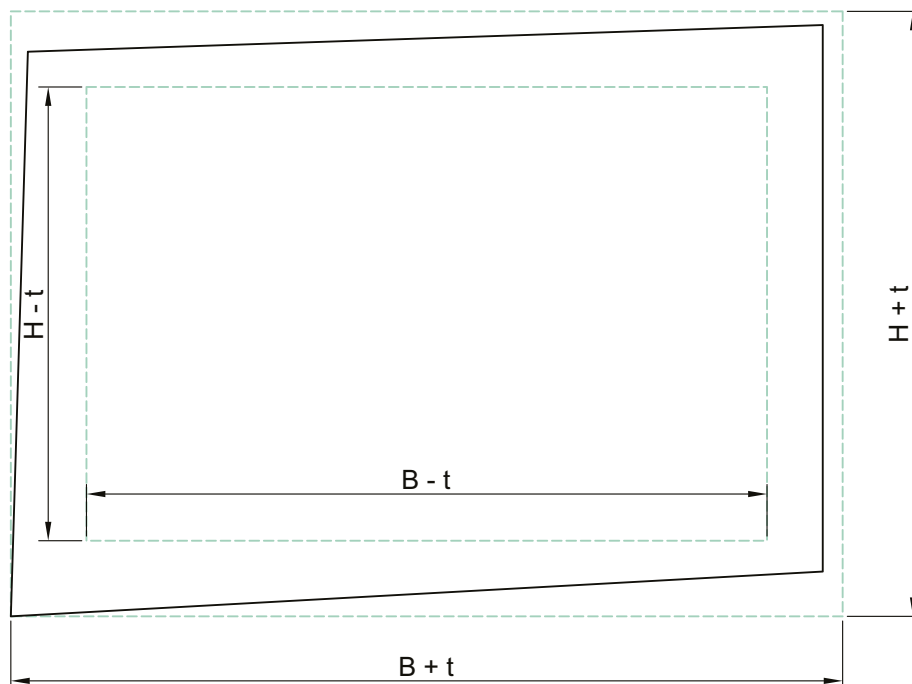
Referência	Inércia Ixx (cm ⁴)	Inércia Conjunta (cm ⁴)
B.250.051	86,54	173,08
B.250.051	86,54	
B.250.051	106,90	213,80
B.250.051	106,90	



Tolerâncias por unidade de vidro

As tolerâncias nas unidades de vidro estão sujeitas à norma EN 1279.

Esta norma prevê que o painel de vidro não será mais comprido que o retângulo determinado resultante das dimensões nominais aumentadas pelas tolerâncias (t) ou menores que um retângulo reduzido pelas mesmas. Os lados dos retângulos são paralelos um ao outro e estes retângulos terão um centro em comum.

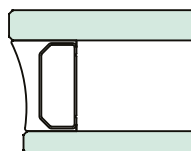
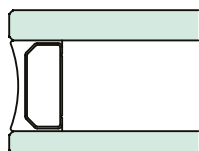


Tolerâncias

Norma EN 1279

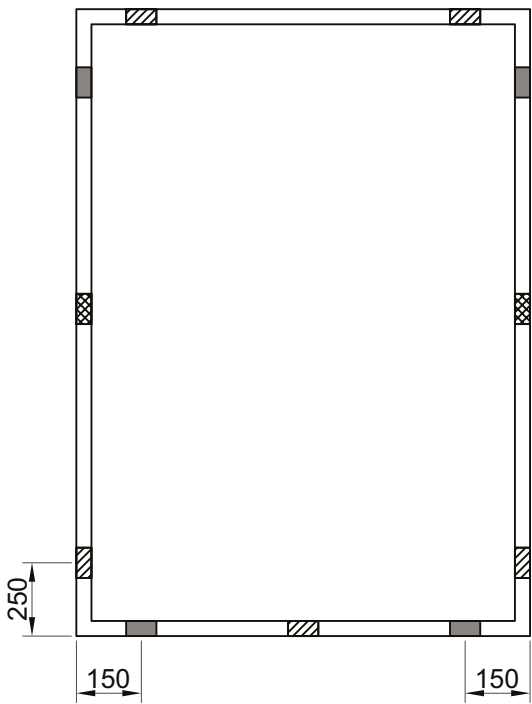
Dimensão nominal
 $B/H \leq 3 \text{ m}$
 $B/H > 3 \text{ m}$

Tolerância
 $t = \pm 2 \text{ mm}$
 $t = \pm 3 \text{ mm}$

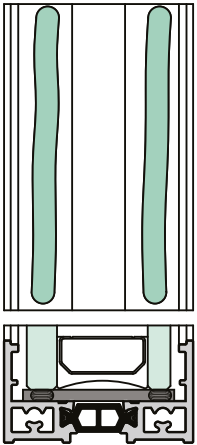
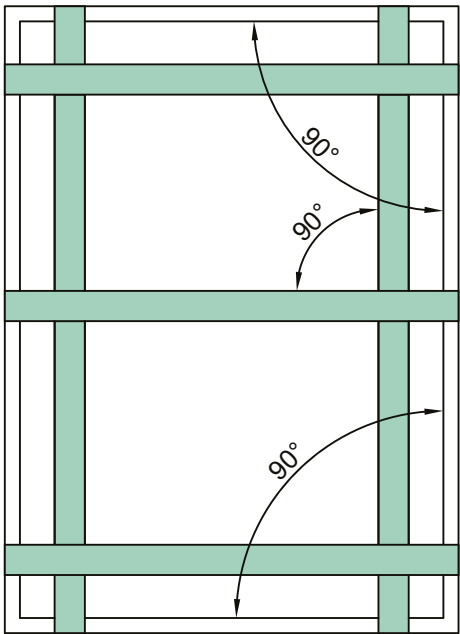


Nota

Estas tolerâncias devem ser reduzidas ao mínimo ($t = \pm 2$) para o processo de fabrico da série Sigma. Dentro deste intervalo é possível garantir uma boa funcionalidade da janela.



- Calço de Vidro
- Calço de Segurança
- Calço de Segurança H > 1800



- Nota**
- . Colocar os calços de acordo com a imagem;
 - . Utilizar o silicone estrutural para fazer a colagem do vidro ao alumínio;
 - . Colocar cintas de compressão para ajustar as esquadrias da folha;
 - . As cintas devem permanecer na folha enquanto o silicone estiver a secar;
 - . Ao colocar o silicone garantir uma linha uniforme e direita na zona onde assenta o vidro.

03

PERFIS

sistema de correr RPT
B.250

Aro Fixo

26

Aro Móvel - Sigma

31

Aro Móvel - Sigma Plus

36

Aro Móvel - Sigma Max

37

Complementar

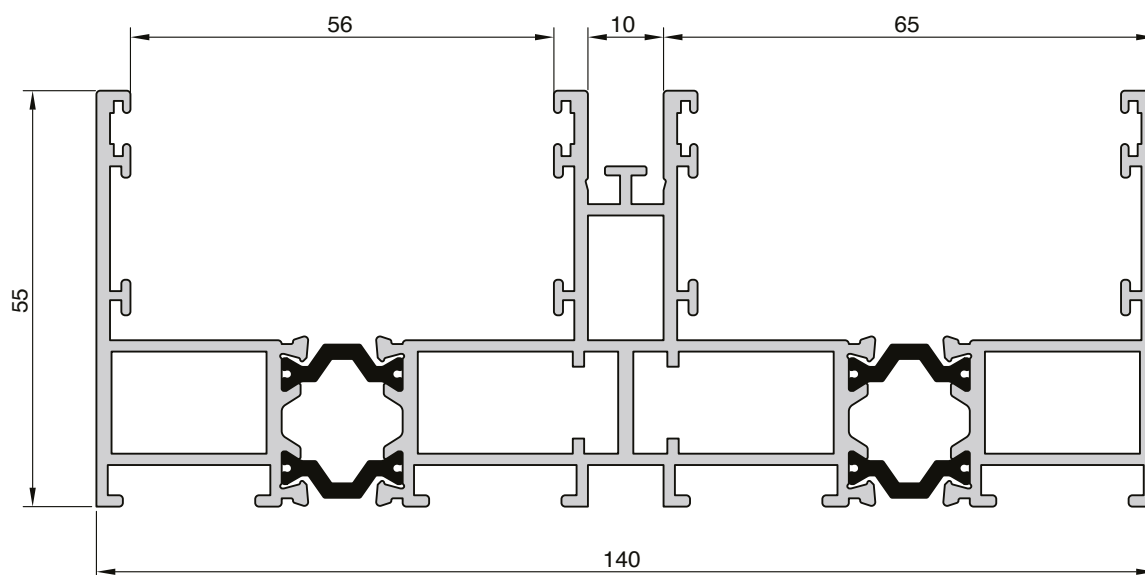
38

Galandage

39

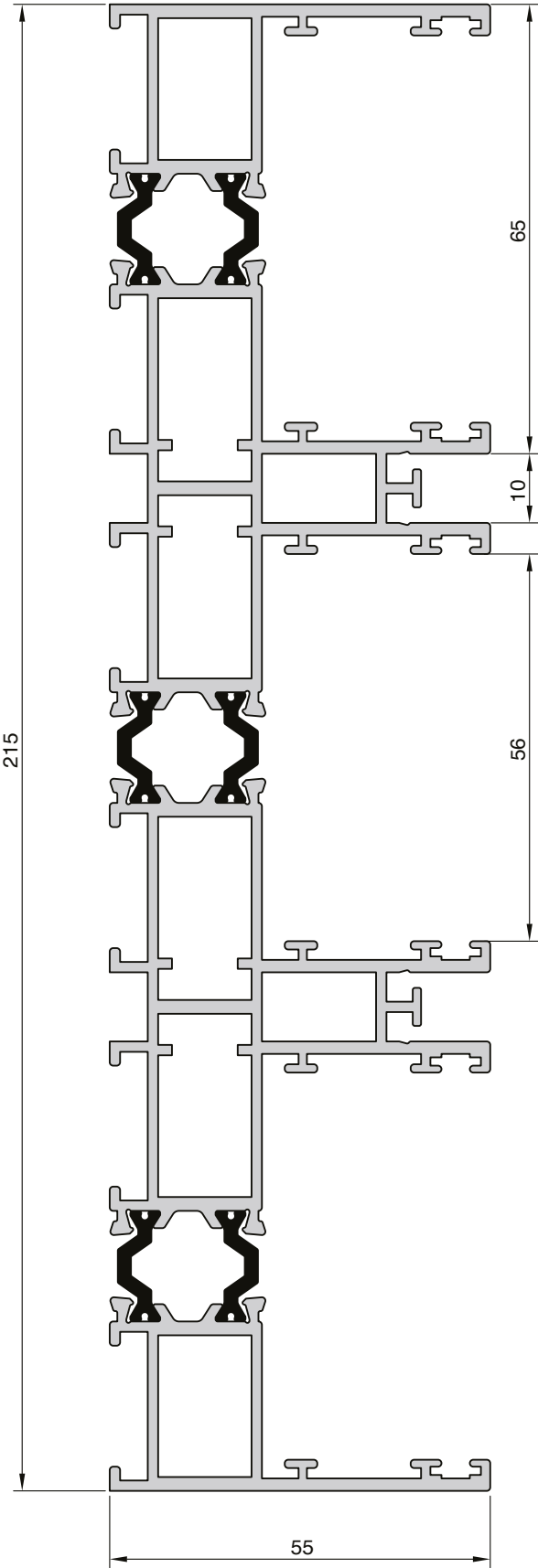
Drenagem

40

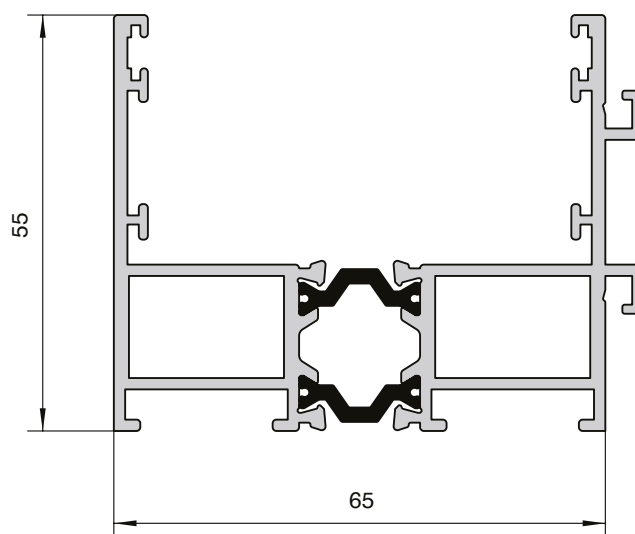
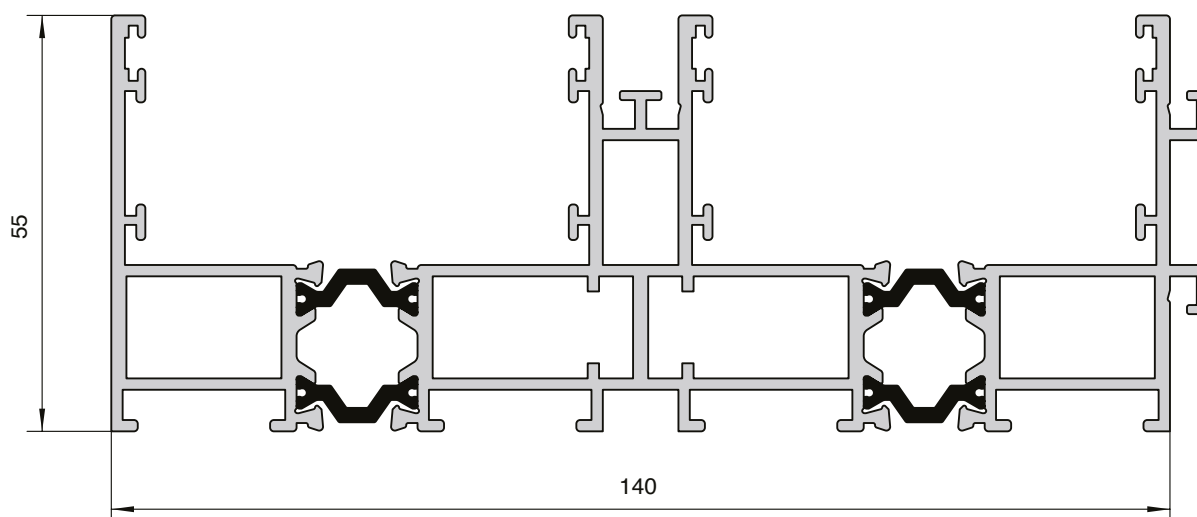
B.250.010

Escala 1:1

B.250.100

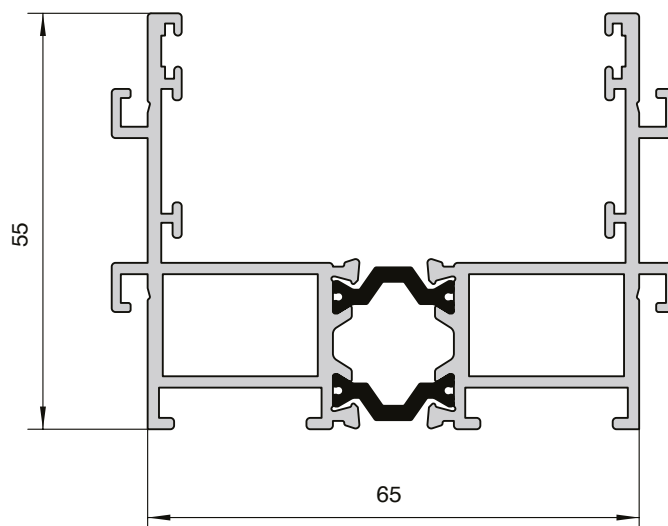


Escala 1:1

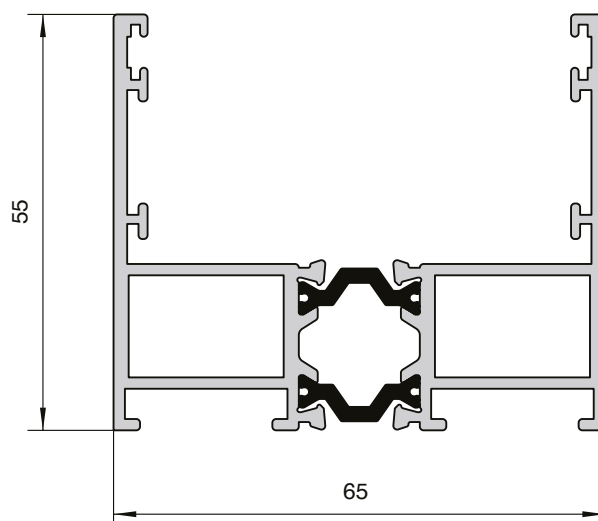
B.250.120**B.250.130**

Escala 1:1

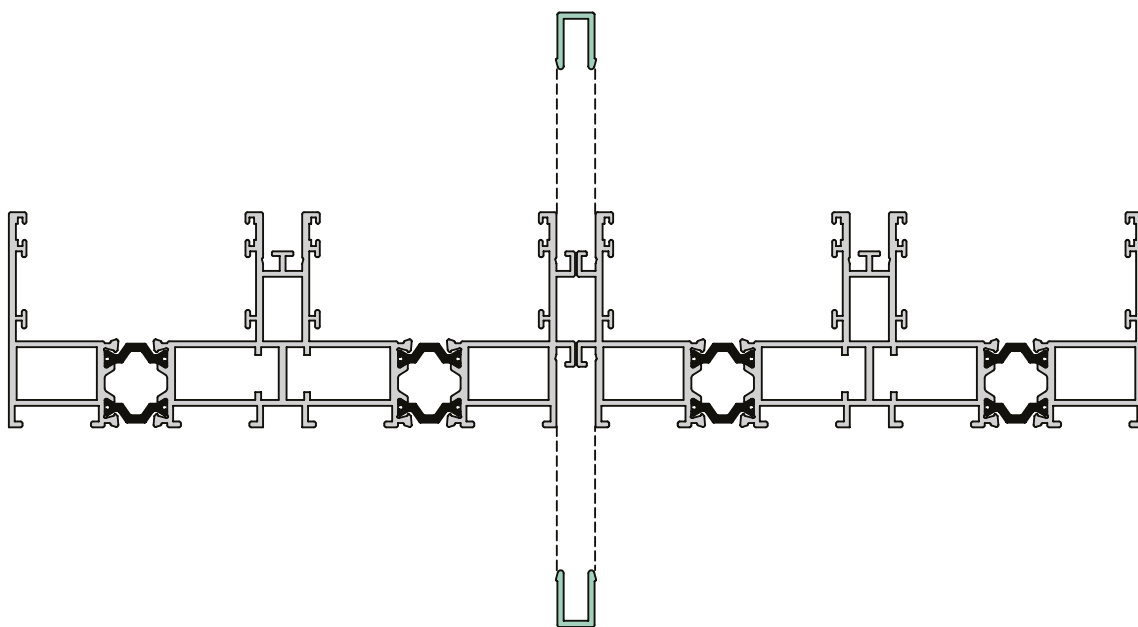
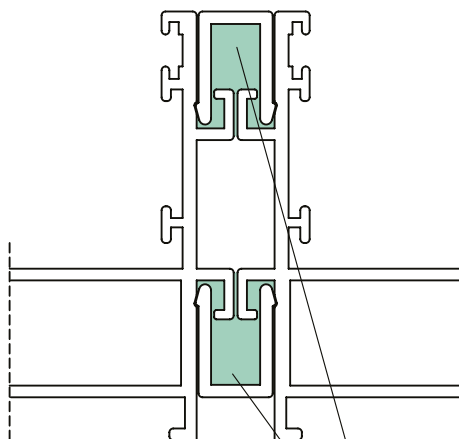
B.250.140



B.250.150



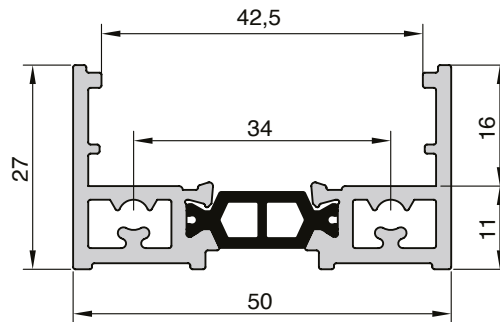
Escala 1:1

**B.250.014**

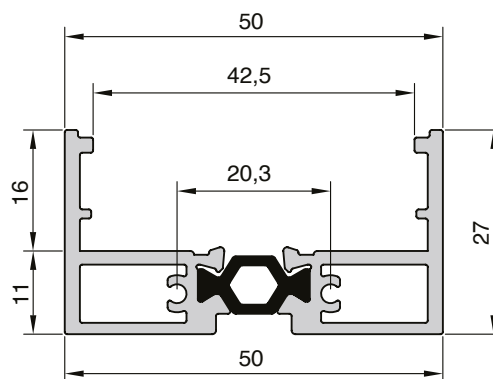
Preencher os canais do aro fixo com silicone no perfil de união **B.250.014**

Escala 1:1

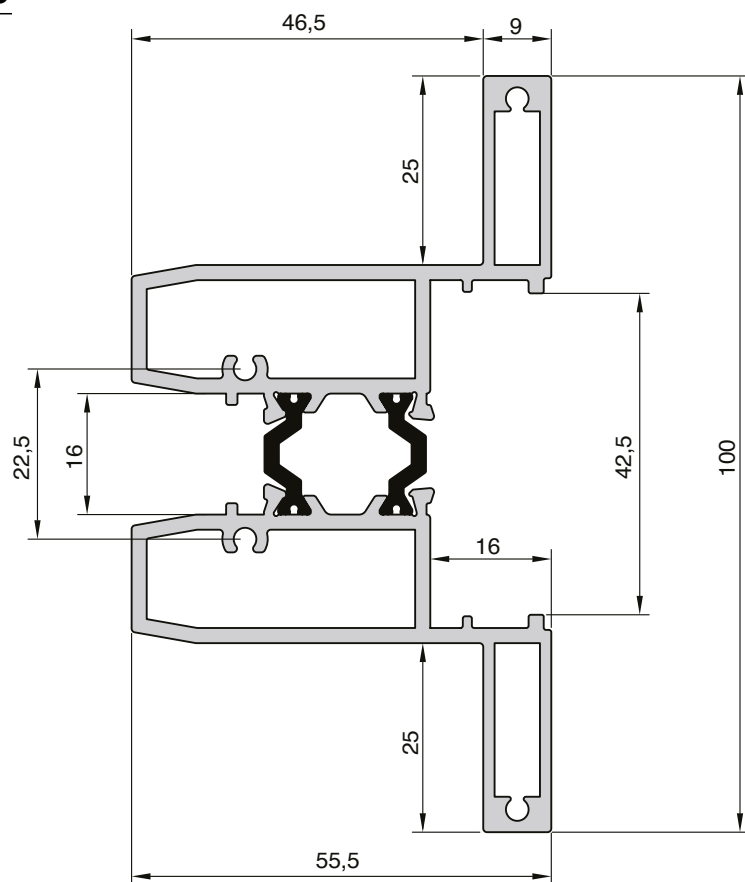
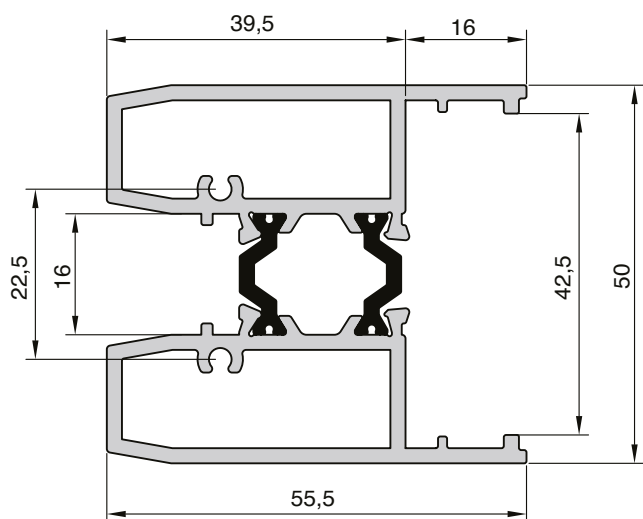
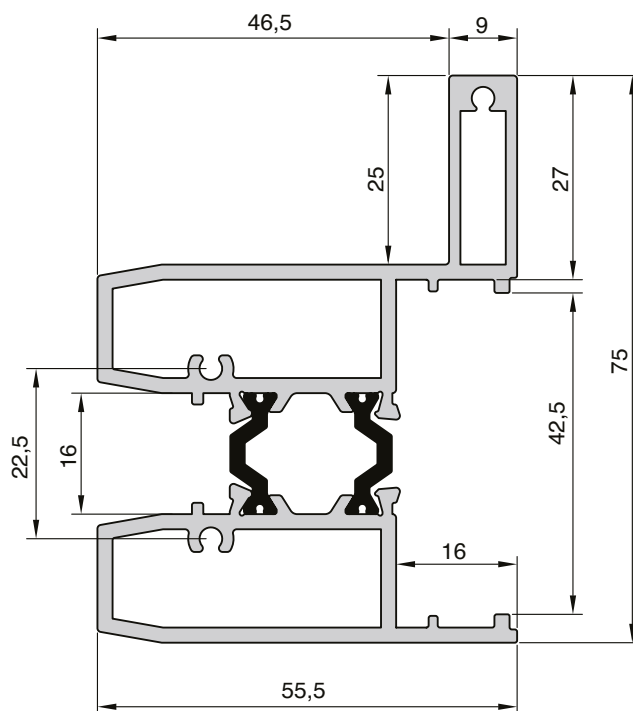
B.250.020



B.250.110

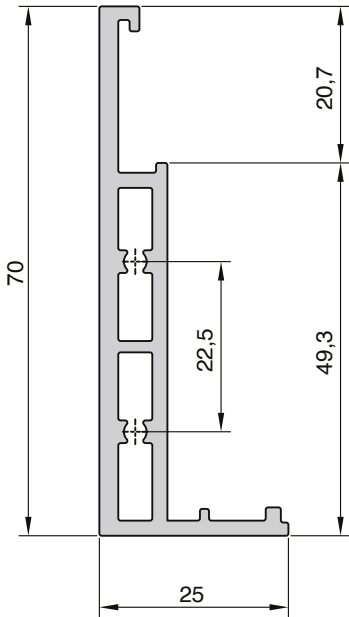


Escala 1:1

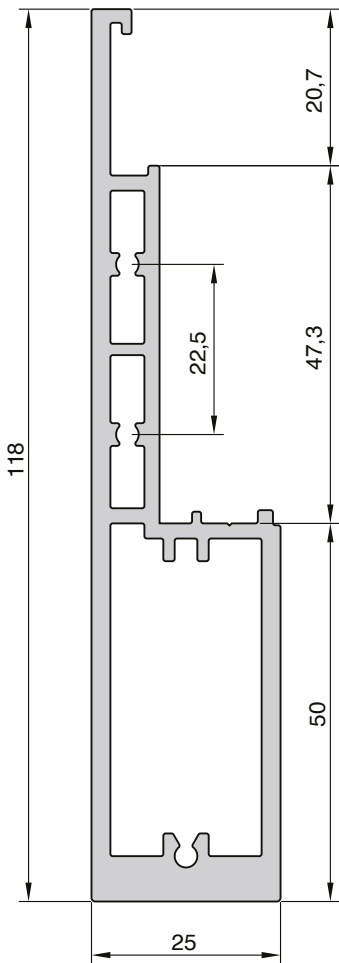
B.250.030

B.250.070

B.250.080


Escala 1:1

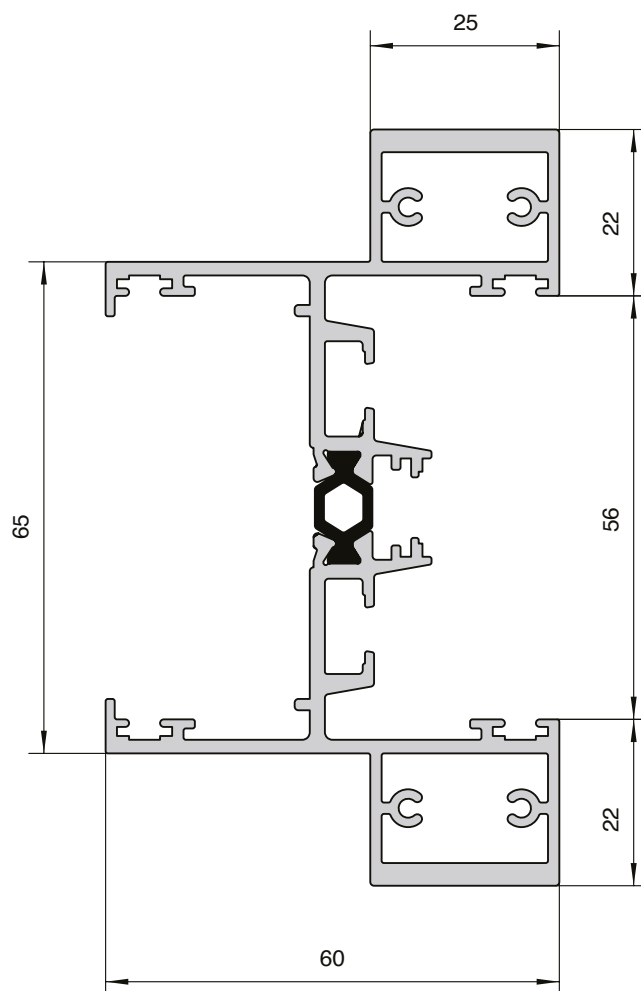
B.250.041



B.250.051

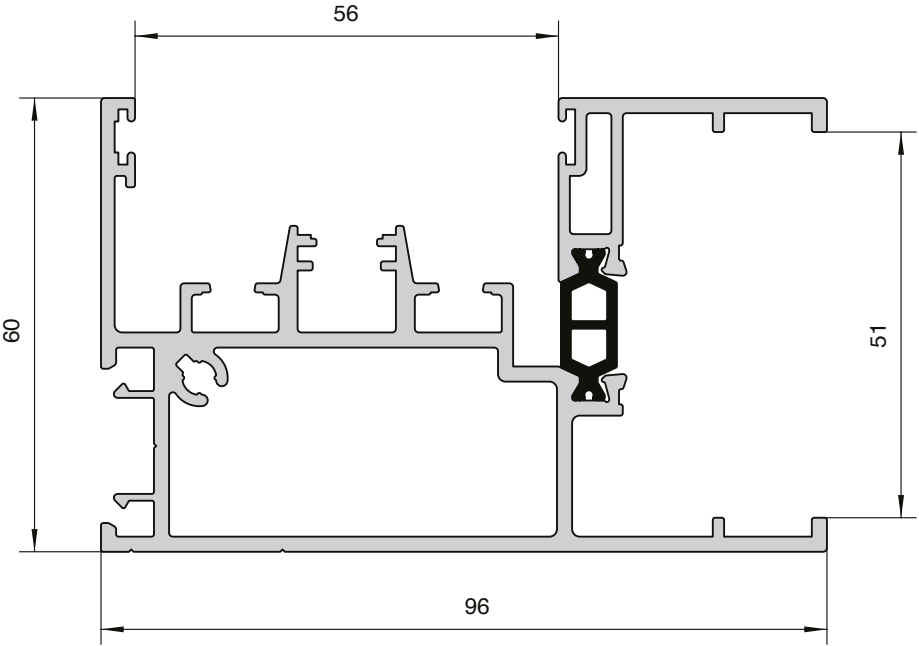


Escala 1:1

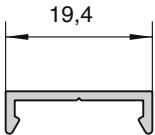
B.250.160

Escala 1:1

B.250.170



F.010.139



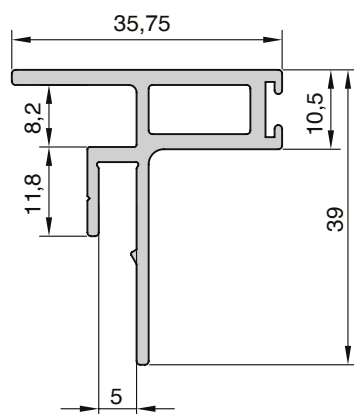
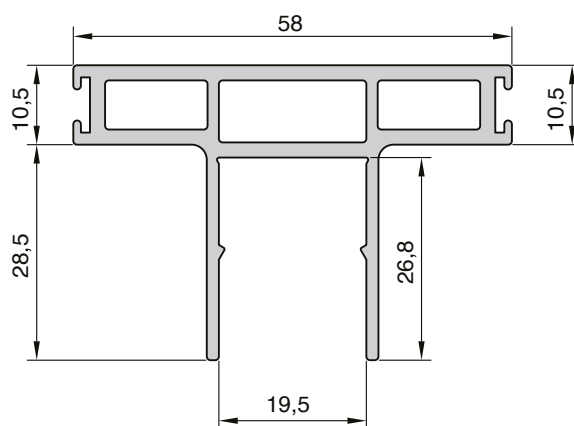
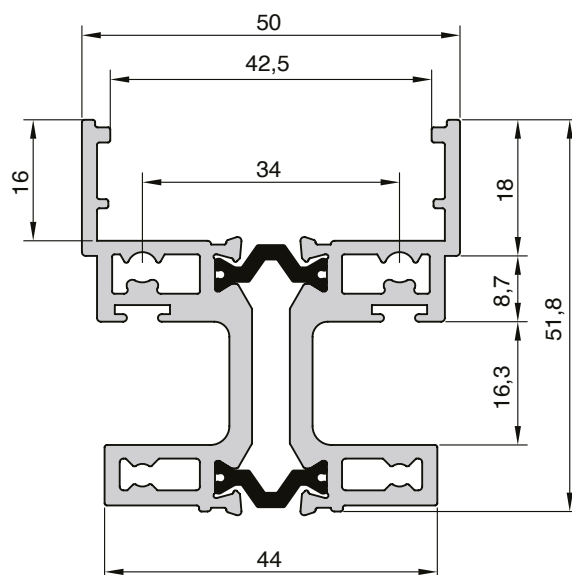
Produto
4

Características Técnicas
12

Perfis
24

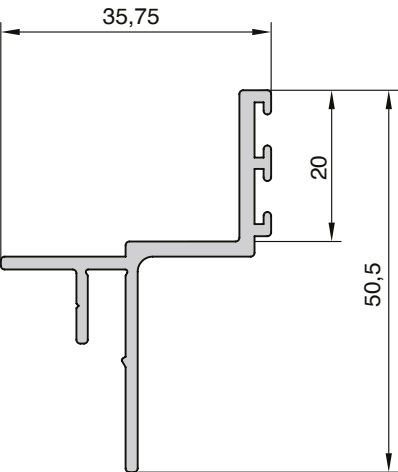
Secções
46

Escala 1:1

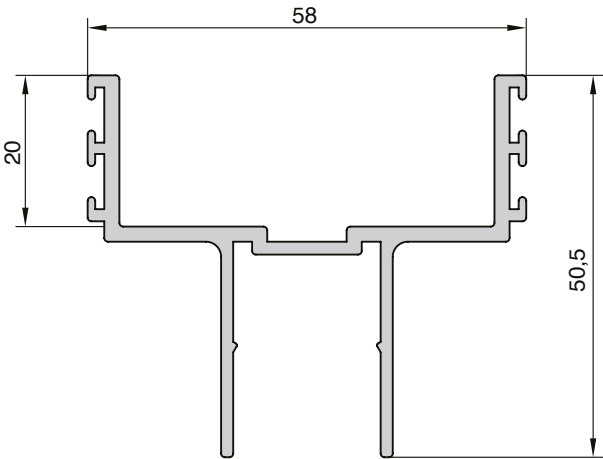
B.250.023**B.250.024****B.250.060**

Escala 1:1

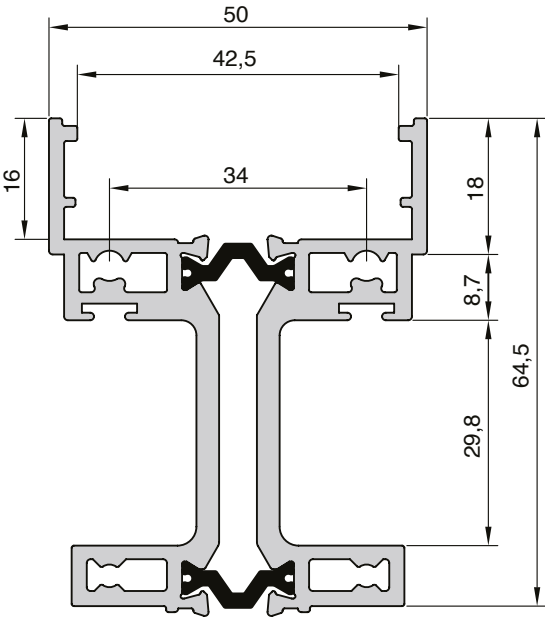
B.250.025



B.250.026



B.250.090



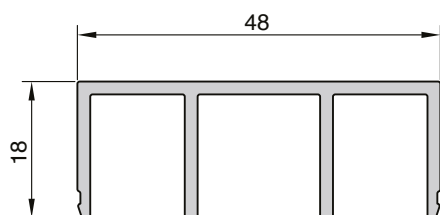
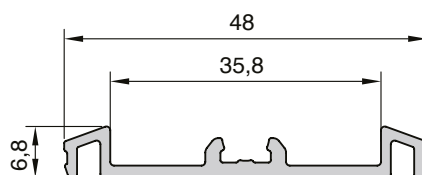
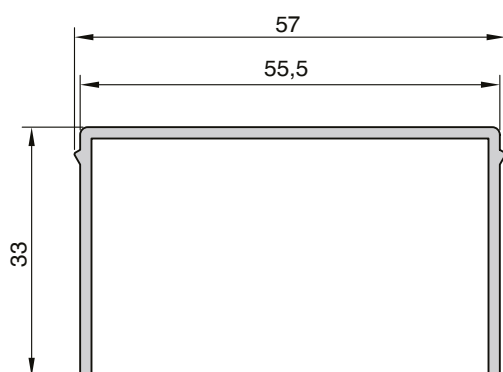
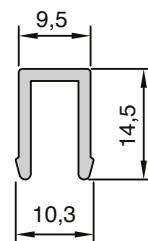
Produto
4

Características Técnicas
12

Perfis
24

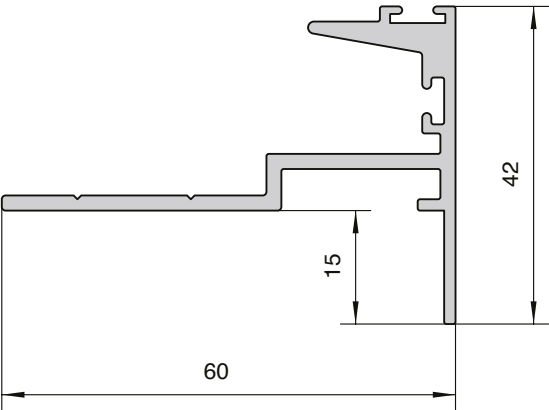
Secções
46

Escala 1:1

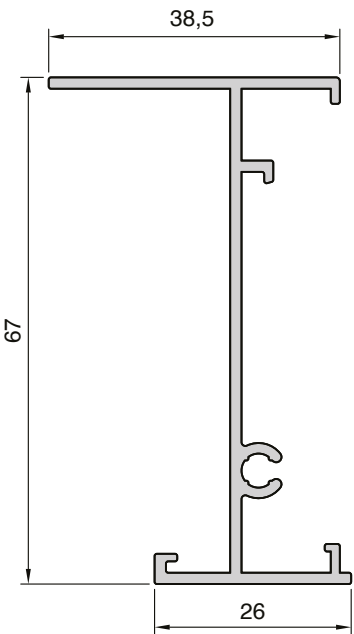
B.250.001**B.250.002****B.250.013****B.250.014**

Escala 1:1

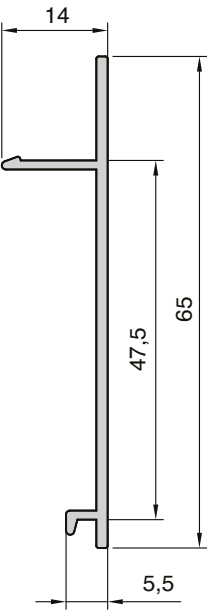
B.250.015



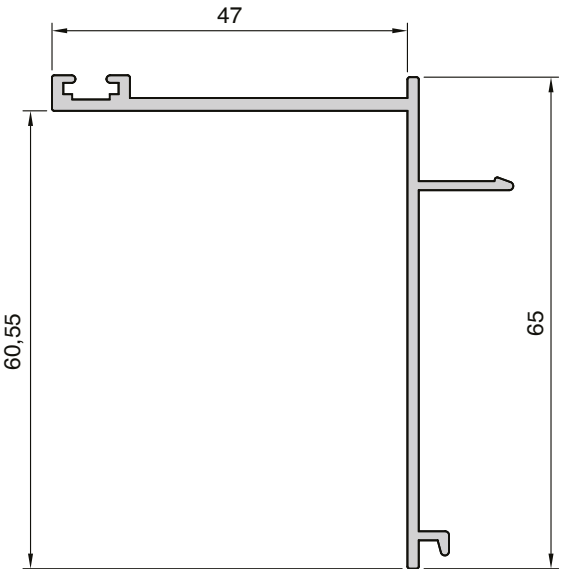
B.095.214



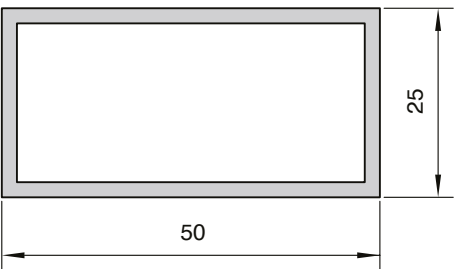
B.095.215



B.095.216



D.012.013



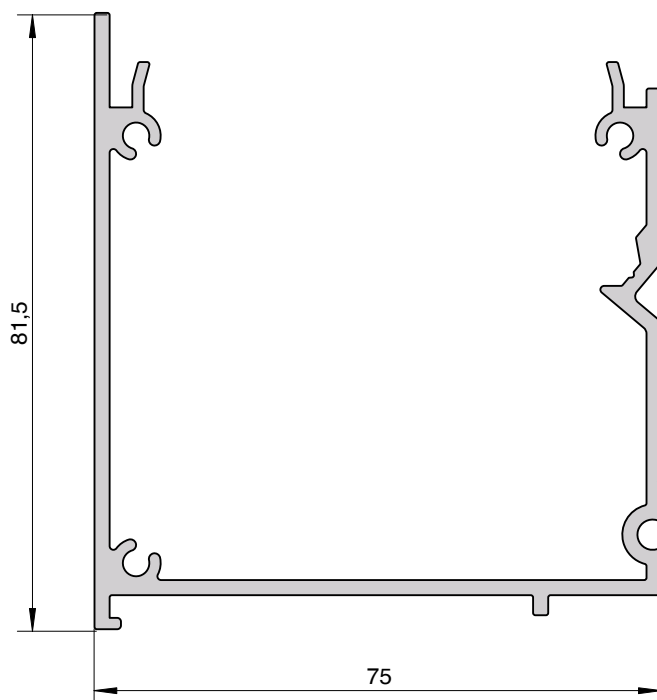
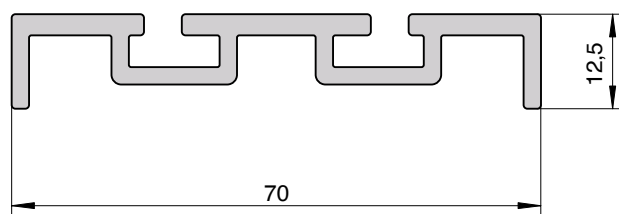
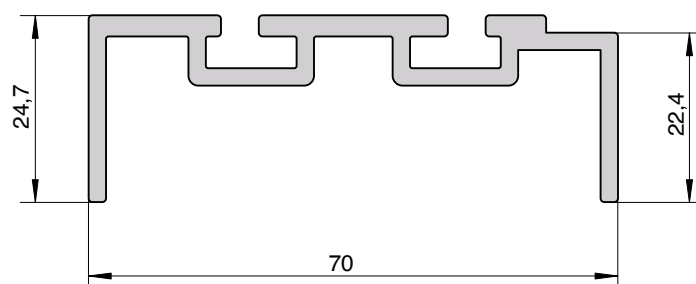
Produto
4

Características Técnicas
12

Perfis
24

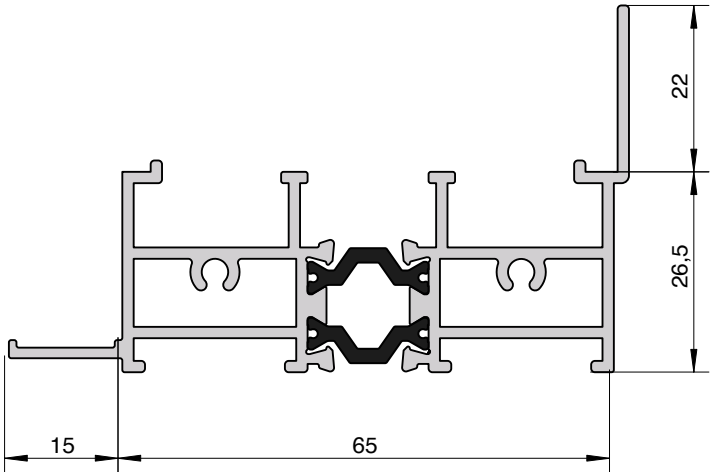
Seções
46

Escala 1:1

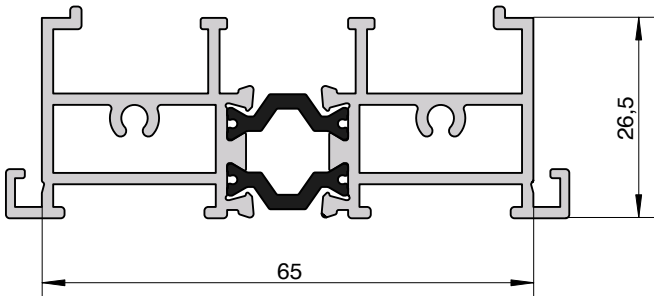
B.250.003**B.250.004****B.250.005**

Escala 1:1

B.250.180



B.250.230



Produto
4

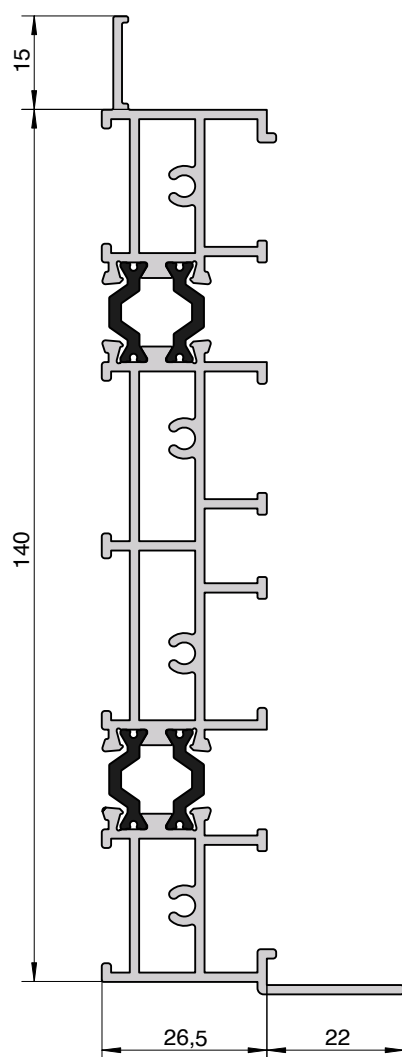
Características Técnicas
12

Perfis
24

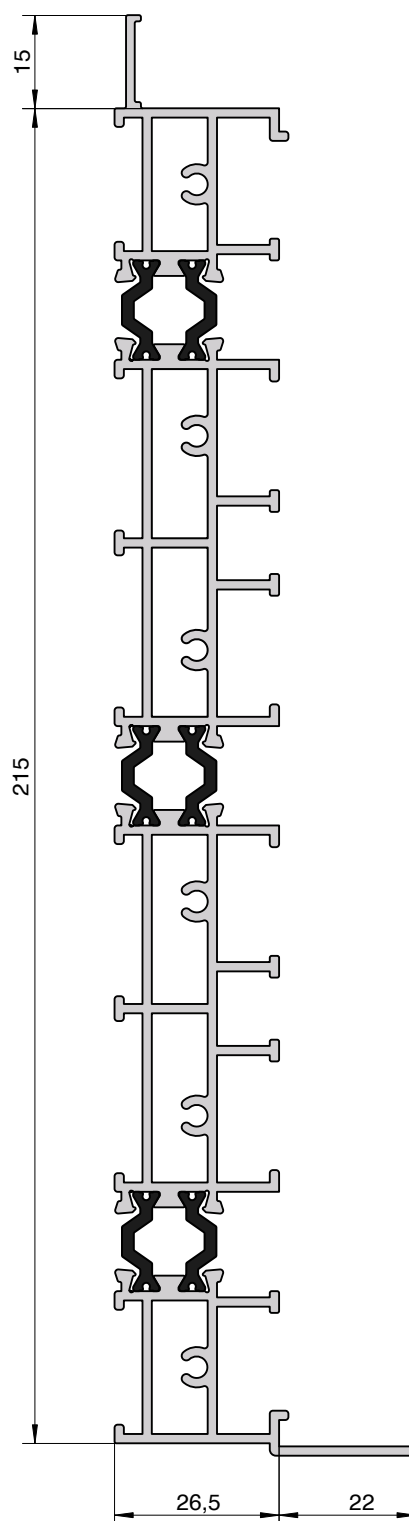
Seções
46

Escala 1:1

B.250.190



B.250.200



B.250.210

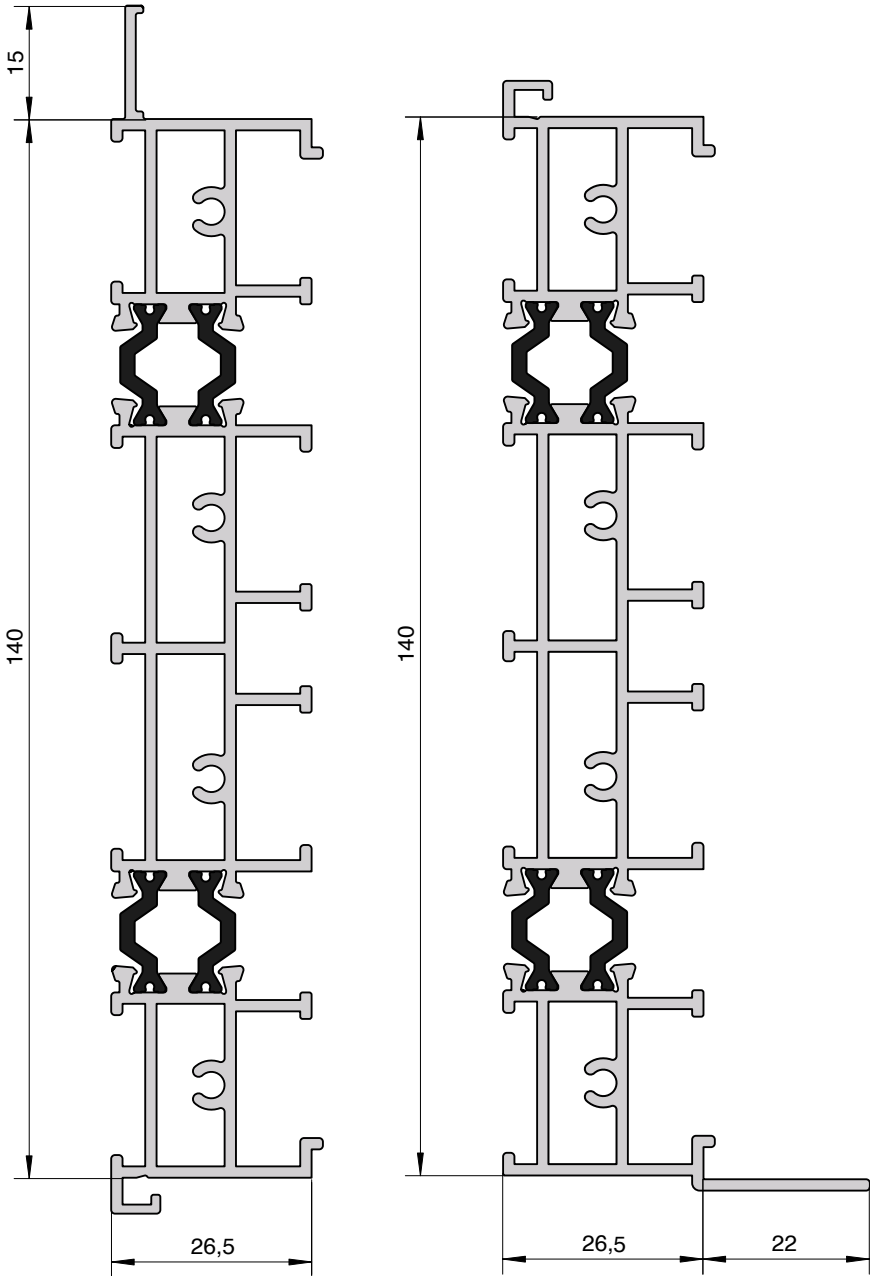
B.250.220

Produto
4

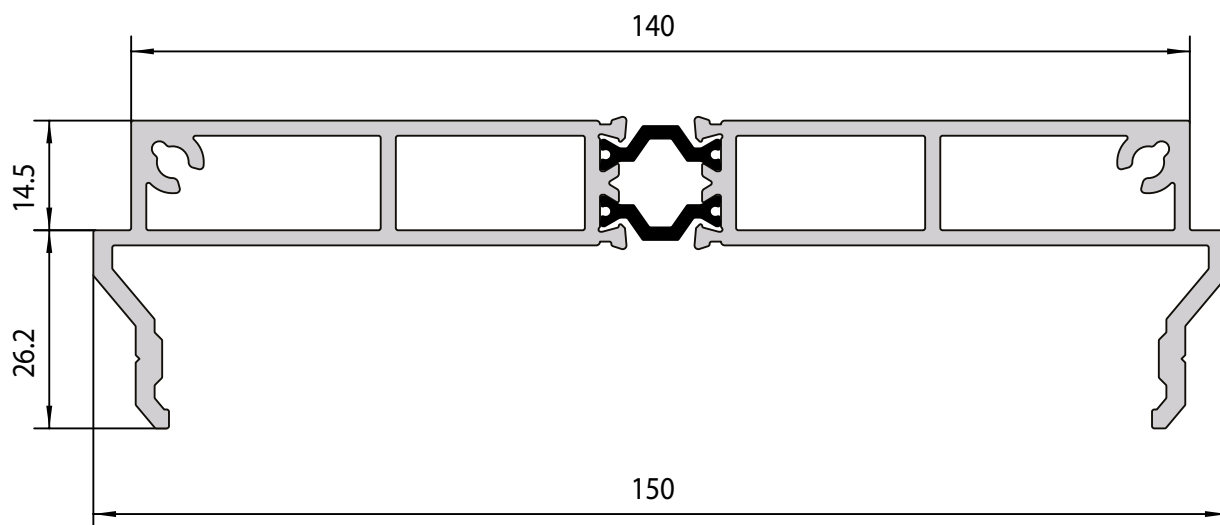
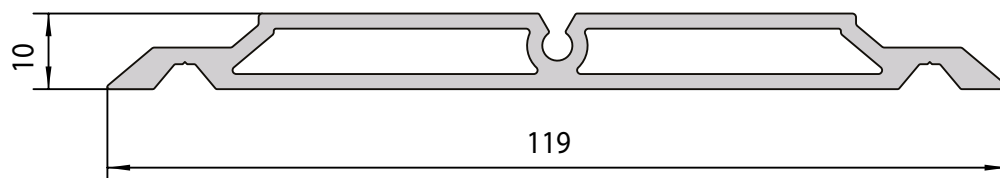
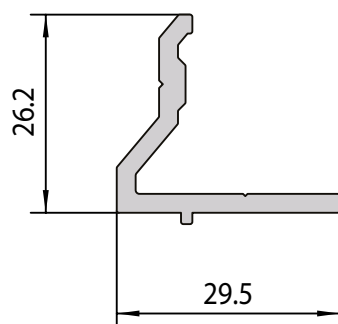
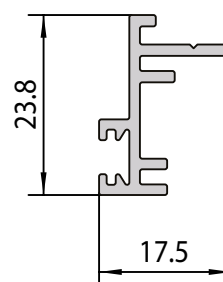
Características Técnicas
12

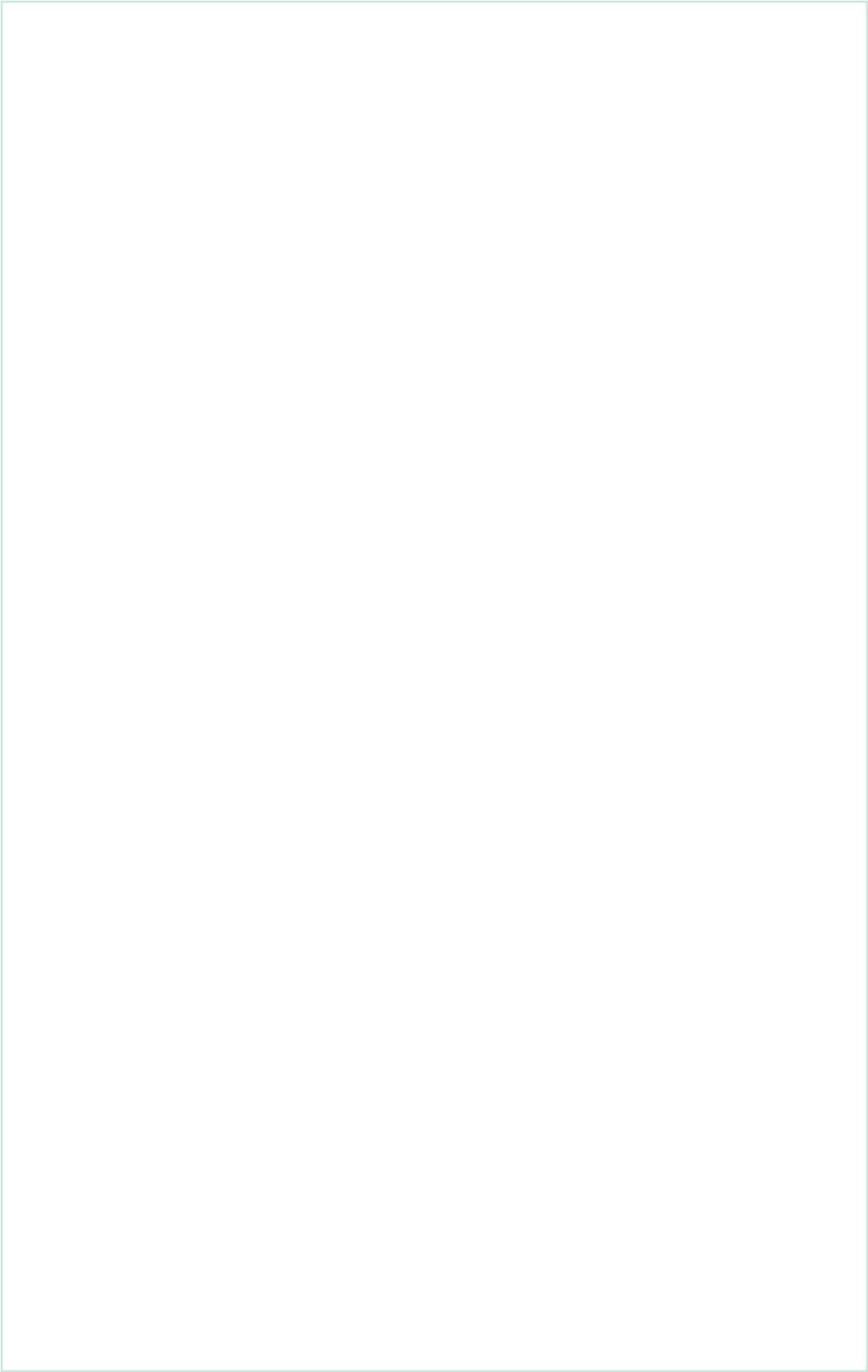
Perfis
24

Seções
46



Escala 1:1

B.250.240**B.250.016****B.250.017****B.250.018**



Produto
4

Características Técnicas
12

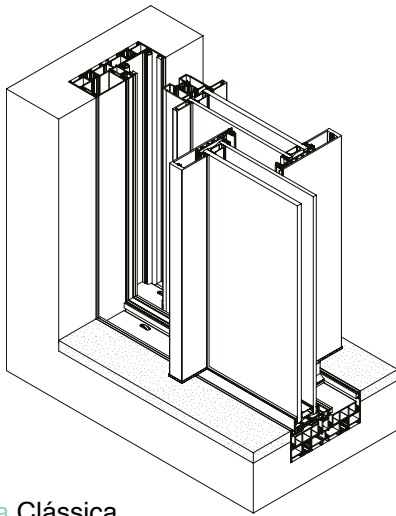
Perfis
24

Secções
46

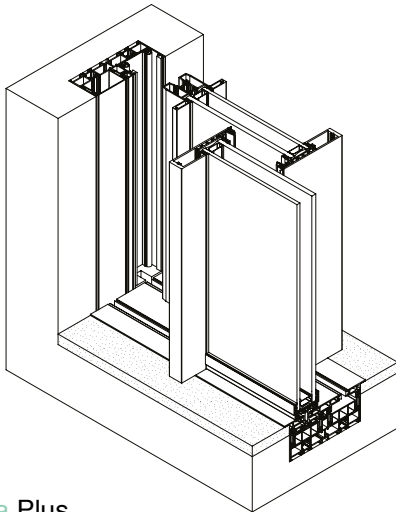
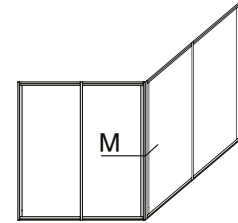
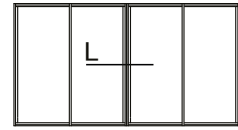
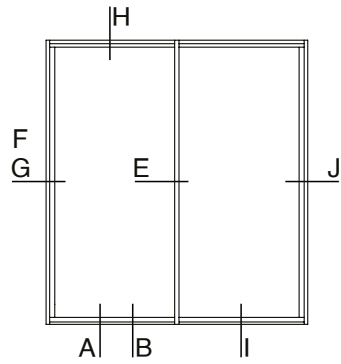
04

SECCÕES

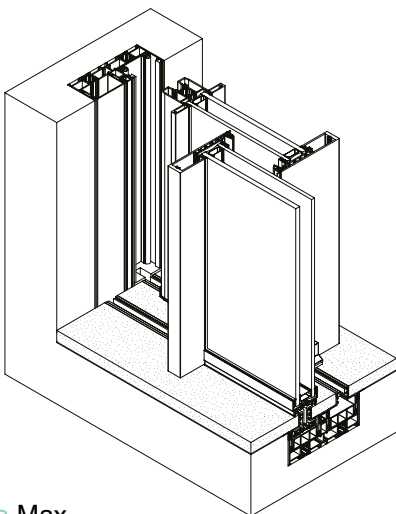
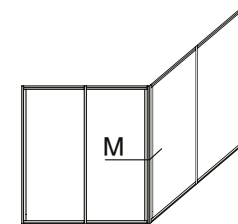
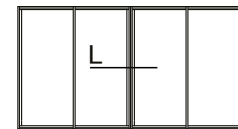
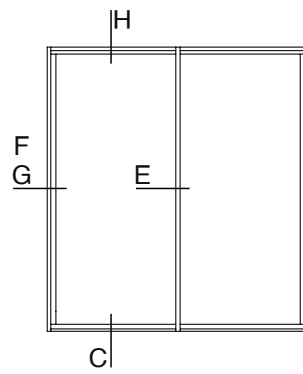
medidas em mm
escala 1.1



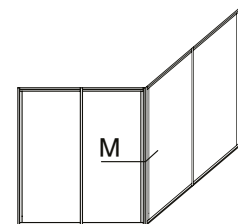
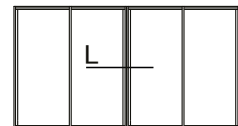
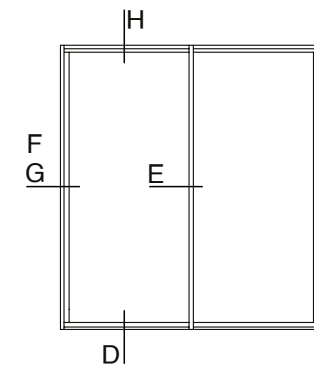
Sigma Clássica

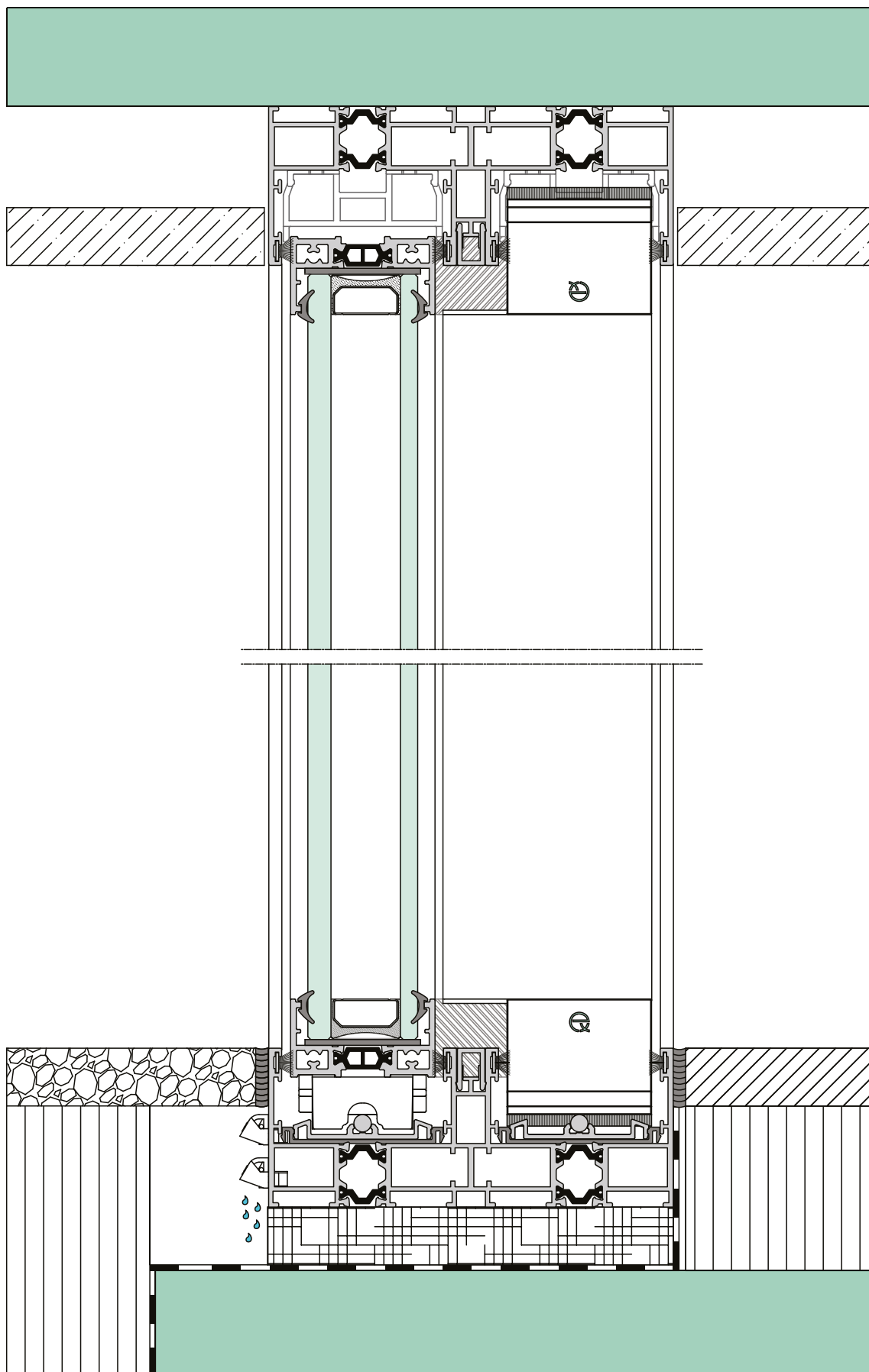


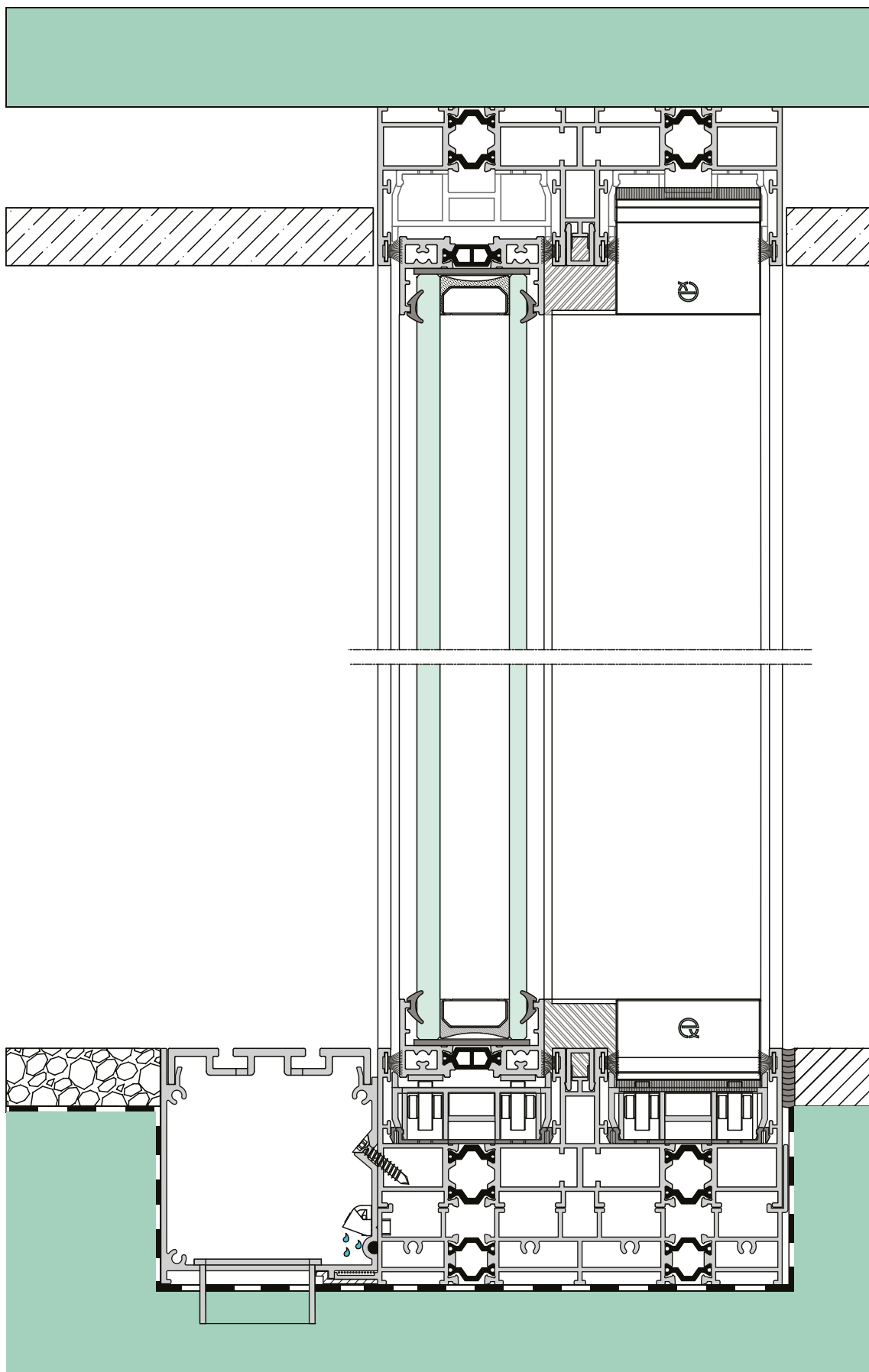
Sigma Plus



Sigma Max





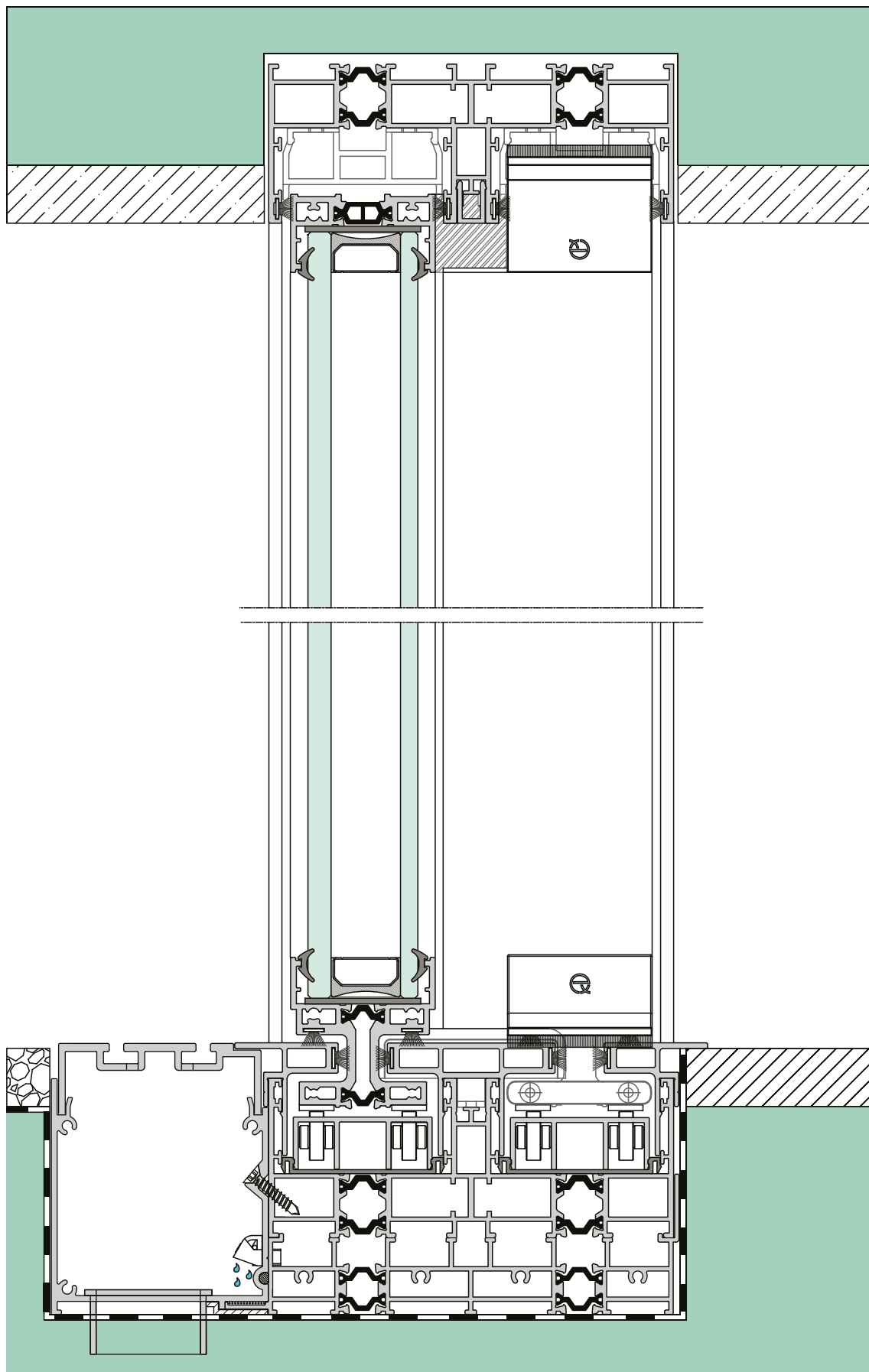


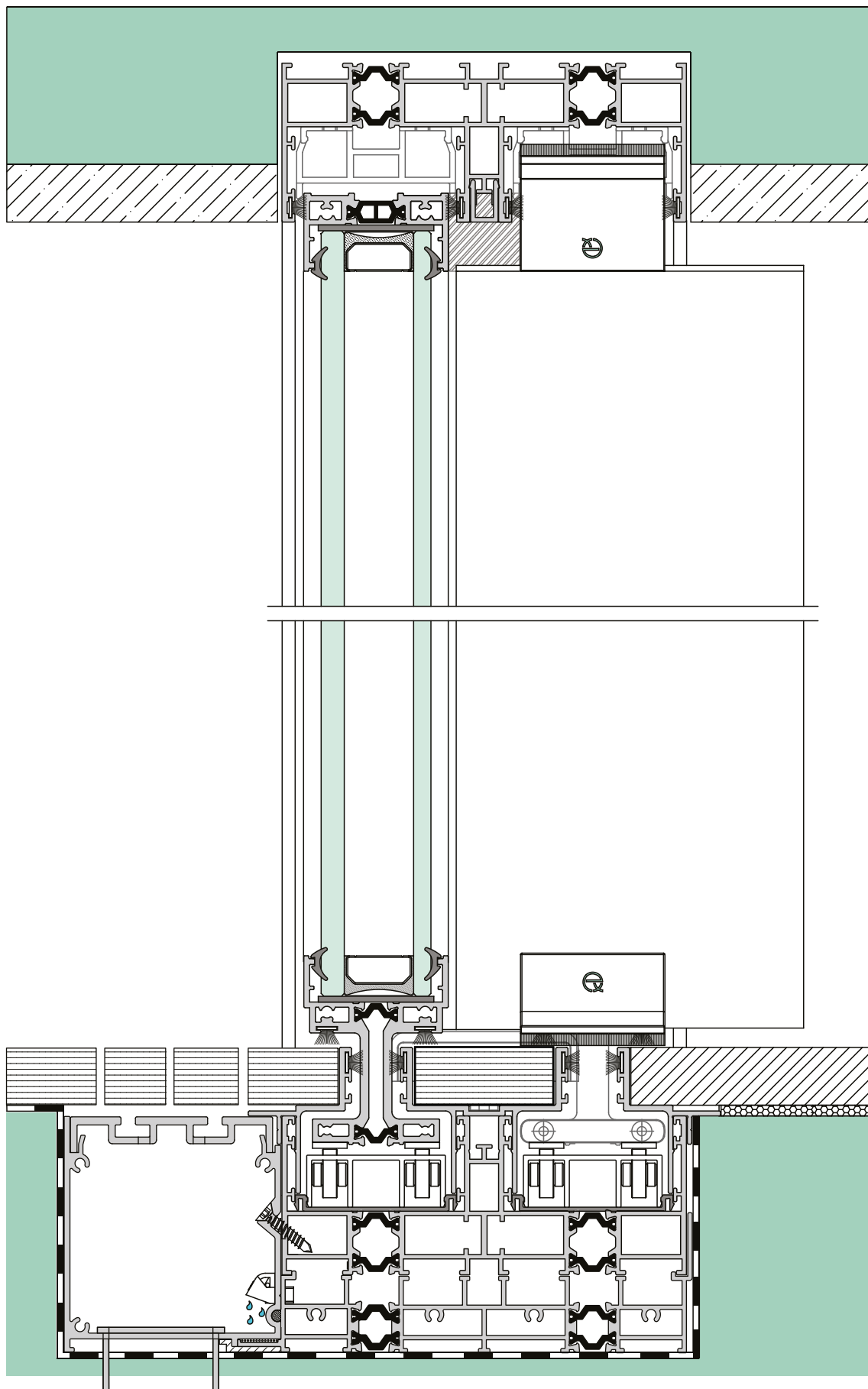
Produto
4

Características Técnicas
12

Perfis
24

Secções
46



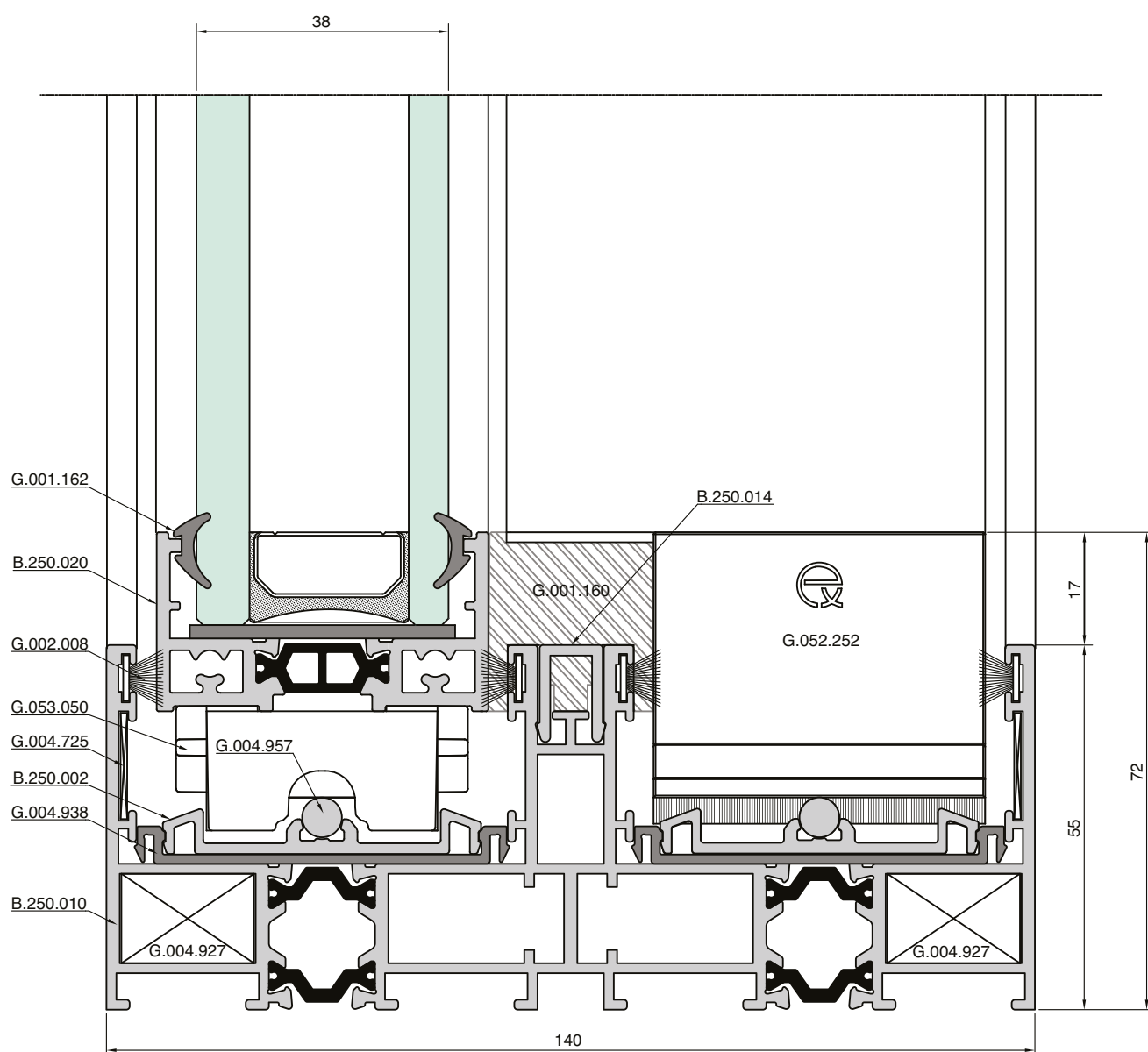
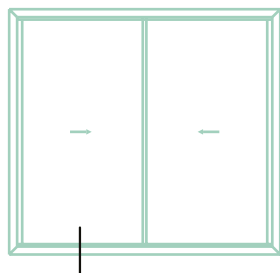


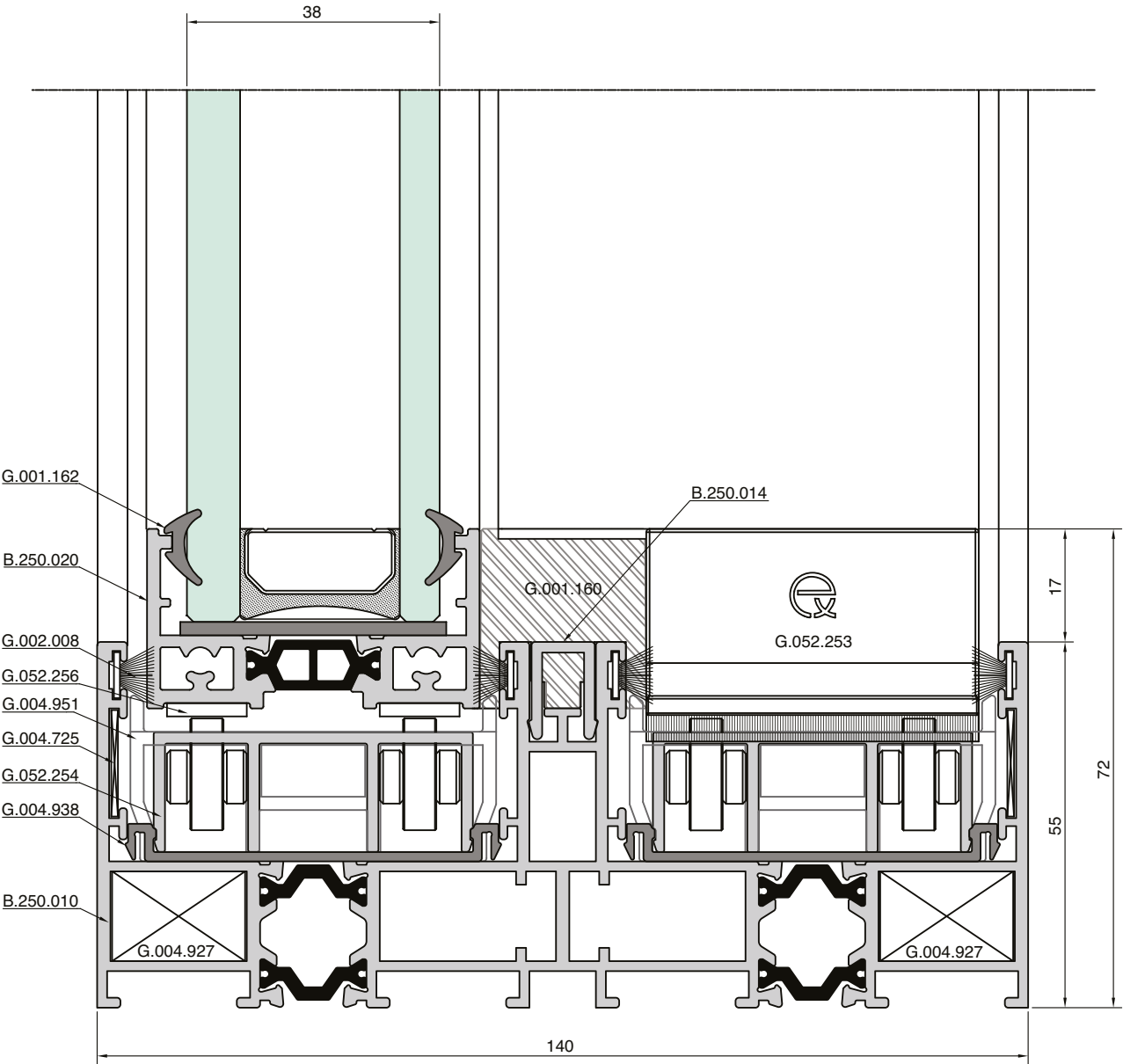
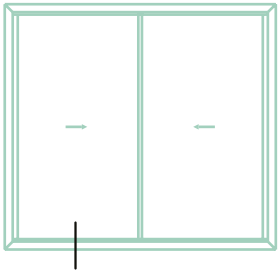
Produto
4

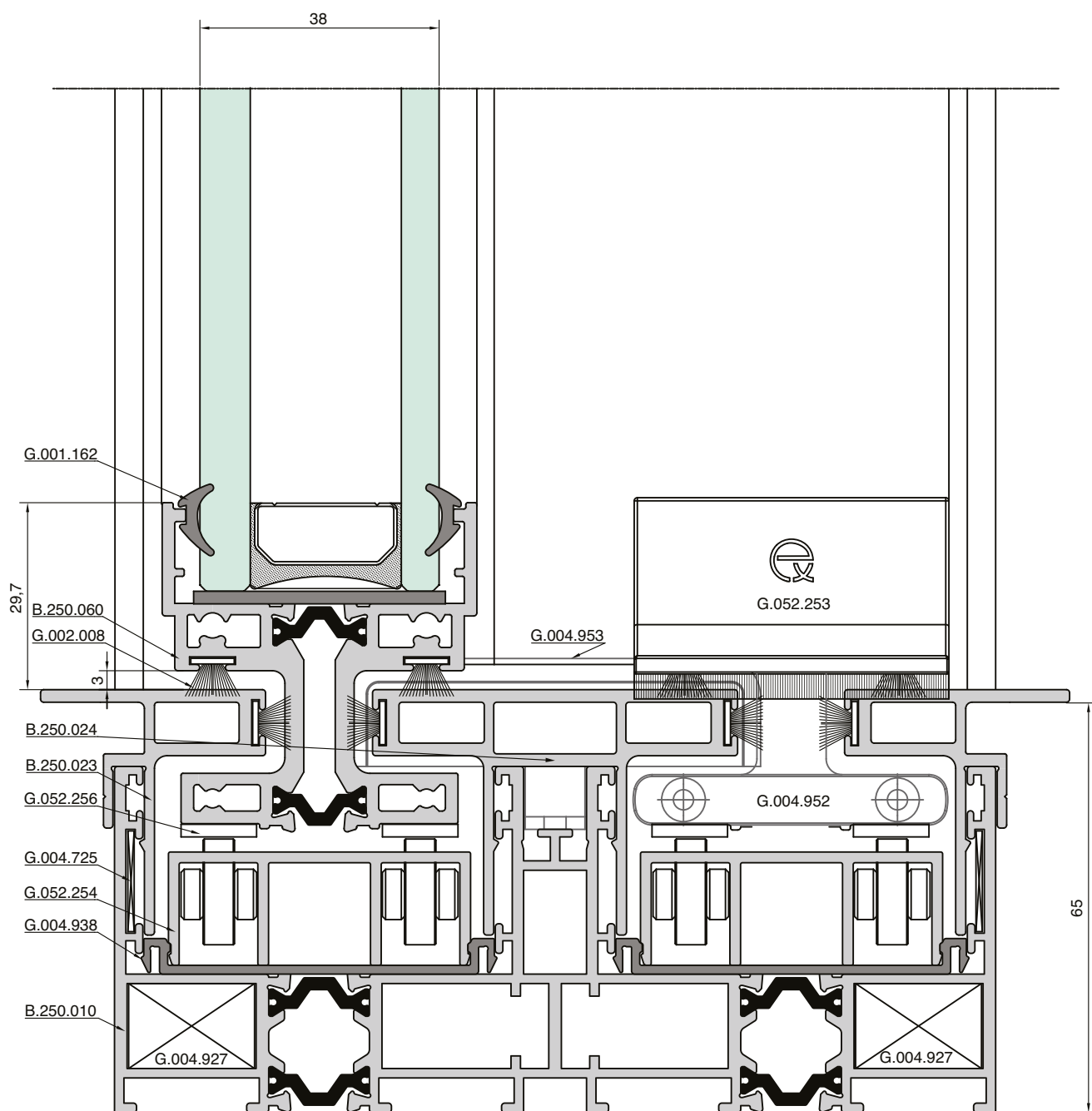
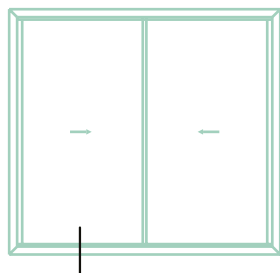
Características Técnicas
12

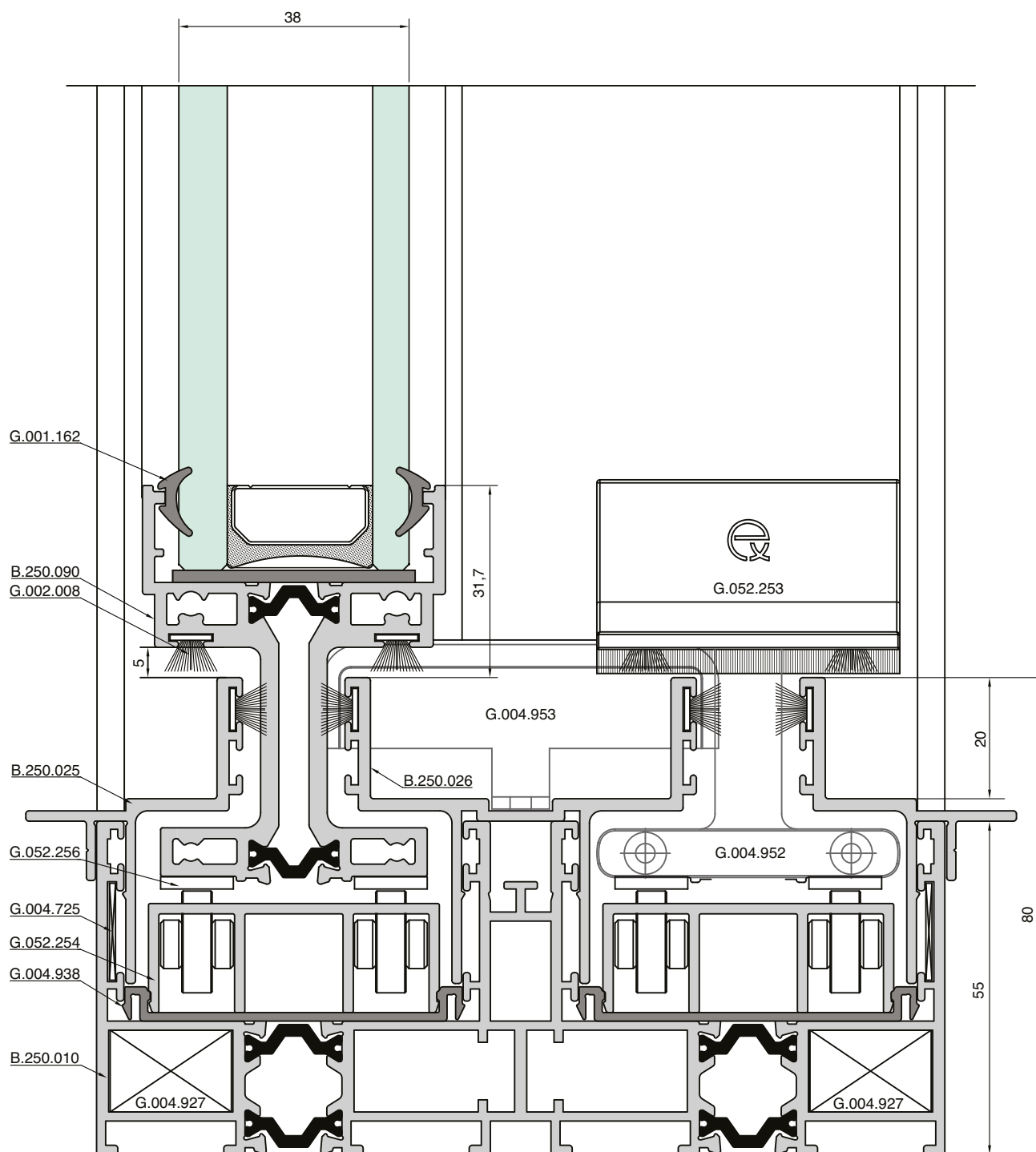
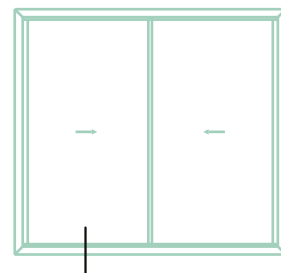
Perfis
24

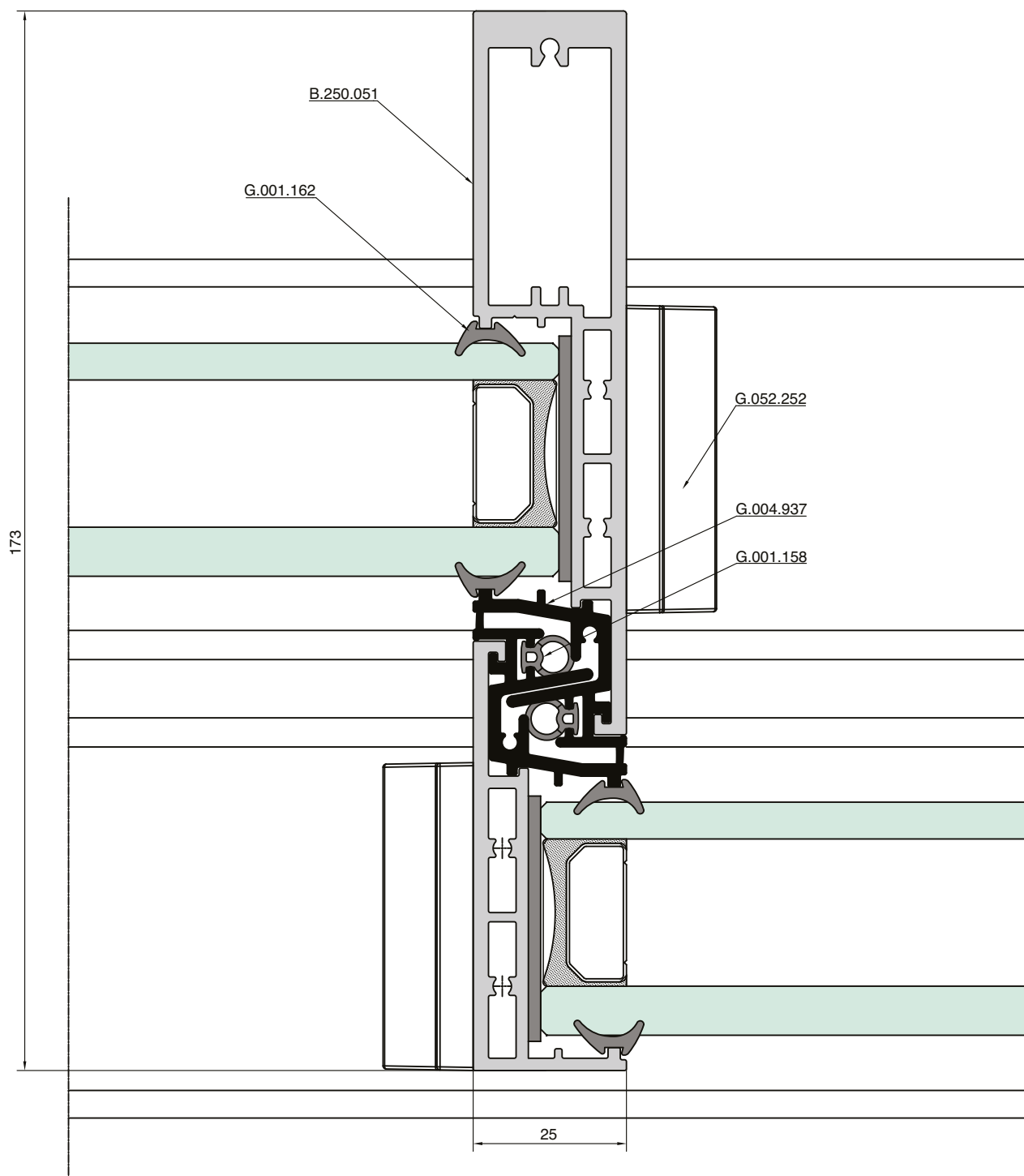
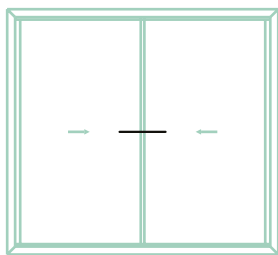
Secções
46

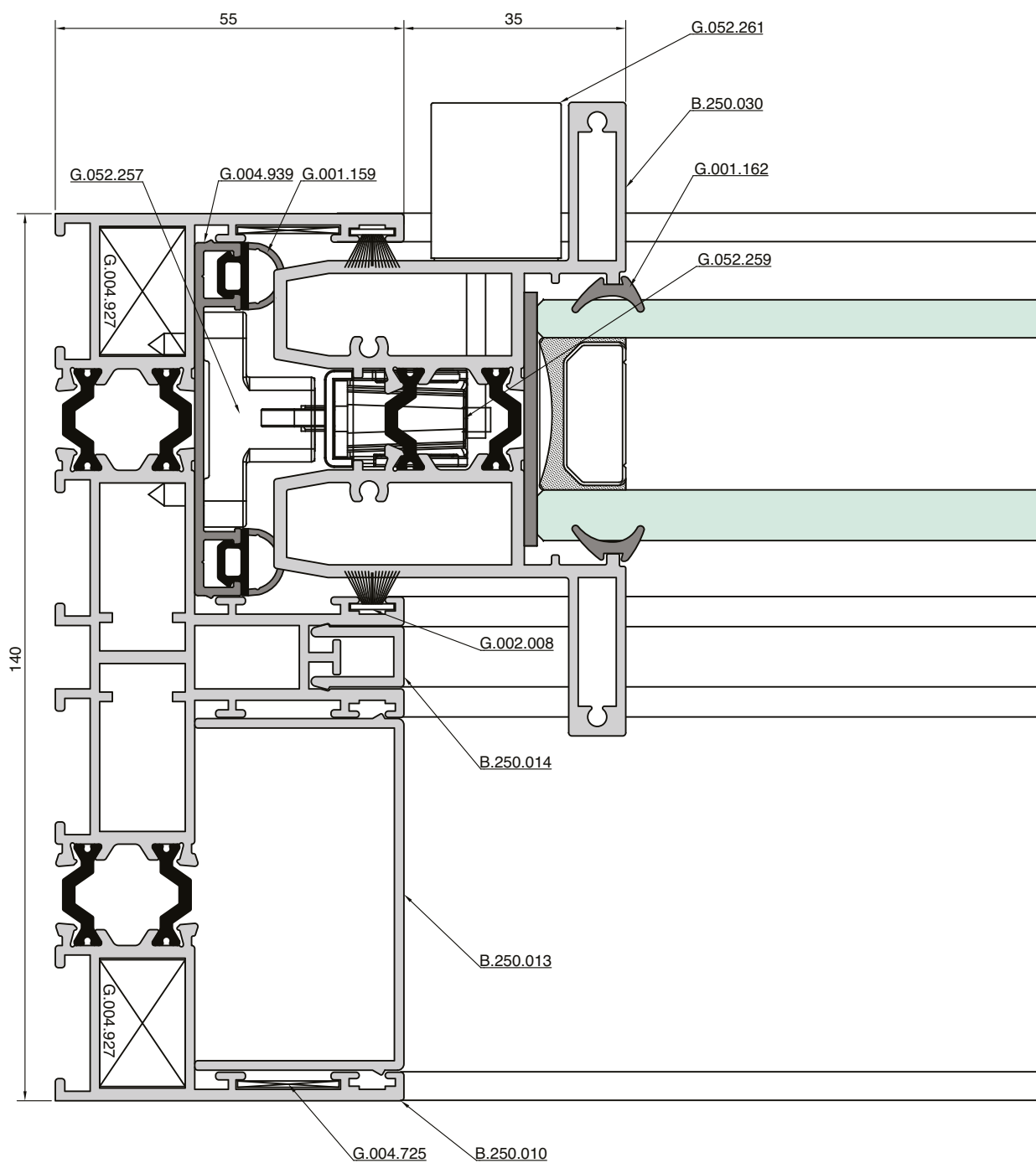
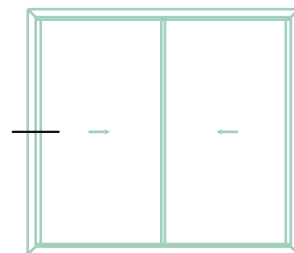


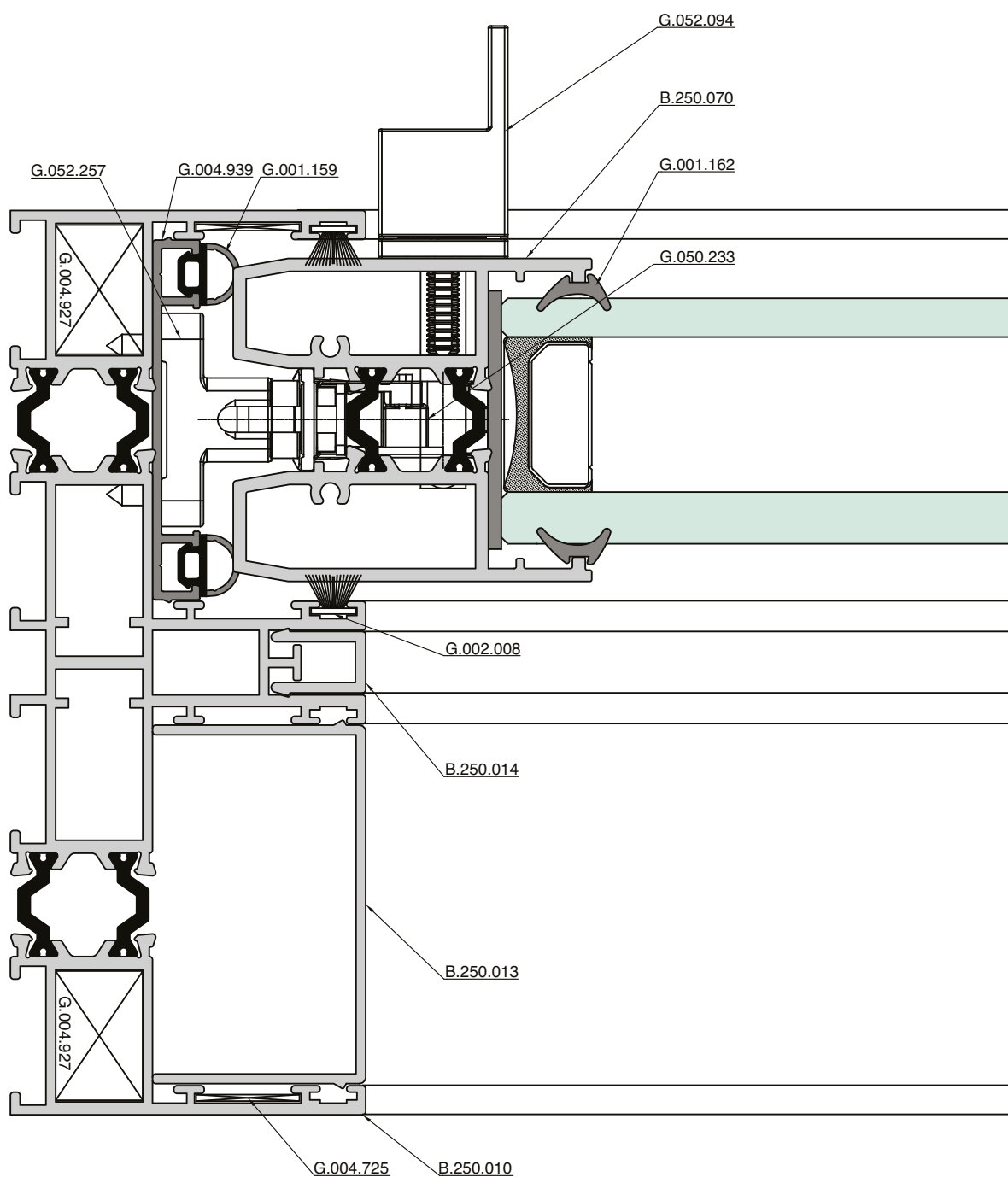
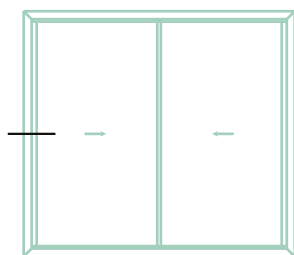


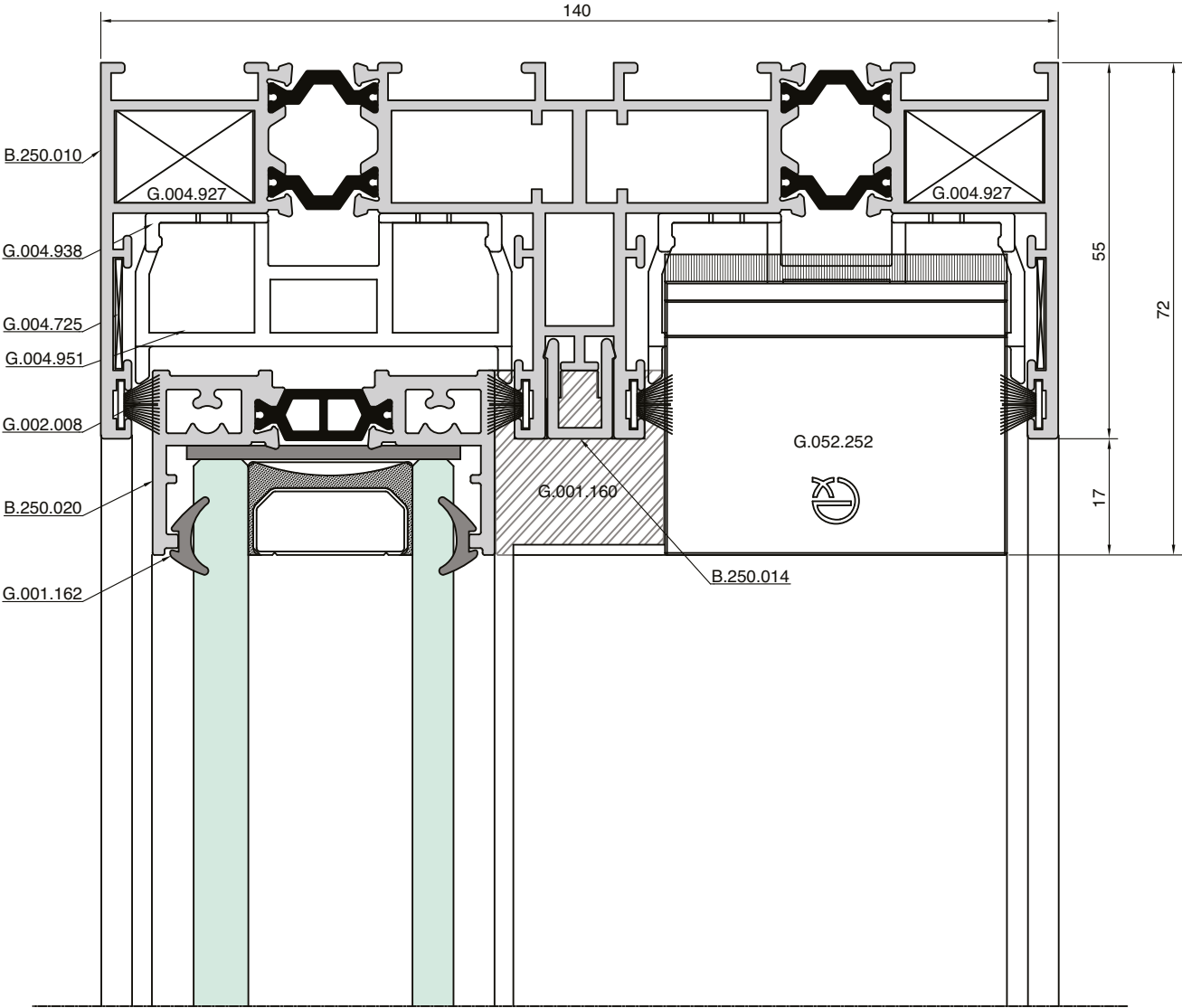
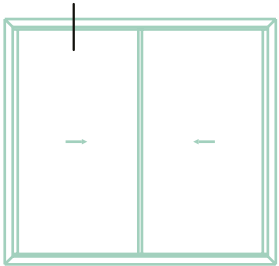


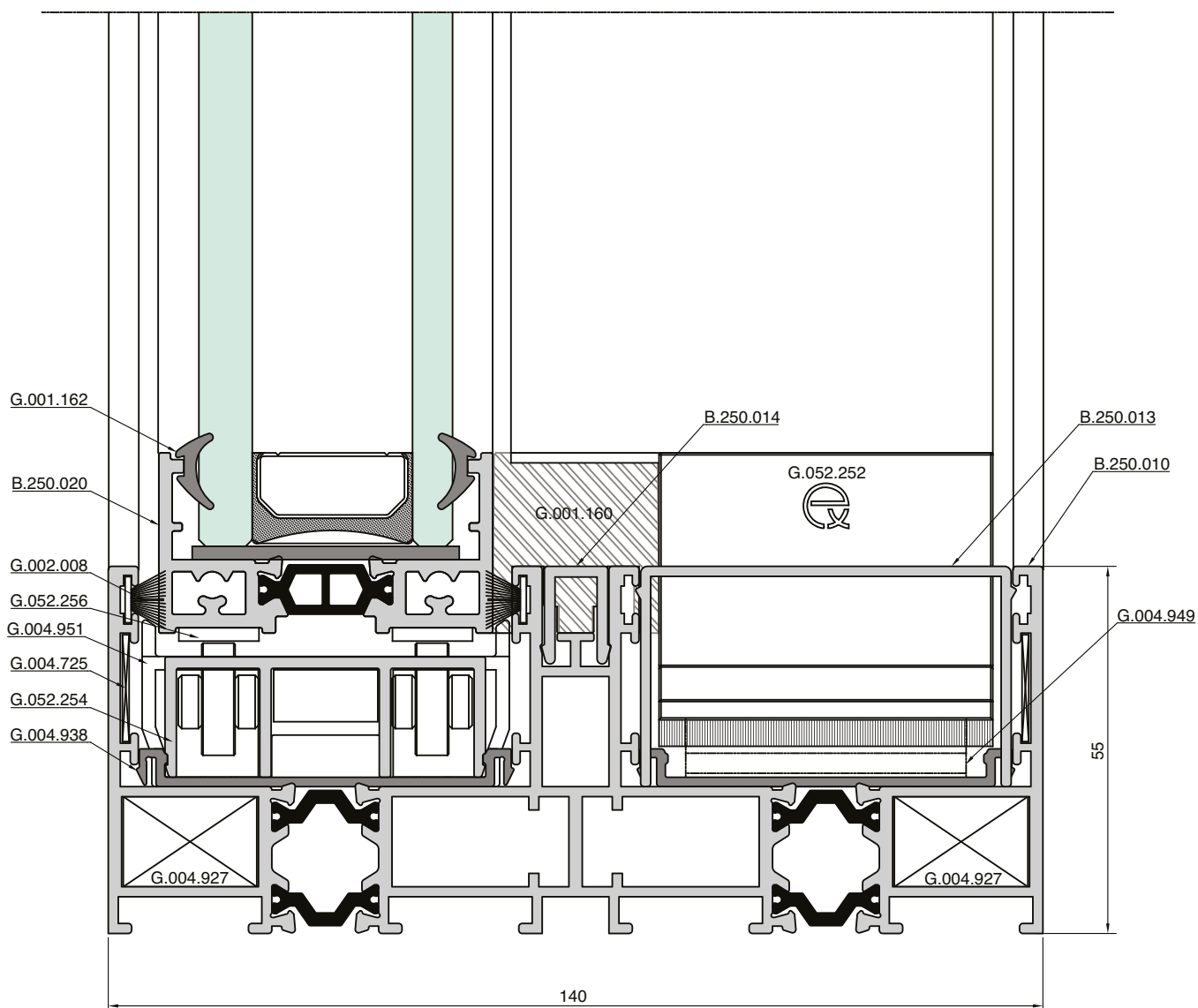
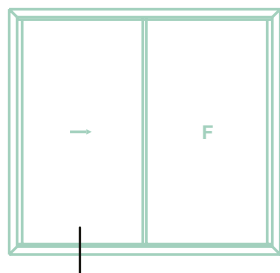


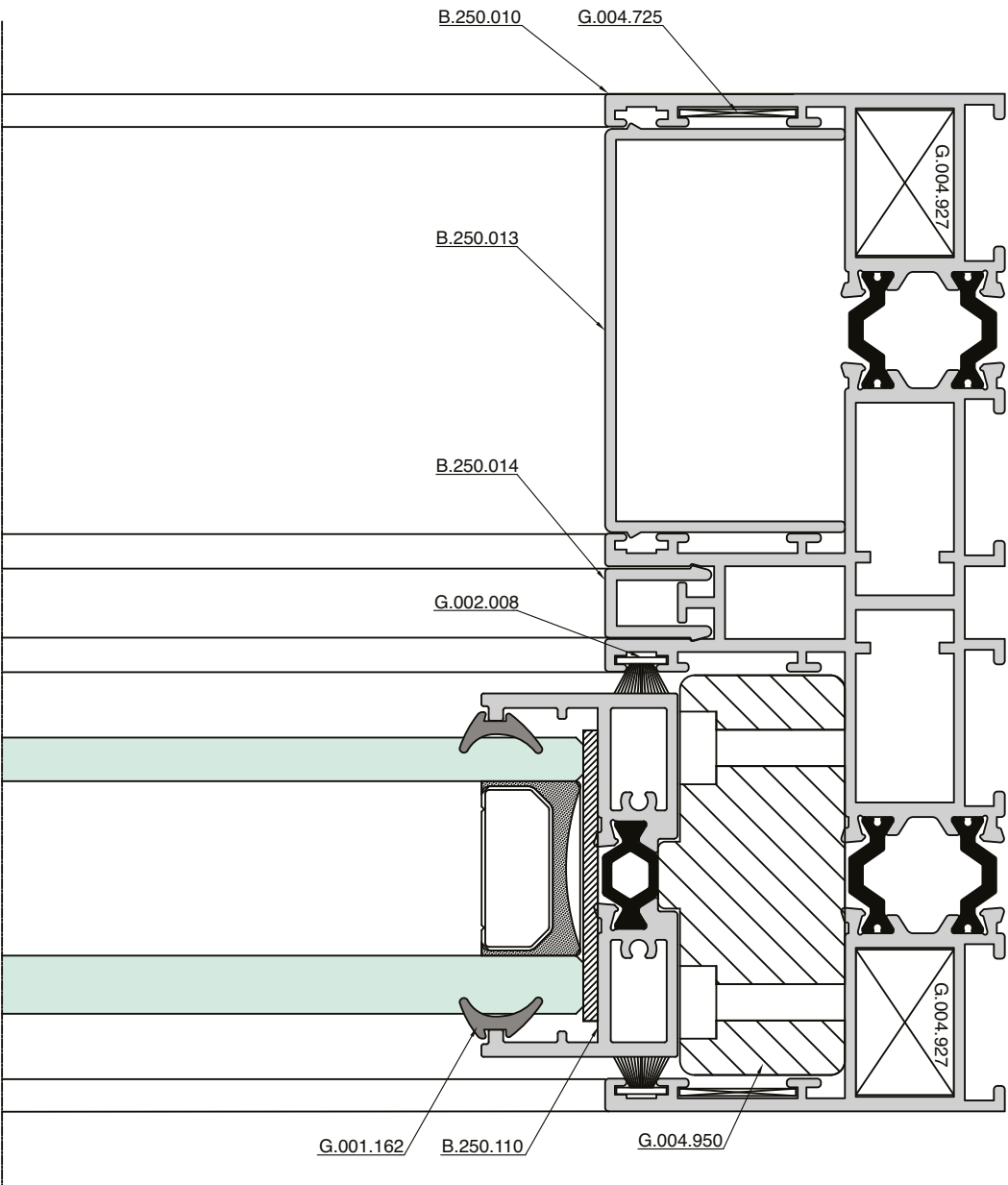
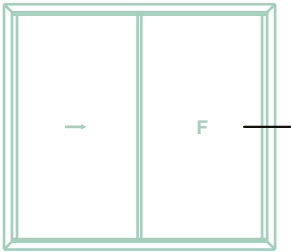


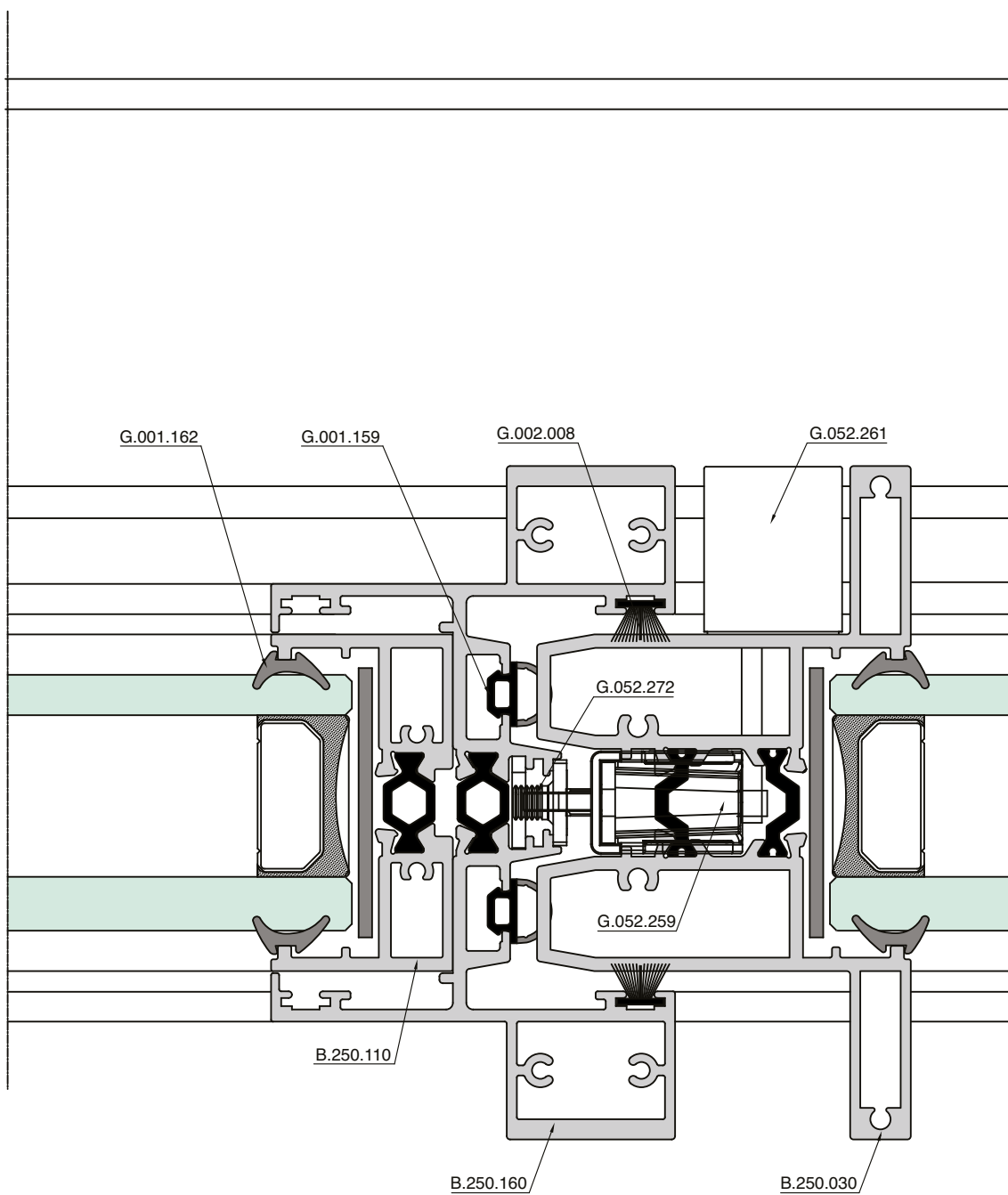
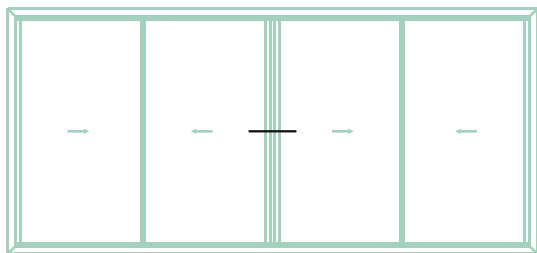


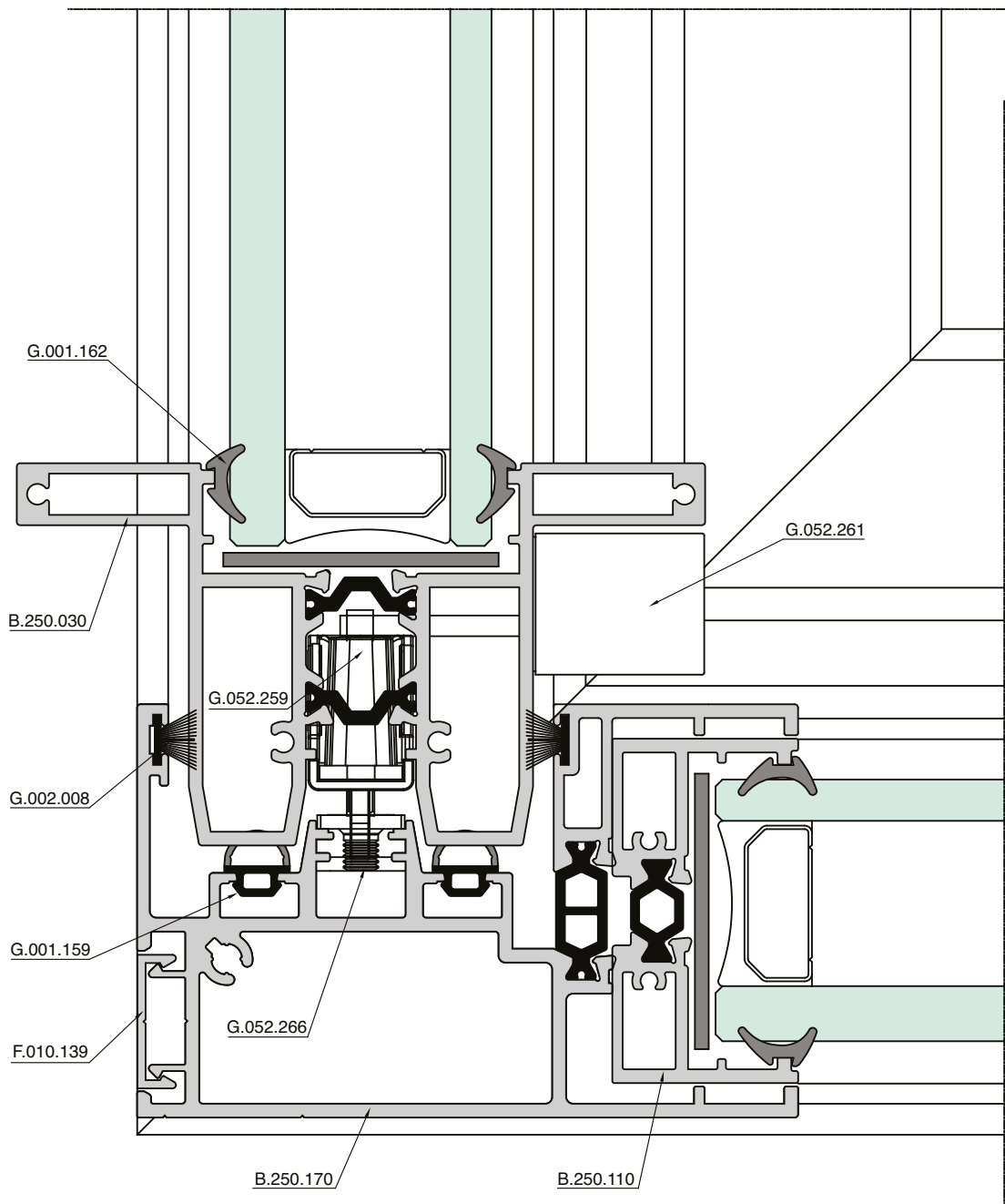
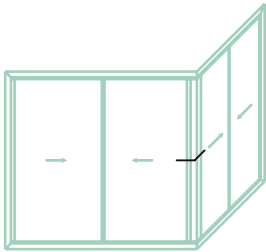


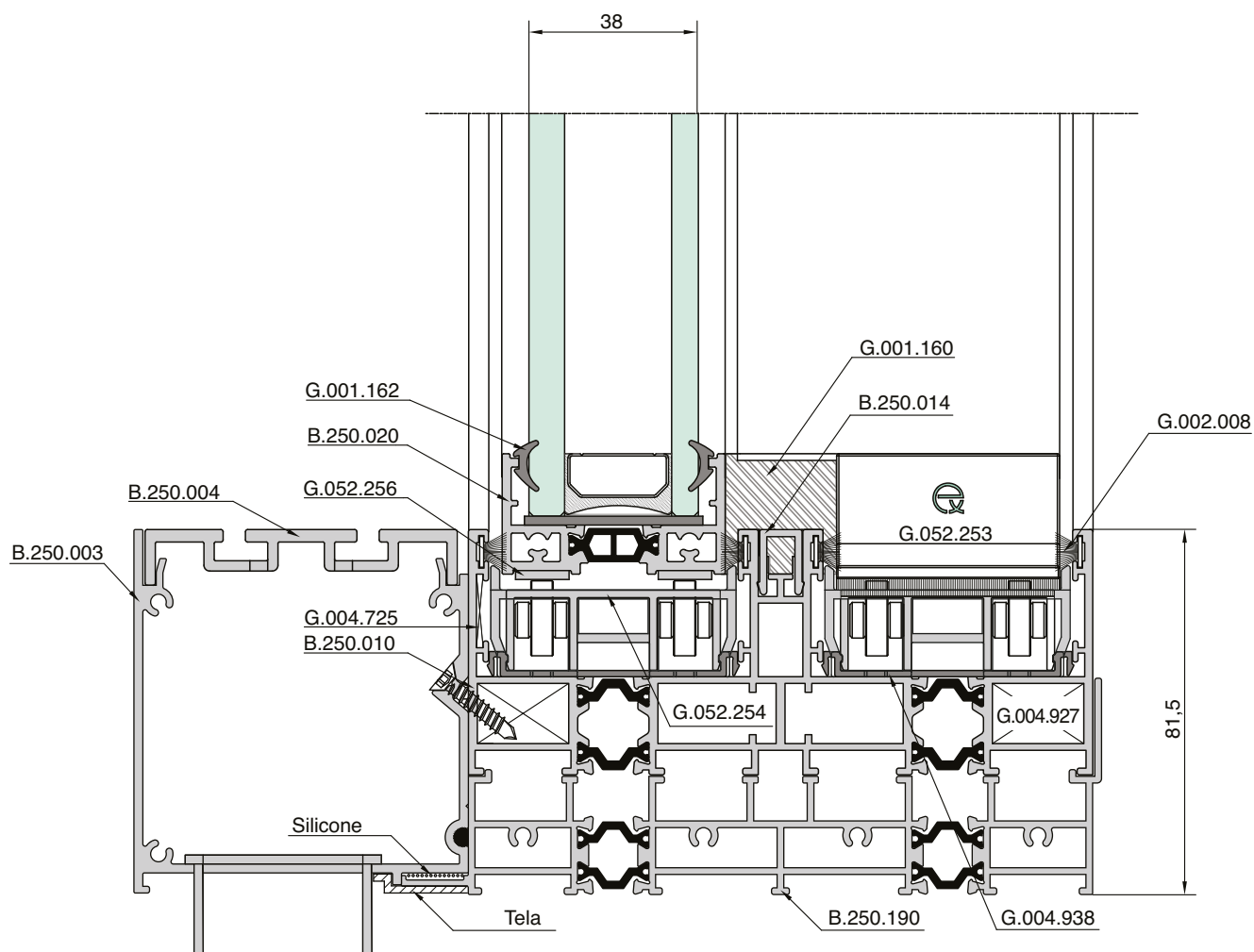
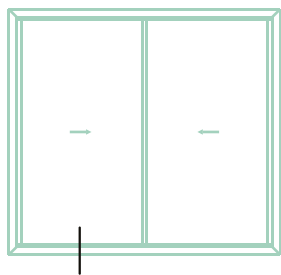




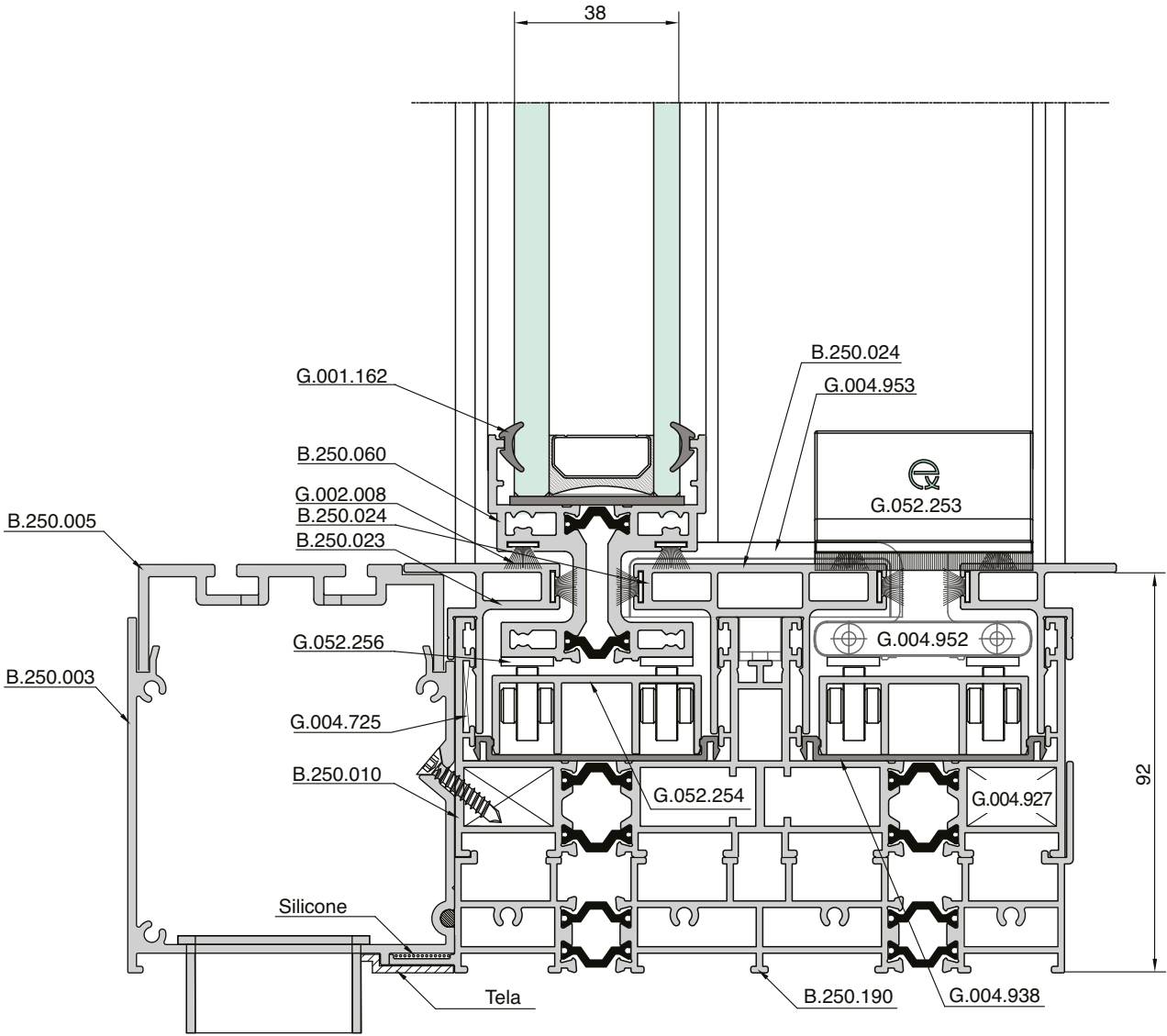
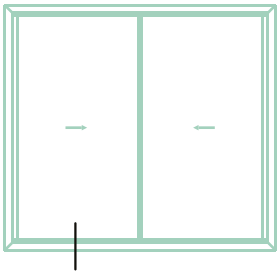




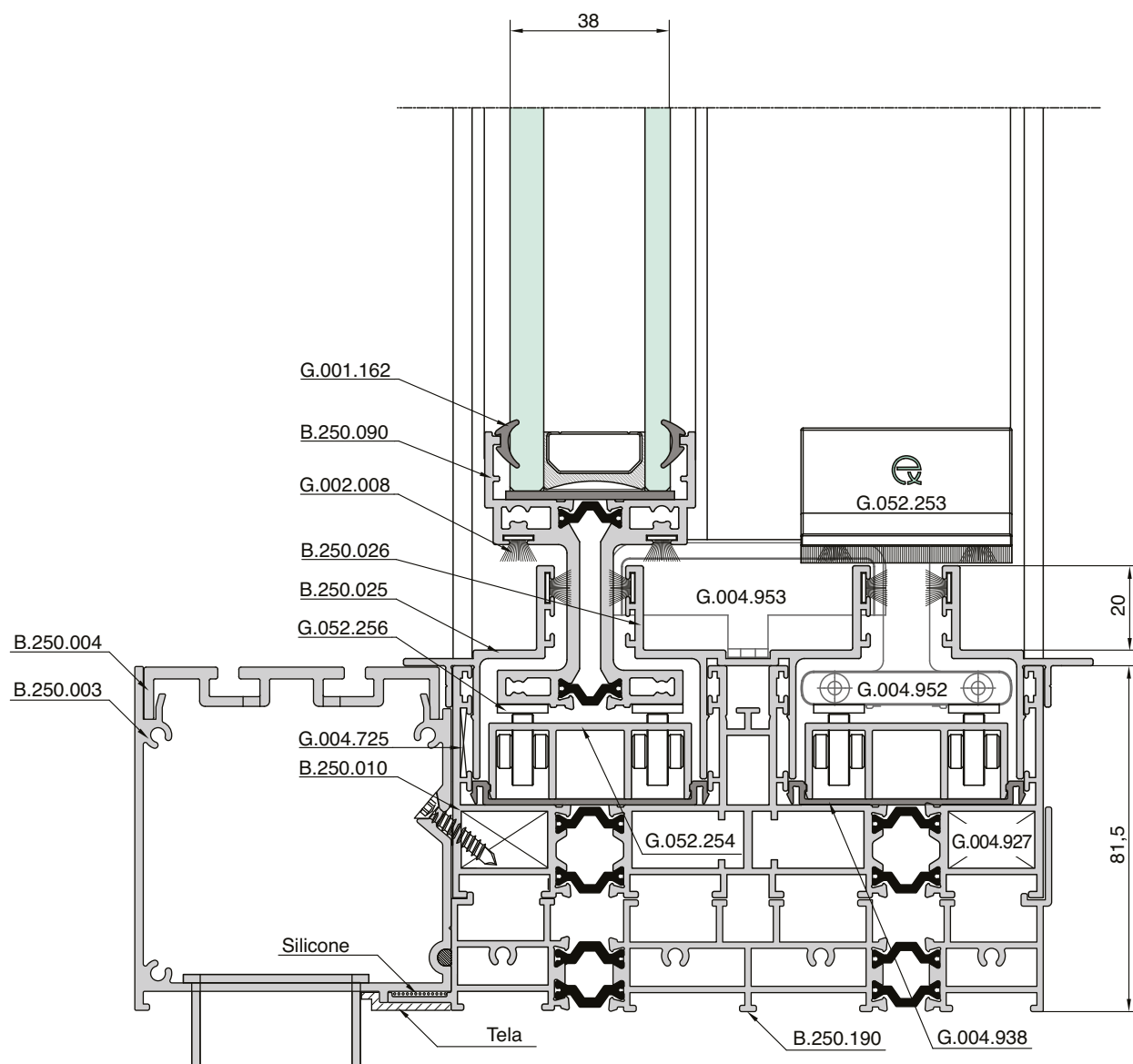
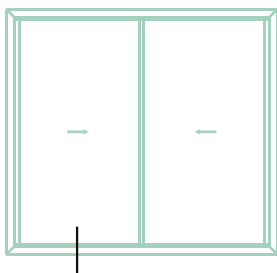




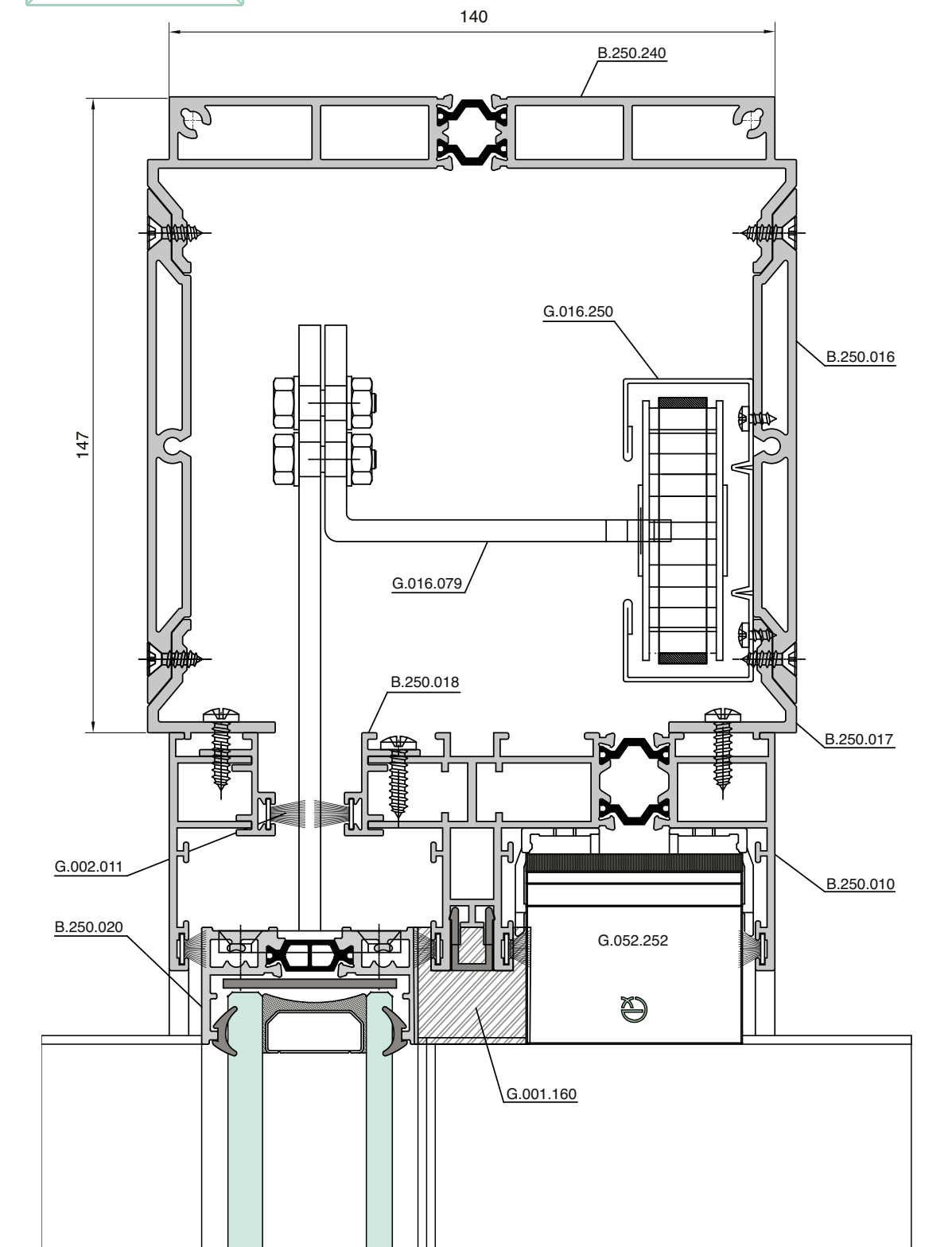
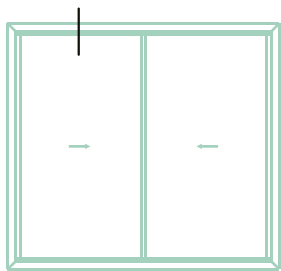
Para mais informações contactar o Departamento Técnico



Para mais informações contatar o Departamento Técnico



Para mais informações contactar o Departamento Técnico



Para mais informações contactar o Departamento Técnico

