



# *Fachadas*

A.080 - Alas80

GlassWall

LOU / ALU

# Fachadas

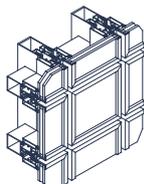
A.080 - Alas80

## GlassWall

A.080 

### Fachada VEP - Vidro Exterior Preso

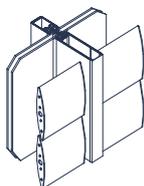
Vidros aplicados em caixilho independente (quadro móvel), fixado posteriormente à estrutura através de peças próprias, que asseguram a transmissão dos esforços à estrutura de base.



### Fachada Hélios (Quebra Sol)

Solução integrado para envidraçamentos e controlo solar.

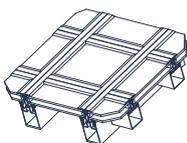
Vidros e perfis de sombreamento numa só estrutura, com lâminas de 170 ou 200 mm, fixas ou orientáveis, posicionadas horizontalmente, com motores e mecanismos de comando ocultos.



### Clarabóia

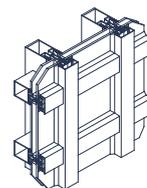
Solução ideal para construção de lanternins, coberturas e envidraçados inclinados, com possibilidade de ventilação através de janelas projectantes acionadas electricamente.

Os vidros são fixados à estrutura através de capas específicas que possibilitam o rápido escoamento das águas.



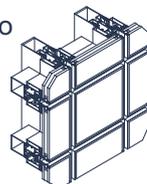
### Fachada Clássica

Vidros fixados à estrutura através de capas exteriores, em perfil de alumínio, aplicadas na posição vertical e horizontal.



### Fachada VEC - Vidro Exterior Colado

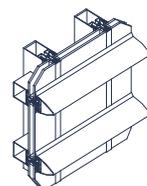
Vidros colados em caixilho independente (quadro móvel), fixado posteriormente à estrutura através de peças próprias, que asseguram a transmissão dos esforços à estrutura de base.



### Fachada TH - Trama Horizontal

Vidros fixados à estrutura através de capas exteriores, em perfil de alumínio, aplicadas na posição horizontal.

O efeito visual linear horizontal obtém-se pela ausência de capas exteriores verticais.



### CAPACIDADE DO ENVIDRAÇAMENTO

Específica para cada solução construtiva, abrangendo:

- Elementos com vidro simples de 6 mm a 8 mm de espessura;
- Elementos com vidro duplo de 22 mm a 36 mm de espessura.

### TIPOLOGIAS DE ABERTURA

Integradas:

- Janelas projectantes do próprio sistema.

Encastradas:

- Em associação com sistemas de batente e as suas diversas tipologias de abertura.

### ENSAIO DO TIPO INICIAL

Organismo notificado nº 1239 Boletim de ensaio nº 25497

#### DIMENSIONAMENTO

De acordo com o ITE 51 LNEC.

Fachada Cortina composta por quinze folhas (uma projectante e catorze fixas)

Dimensão:  
5500 mm x 7890 mm



### COEFICIENTE DE TRANSMISSÃO TÉRMICA

Organismo notificado nº 1239 Relatório nº 25786



Fachada cortina composta por nove folhas fixas.

Dimensão: 4500 mm x 4500 mm.

Vidro exterior: Guardian Extraclear Float 6 mm.

Vidro interior: Guardian Lamiglass Clear com 8.38 mm.

Espaçador do vidro: 16 mm.

### DESEMPENHO ACÚSTICO

Organismo notificado nº 1239 Informação de cálculo nº 25660



Fachada cortina composta por oito folhas fixas.

Dimensão: 3860 mm x 2960 mm.

Vidro exterior: Guardian Extraclear Float 4 mm.

Vidro interior: Guardian Lamiglass Clear com 8.38 mm.

Espaçador do vidro: 16 mm.  $R_A$  (dBA) = 36.8

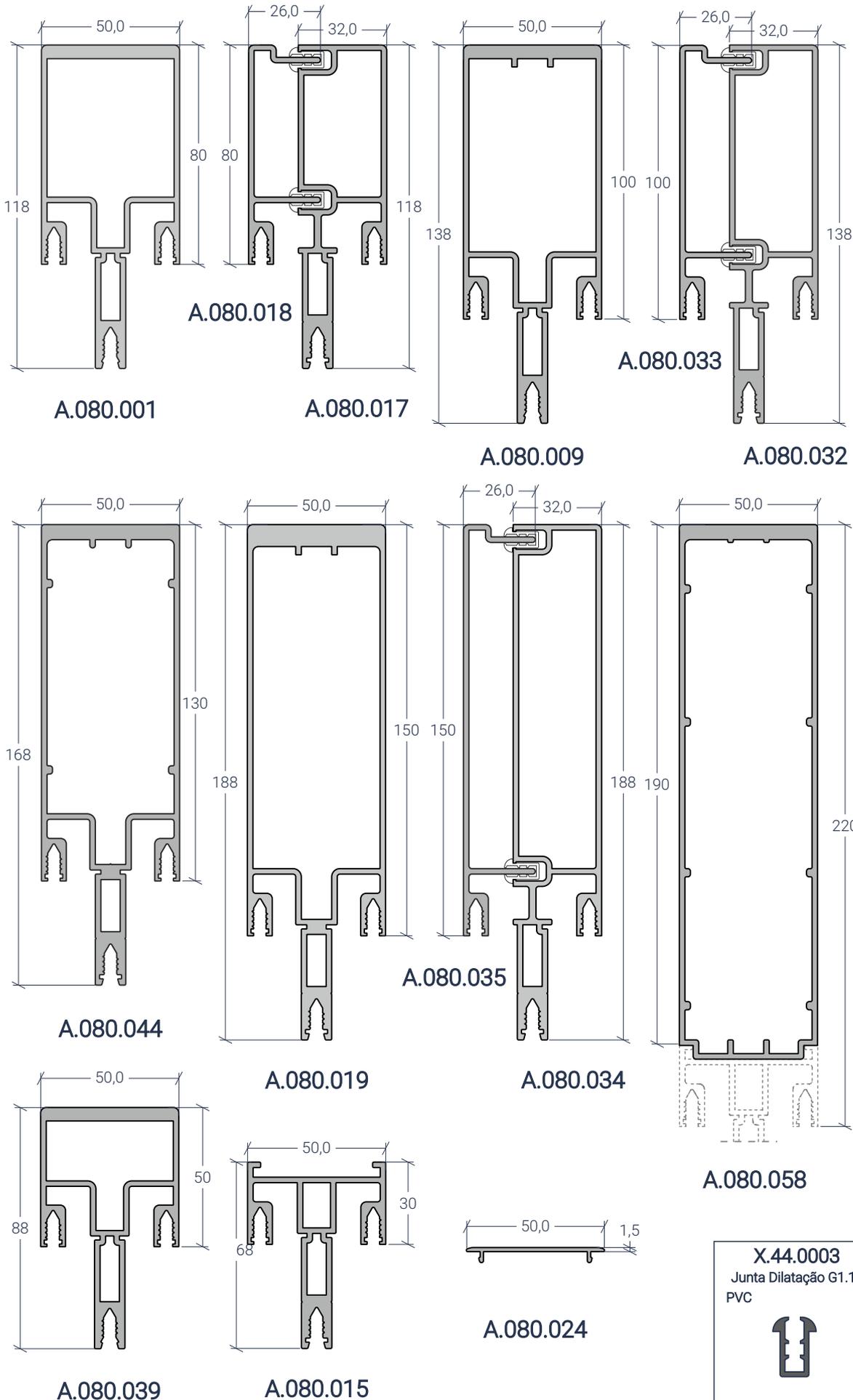
A.080/Alas80

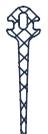


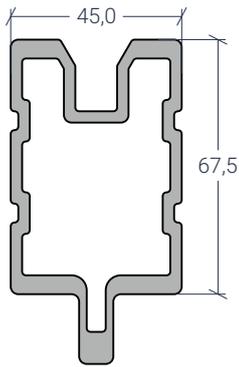
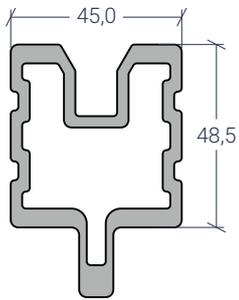
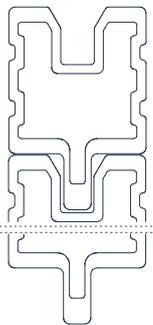
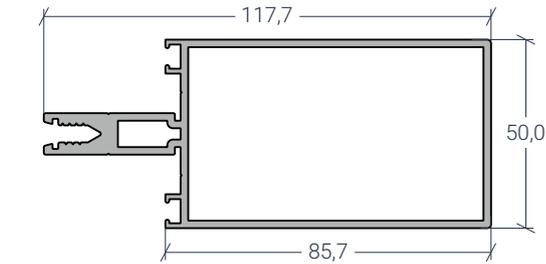
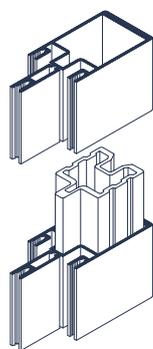
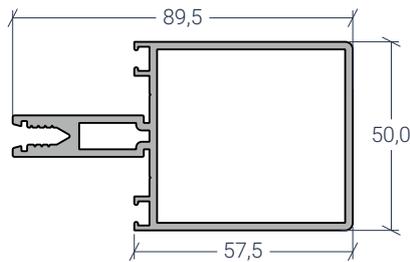
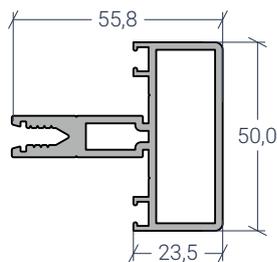
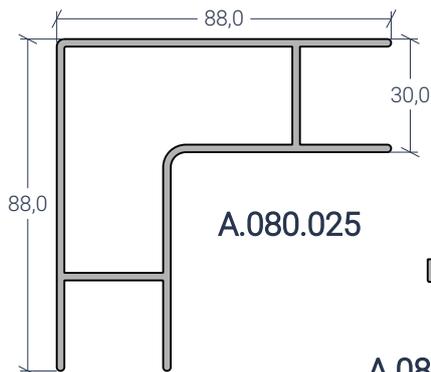
LOU/ALU

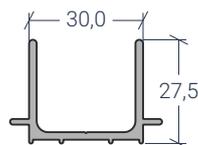
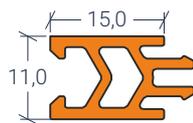
GlassWall

**Perfis Estruturais** (escala 1:2)

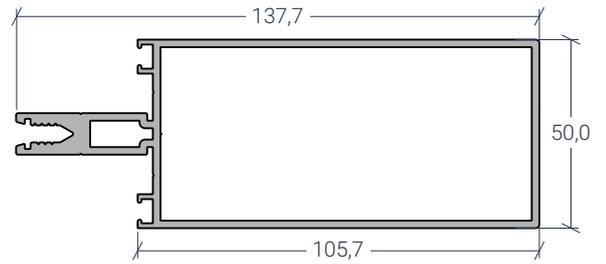
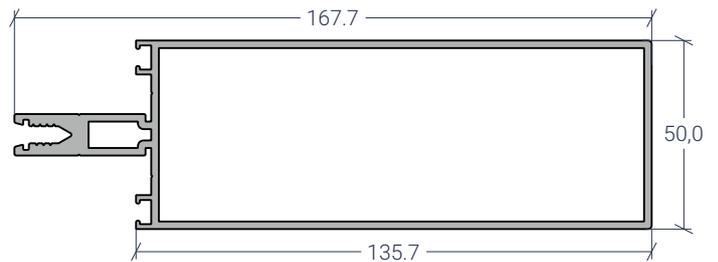
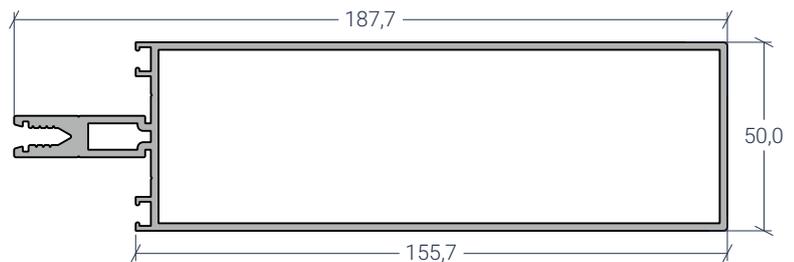
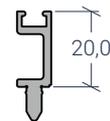
**Montantes - A.080**


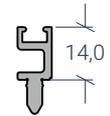
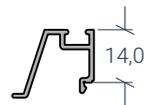
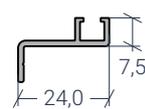
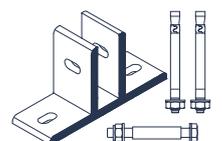
<b>X.45.0001</b> Ved. Montante G1.60 EPDM 	
<b>X.45.0002</b> Ved. Travessa G1.61 EPDM 	
<b>X.45.0003</b> Ved. T. Horizontal G1.62 EPDM 	
<b>X.45.0004</b> Ved. de vidro G1.18 EPDM 	
<b>X.45.0005</b> Ved. de vidro G1.29 EPDM 	
<b>X.44.0029</b> Ved. de vidro G1.08 EPDM 	
<b>X.46.0002</b> Ved. VEP/VEC G1.32 EPDM 	
<b>X.44.0003</b> Junta Dilatação G1.10 PVC 	<b>X.46.0001</b> Ved.VEP/VEC. G1.33 EPDM 

**Perfis Estruturais (escala 1:2)**
**Travessas - A.080**

**A.080.030**

**A.080.029**

**A.080.016**

**A.080.028**

**A.080.002**

**A.080.016**

**A.080.025**

**A.080.045**

**A.080.021**

**A.080.261**

(Perfil à escala 1:1)


**A.080.056**

**A.080.046**

**A.080.040**

**A.080.023**

**A.080.007**

**A.080.022**

**A.080.014**

**A.080.031**
**X.54.0013**  
 Fixador Base/topo G4.378

**X.45.0044**

 Junta Mont/Trav. G1.112  
 EPDM


p/ A.080.056

**X.45.0043**

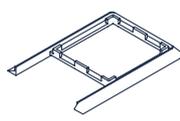
Junta Mont/Trav. G1.95



p/ A.080.028

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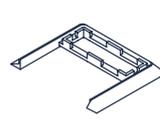
Junta Mont/Trav. G1.59



p/ A.080.002

**X.45.0022**

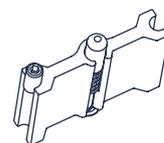
Junta Mont/trav. G1.67



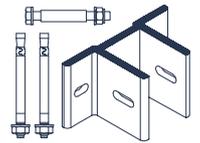
p/ A.080.016

**X.59.0113**

Peça anti-giro G4.490

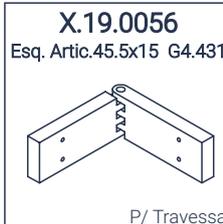
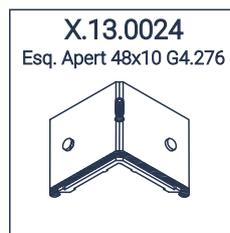
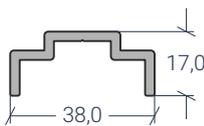
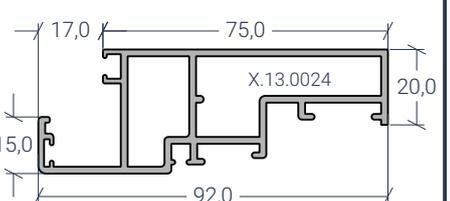
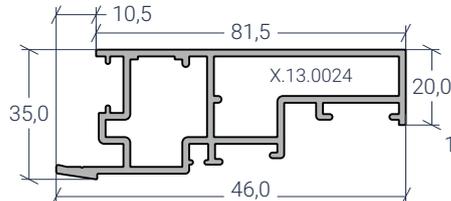
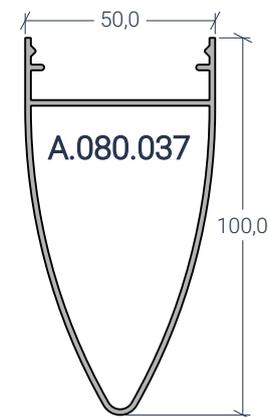
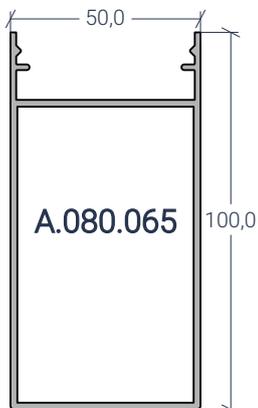
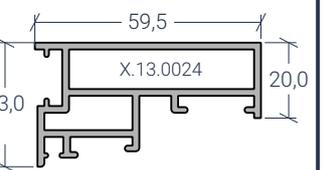
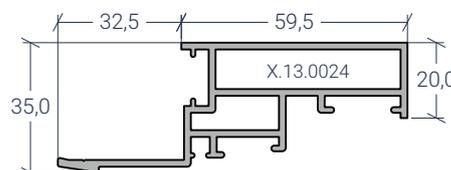
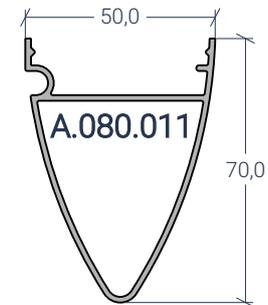
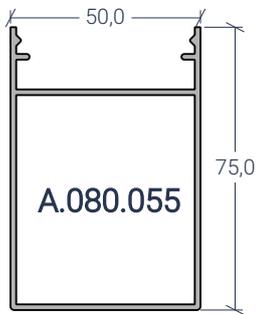
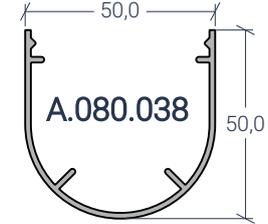
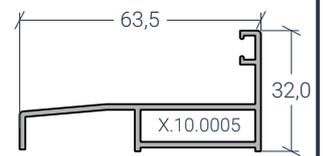
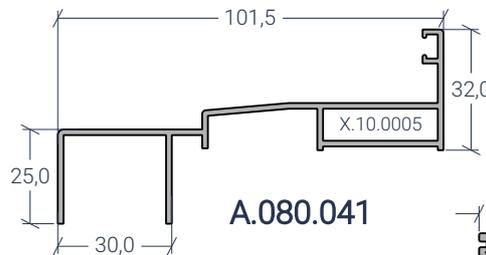
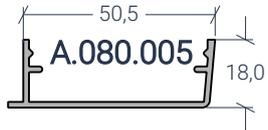

**X.54.0005**

Fixador Testa G4.342



Perfis Estruturais (escala 1: 2)

Capas e Móveis - A.080



P/ Travessa

P/ VEP/VEC

P/ A.080.011

P/ VEC

P/ Folha VEP

### Módulo Clássico (Xadrez)

#### Características

Vista exterior:

Vertical 50 mm  
Horizontal 50 mm

Barra isoladora em Poliamida TK 6.6

Capacidade de envidraçamento:

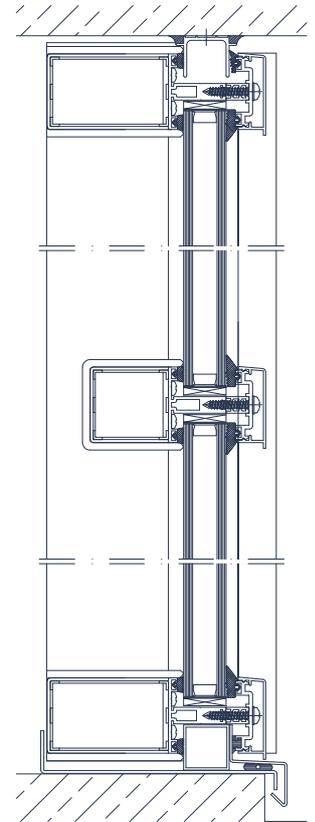
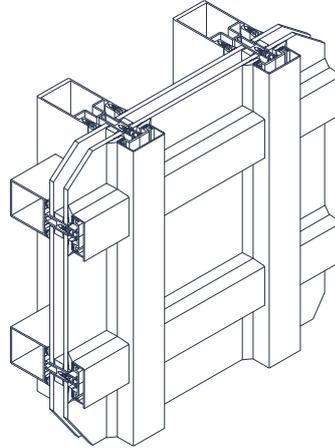
Duplo 26 / 30 mm  
Simples 6 / 10 / 12 / 16 mm

Junta de estanquidade do vidro assegurada por vedantes em EPDM

Peso máximo admissível por folha fixa: 500kg

Possibilidades de abertura:

Janela projectante  
Portas e janelas dos sistemas A040 e A045



#### Resultados no banco de ensaios

Permeabilidade ao ar - A 4

Estanquidade à água - R 750

Índice de atenuação acústica RW = 38 dB

Coef. de transmissão térmica da janela Uw = 3,1 W/m2K

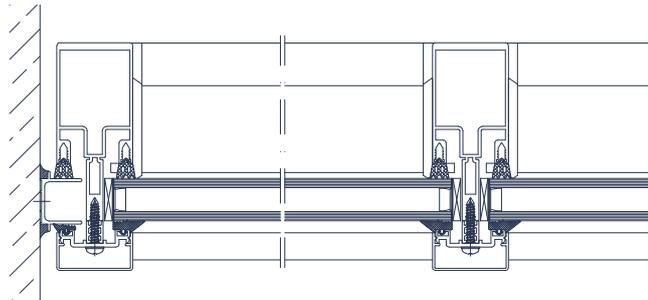
Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para o cálculo Rw e Uw o preenchimento considerado foi um vidro de baixa emissividade ( $e \leq 0,05$ ) composto por

4.4.2+12+6mm, com Rw = 40 dB e

Uv = 2,7 W/m2K.

Os valores apresentados estão condicionados pela dimensões e características do caixilho, sua localização e preenchimento utilizado.



#### Características

Vista exterior:

Vertical, vedante em EPDM  
Horizontal 50 mm

Barra isoladora em Poliamida TK 6.6

Capacidade de envidraçamento:

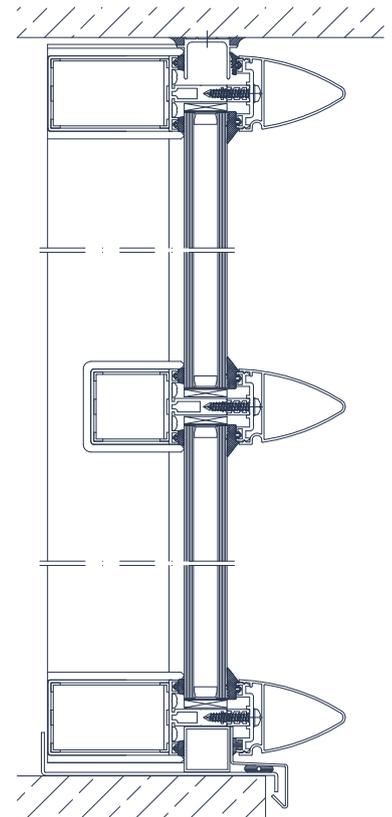
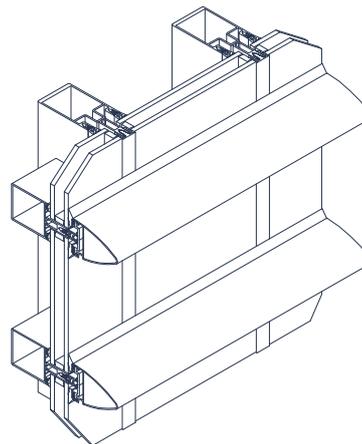
Duplo 30 mm  
Simples 10 / 16 mm

Junta de estanquidade do vidro assegurada por vedantes em EPDM

Peso máximo admissível por folha fixa: 500kg

Possibilidades de abertura:

Janela projectante  
Portas dos sistemas A040 e A045



#### Resultados no banco de ensaios

Permeabilidade ao ar - A 4

Estanquidade à água - R 750

Índice de atenuação acústica RW = 38 dB

Coef. de transmissão térmica da janela Uw = 3,0 W/m2K

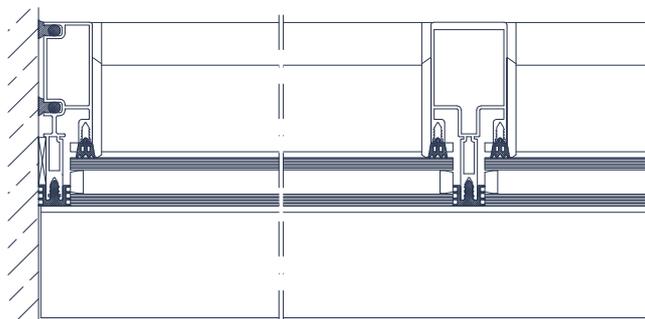
Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para o cálculo Rw e Uw o preenchimento considerado foi um vidro de baixa emissividade ( $e \leq 0,05$ ) composto por

4.4.2+16+6mm, com Rw = 40 dB e

Uv = 2,7 W/m2K.

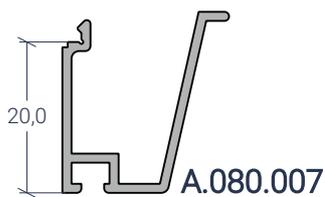
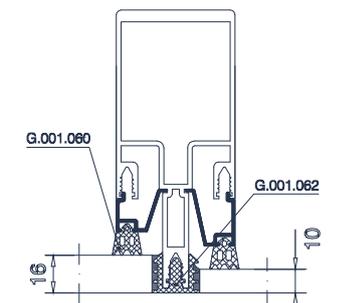
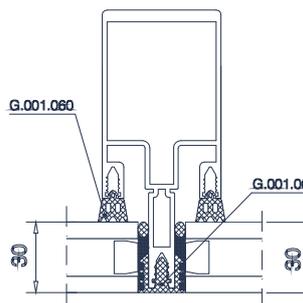
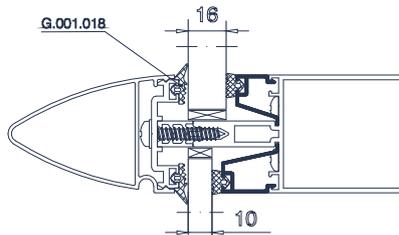
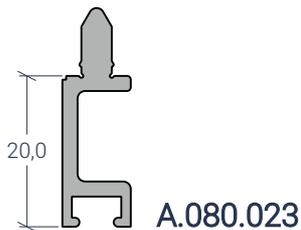
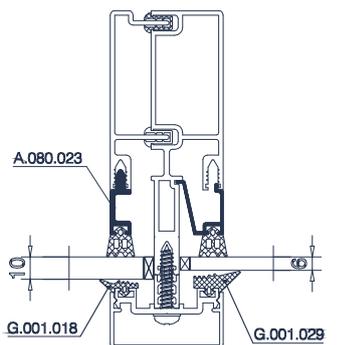
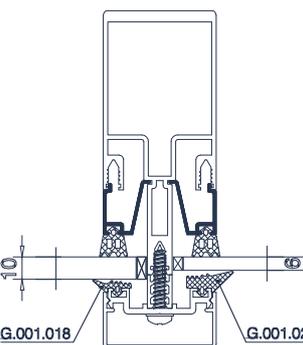
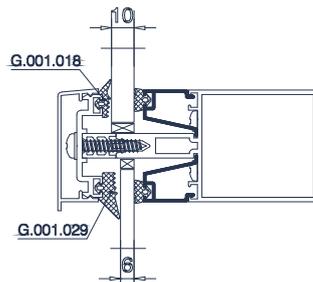
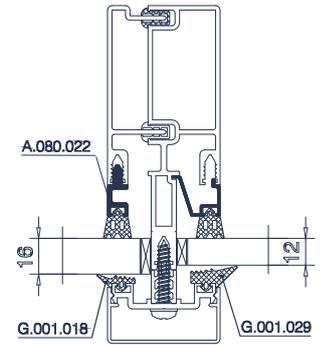
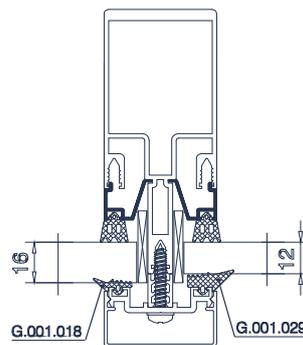
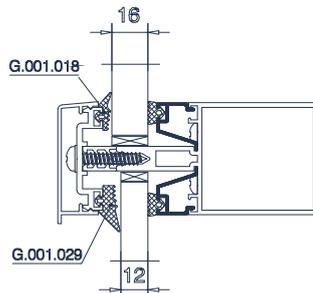
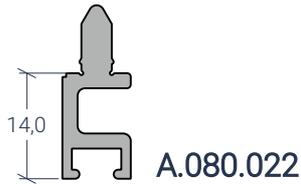
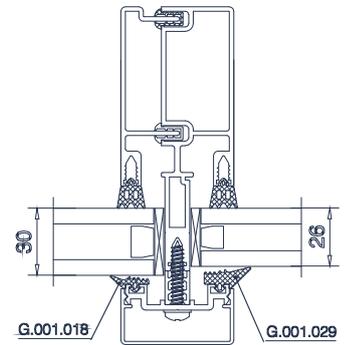
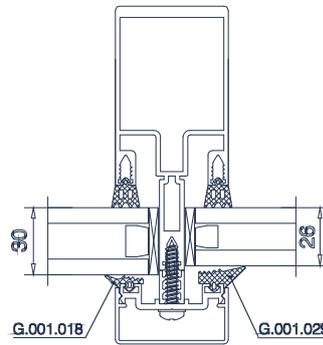
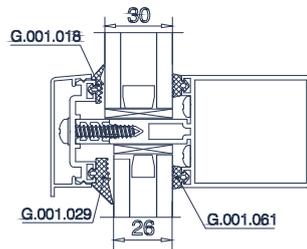
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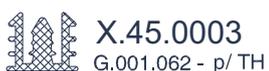
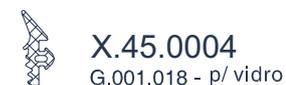
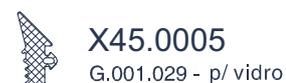
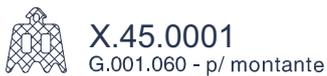
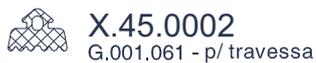
Perfis: (escala 1:2) Cortes: (sem escala)

## Módulo Clássico e T.H. - A.080

### Envidraçamento



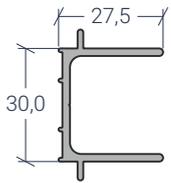
Vedantes EPDM



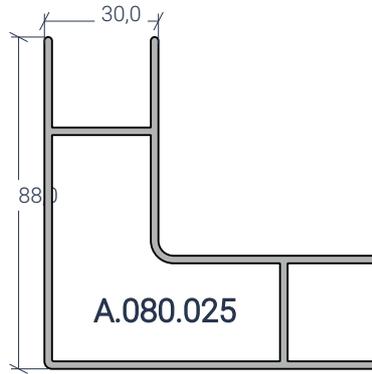
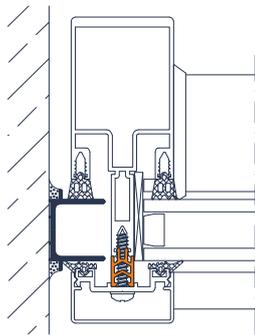
Perfis: (escala 1:2) Cortes: (sem escala)

## Módulo Clássico e T.H. - A.080

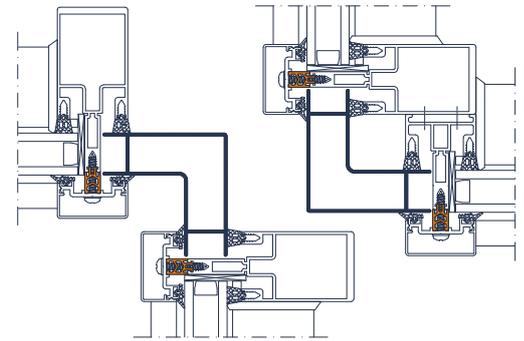
### Remates e Juntas



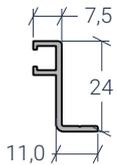
A.080.021



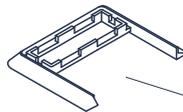
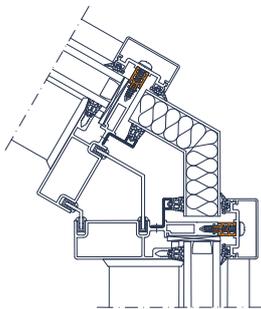
A.080.025



A.080.261



A.080.031

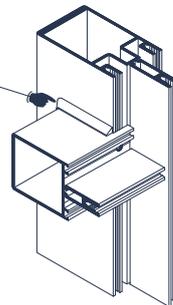


X.45.0022  
G.001.067 (A.080.016)

X.45.0021  
G.001.059 (A.080.002)

X.45.0043  
G.001.095 (A.080.028)

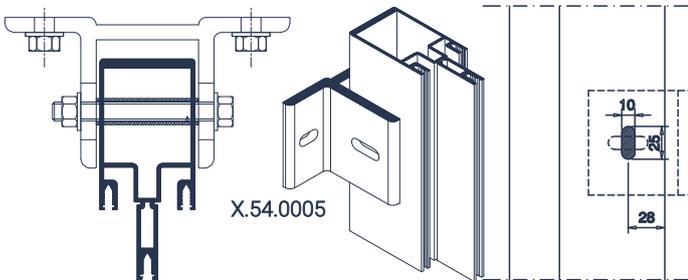
X.45.0044  
G.001.112 (A.080.056)



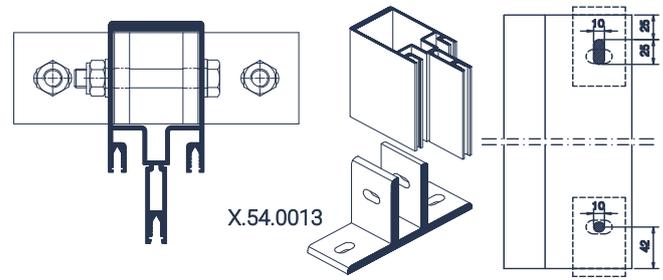
X.59.0113

Peça anti-giro - G.004.490

### Fixação à Lage



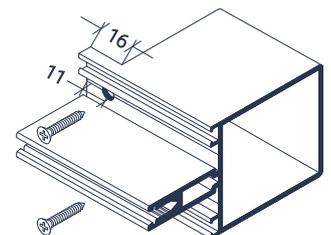
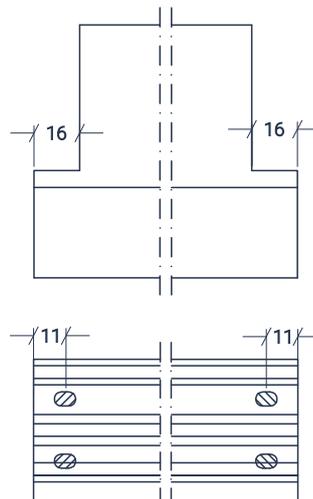
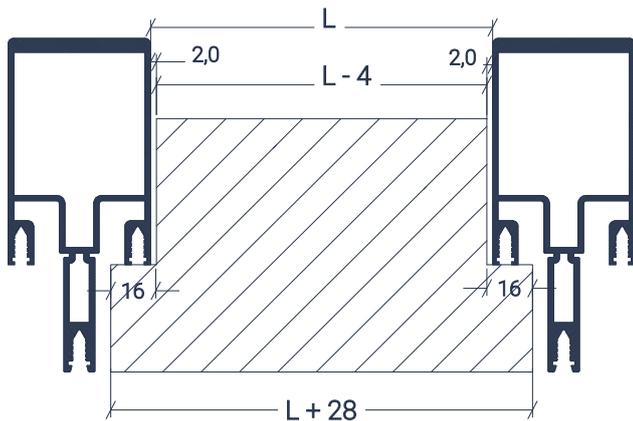
X.54.0005



X.54.0013

### Medidas de Corte e Malhete da Travessa

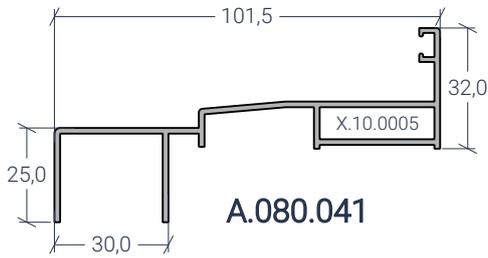
Medidas de corte das travessas c/ junta de vedação



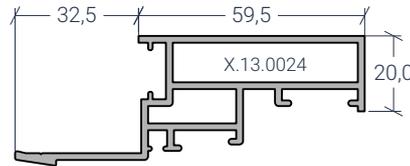
Perfis: (escala 1:2) Cortes: (sem escala)

## Módulo Clássico e T.H. - A.080

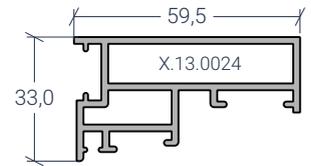
### Pormenores de Montagem



**A.080.041**

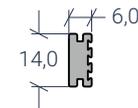
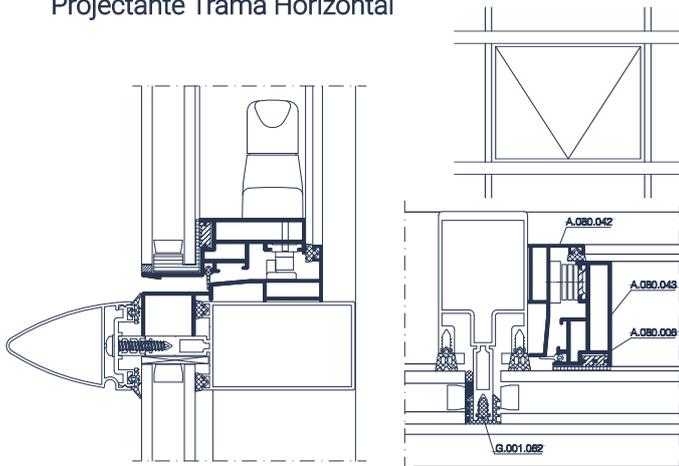


**A.080.008**

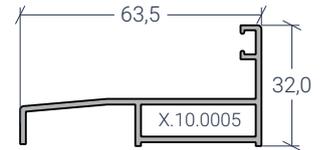


**A.080.043**

### Projectante Trama Horizontal

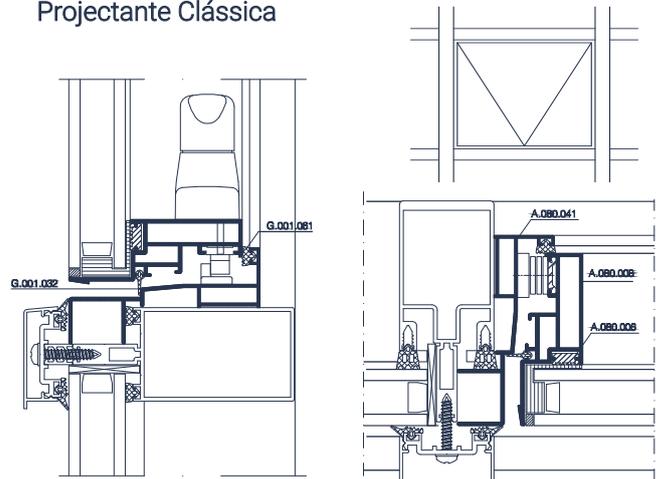


**A.080.006**

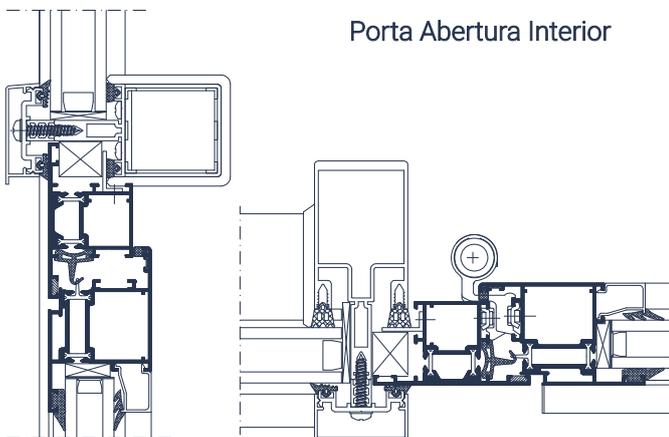


**A.080.042**

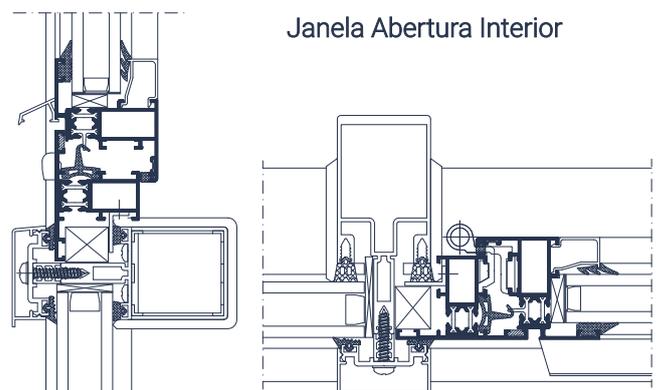
### Projectante Clássica

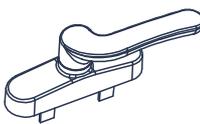
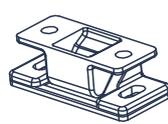
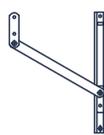


### Porta Abertura Interior



### Janela Abertura Interior



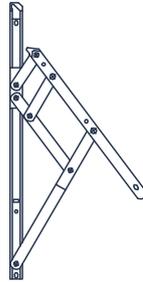
<p><b>X.30.0155</b> Cremone projet. G4.860</p> 	<p><b>X.33.0128</b> Ponto de fecho. G4.861</p> 	<p><b>X.37.0034</b> Limit. Flecha G4.750</p> 	<p><b>X.37.0033</b> Limit. Abertura G4.749</p> 	<p><b>X.37.0042</b> Compasso Projet. G4.748</p>  <p>40kg - Alt. de 300 a 600</p>	<p><b>X.37.0043</b> Compasso Projet. G4.488</p>  <p>50kg - Alt. de 600 a 800</p>	<p><b>X.37.0006</b> Compasso Projet. G4.393</p>  <p>55kg - Alt. de 787 a 1100</p>	<p><b>X.37.0018</b> Compasso Projet. G4.275</p>  <p>100kg - Alt. de 1270 a 2500</p>	<p><b>X.37.0032</b> Compasso Projet. G4.747</p>  <p>120kg - Alt. de 1300 a 1900</p>
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## Módulo Clássico e T.H. - A.080

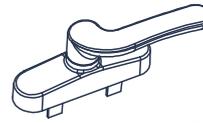
### Aplicação de acessórios

-  **X.44.0029**  
Vedante Vidros G1.008
-  **X.46.0002**  
Vedante EPDM G1.032
-  **X.45.0002**  
Vedante EPDM G1.061
-  **X.55.0051**  
Fixador de Vidros G4.433
-  **X.30.0128**  
Ponto de fecho. G4.861

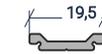
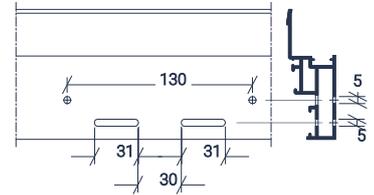
Compasso projetante para largura máxima de 2000 mm de folha



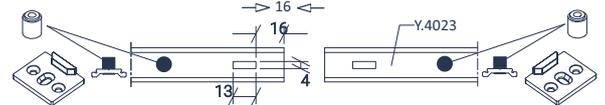
- X.37.0043**  
G.004.748 - 40kg  
de 300 a 300 mm altura
- X.37.0043**  
G.004.488 - 50kg  
de 600 a 800 mm altura
- X.37.0006**  
G.004.393 - 55kg  
de 787 a 1100 mm altura
- X.37.0018**  
G.004.275 - 100kg  
de 1270 a 2500 mm altura
- X.37.0032**  
G.004.747 - 120kg  
de 1300 a 1900 mm altura



**X.30.0155**  
Cremone projet. G4.860

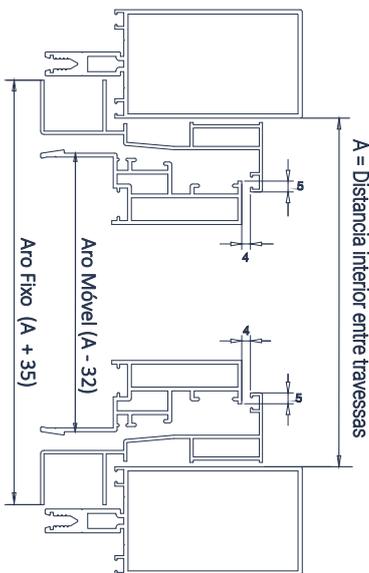


**Y.4023**  
Vareta do cremone

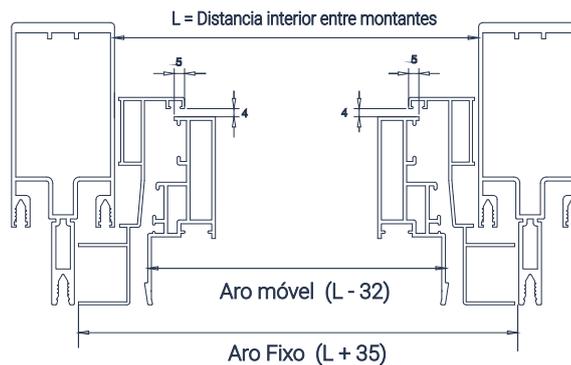


### Medidas de Corte

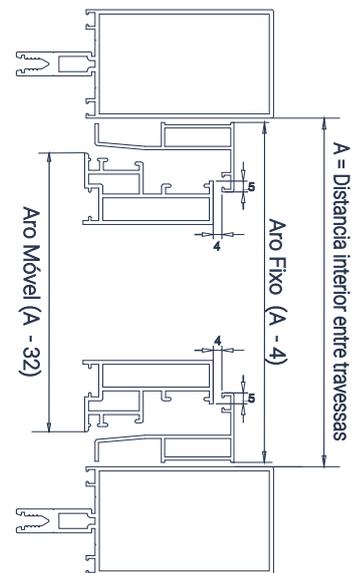
Alturas - Clássica



Larguras - Clássica e Trama Horizontal

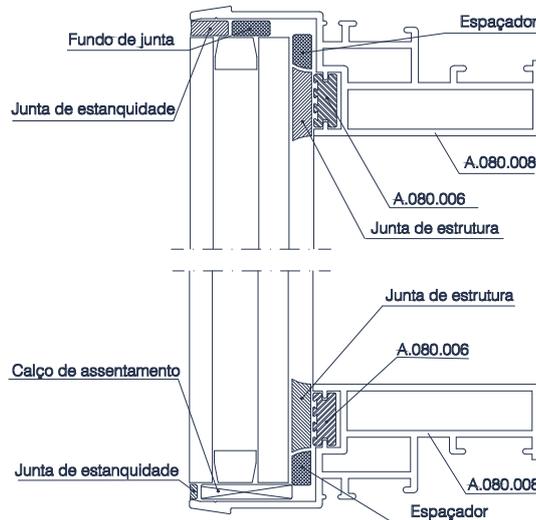
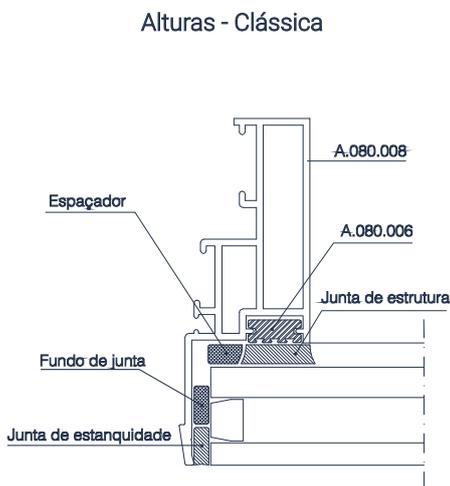


Alturas - Trama Horizontal

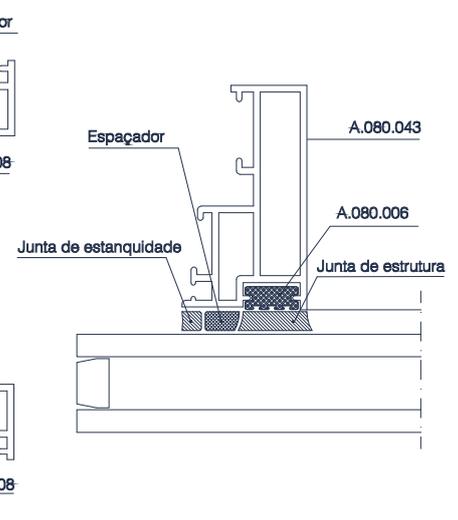


### Colagem dos Vidros

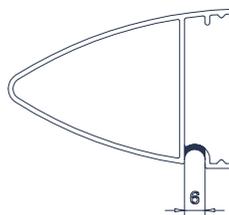
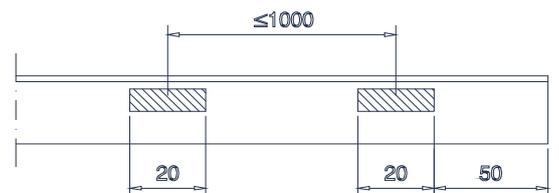
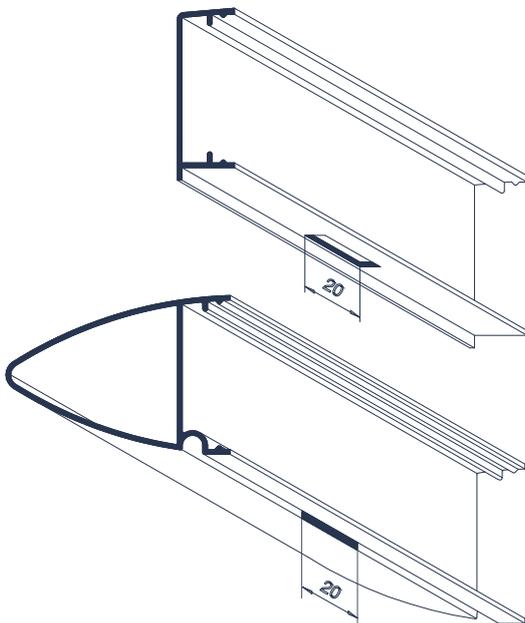
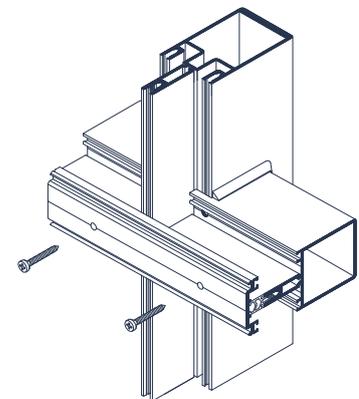
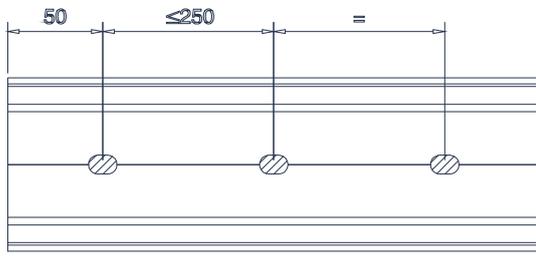
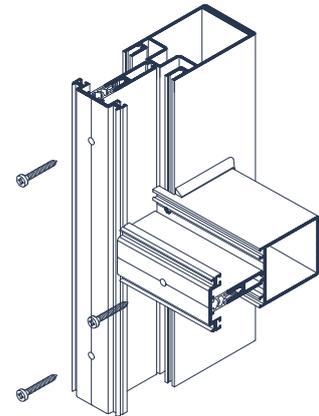
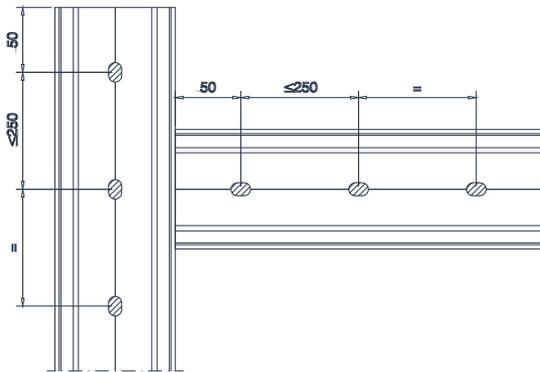
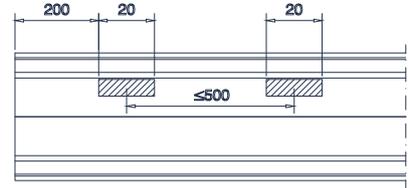
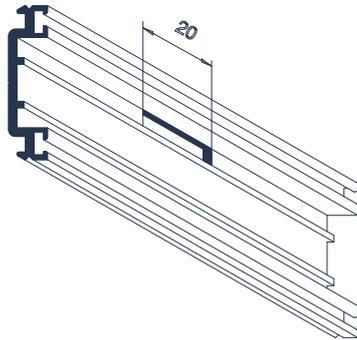
Larguras - Clássica e T. Horizontal



Alturas - T. Horizontal



Capas - Drenagem /Ventilação /Fixação



### Módulo VEP (Vidro Exterior Preso)

#### Características

Vista exterior:

- Junta entre módulos, vedante em EPDM,
- Moldura dos vidros 15 mm
- Barra isoladora em Poliamida TK 6.6
- Capacidade de envidraçamento:
  - Duplo 26 mm
  - Simples 8 mm

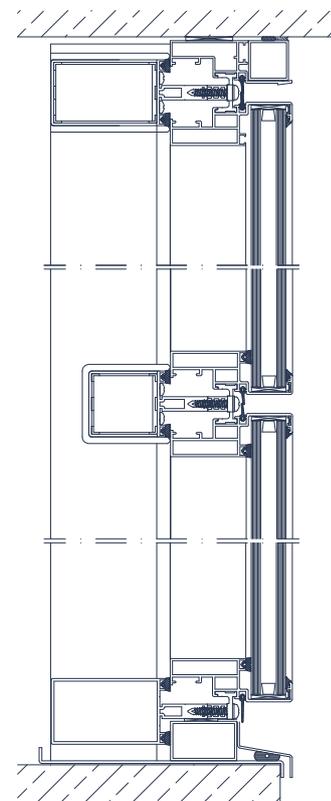
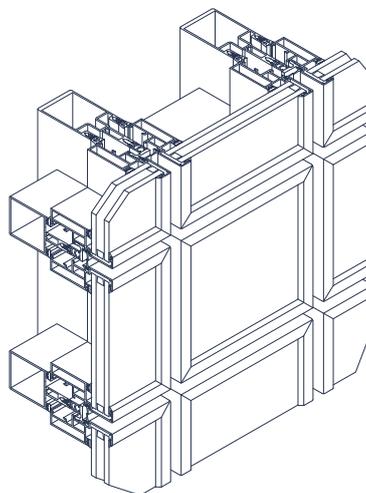
Junta de estanquidade do vidro assegurada por vedantes em EPDM

Junta de estanquidade entre módulos assegurada pela sobreposição de dois vedantes em EPDM

Peso máximo admissível por folha fixa: 500kg

Possibilidades de abertura:

- Janela projectante
- Portas dos diferentes sistemas



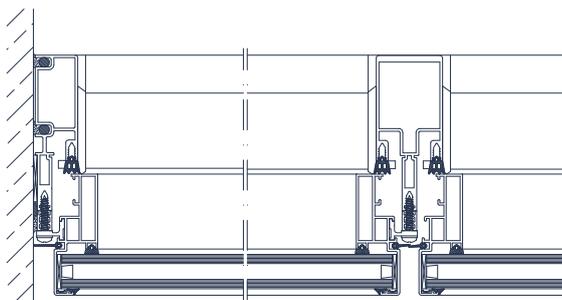
#### Resultados no banco de ensaios

- Permeabilidade ao ar - A 4
- Estanquidade à água - R 7
- Índice de atenuação acústica RW = 38 dB
- Coef. de transmissão térmica da janela Uw = 3,0 W/m<sup>2</sup>K

Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para cálculo Rw e Uw, o preenchimento considerado foi um vidro de baixa emissividade ( $e \leq 0,05$ ) composto por 4.4.2+12+6mm, com Rw = 40 dB e Ug = 2,7 W/m<sup>2</sup>K.

Os valores apresentados estão condicionados pelas dimensões e características do caixilho, sua localização e preenchimento utilizado.



### Módulo VEC (Vidro Exterior Colado)

#### Características

Vista exterior:

- Junta entre módulos, vedante em EPDM,
- Barra isoladora em Poliamida TK 6.6
- Capacidade de envidraçamento:
  - Duplo 28 / 30 mm
  - Simples 6 / 8 mm

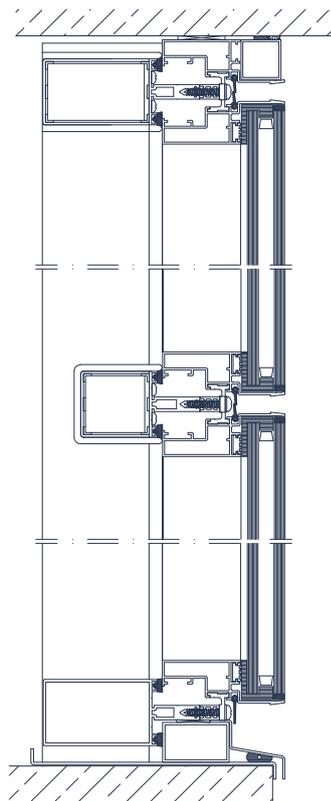
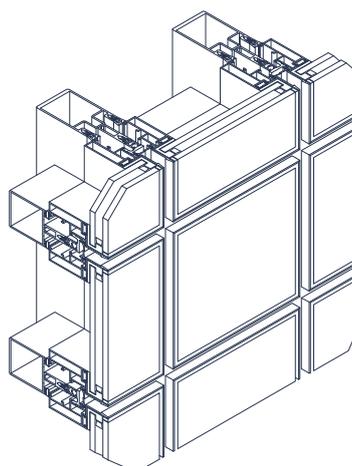
Junta de estanquidade do vidro assegurada por colagem

Junta de estanquidade entre módulos assegurada pela sobreposição de dois vedantes em EPDM

Peso máximo admissível por folha fixa: 500kg

Possibilidades de abertura:

- Janela projectante
- Portas dos diferentes sistemas



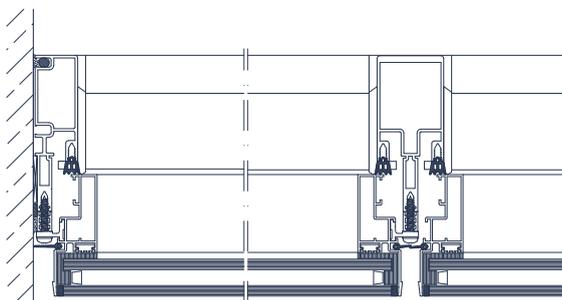
#### Resultados no banco de ensaios

- Permeabilidade ao ar - A 4
- Estanquidade à água - R 7
- Índice de atenuação acústica RW = 38 dB
- Coef. de transmissão térmica da janela Uw = 2,9 W/m<sup>2</sup>K

Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para cálculo Rw e Uw, o preenchimento considerado foi um vidro de baixa emissividade ( $e = 0,05$ ) composto por 4.4.2+14+6mm, com Rw = 40 dB e Ug = 2,7 W/m<sup>2</sup>K.

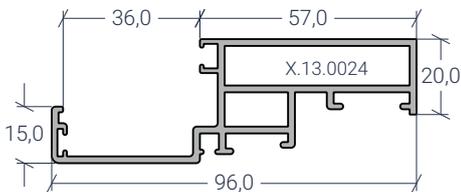
Os valores apresentados estão condicionados pelas dimensões e características do caixilho, sua localização e preenchimento utilizado.



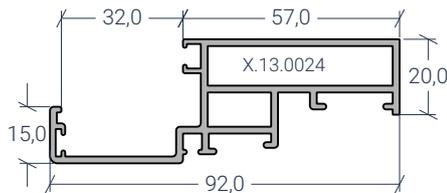
Perfis (escala 1:2) Cortes (sem escala)

## Módulos VEP e VEC - A.080

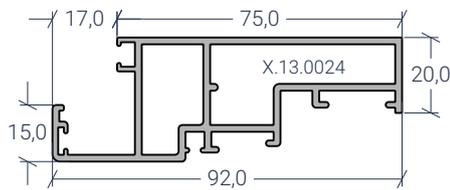
### Módulo VEP



**A.080.069**



**A.080.026**



**A.080.027**



X.55.0003

G.004.277 - Peça de fixação



X.55.0006

G.004.352 - Suporte p/ painel fixo



X.55.0051

G.004.433 - Fixação p/ vidros



A.080.261

G.004.261 - Barra de poliamida



X.44.0029

G.001.008 - Vedante p/ vidro



X.46.0002

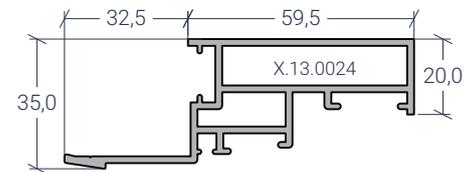
G.001.032 - Vedante EPDM



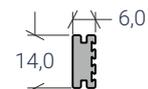
X.45.0002

G.001.061 - Vedante EPDM

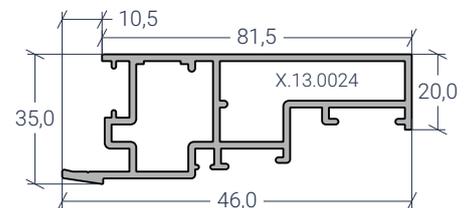
### Módulo VEC



**A.080.008**



**A.080.006**

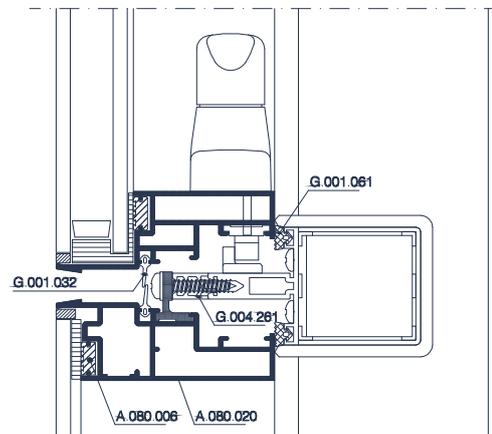
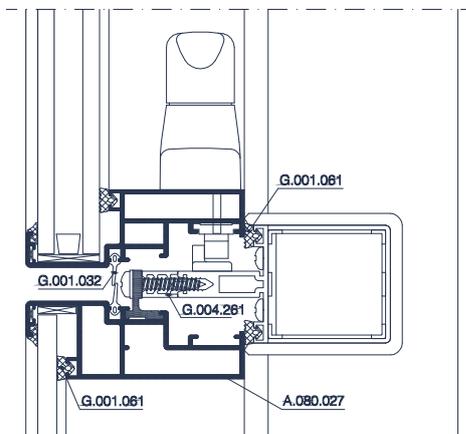


**A.080.020**

### VEP

### Pormenores Horizontais

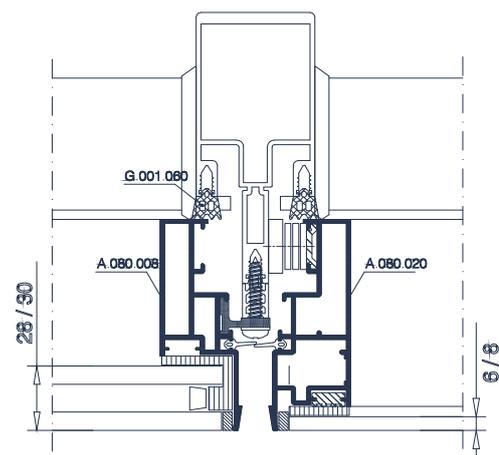
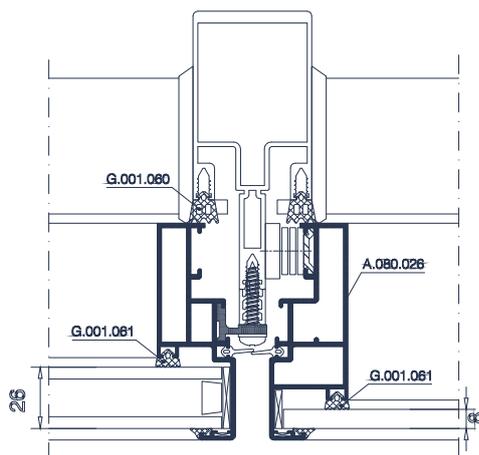
### VEC



### VEP

### Pormenores Verticais

### VEC

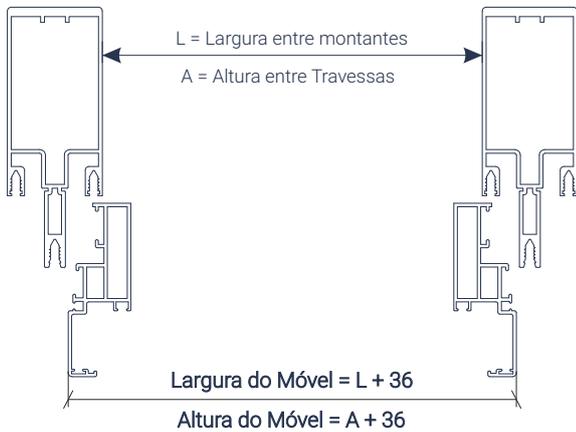


## Módulos VEP e VEC - A.080

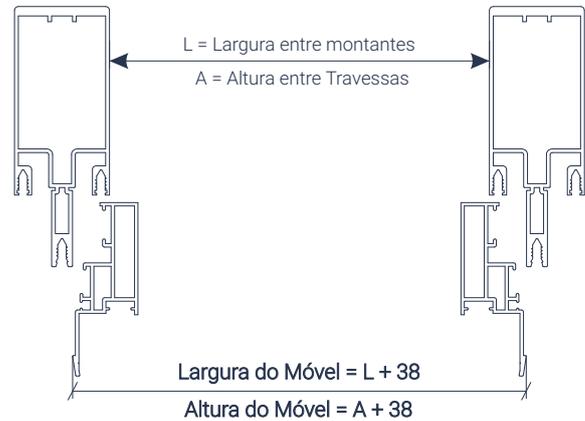
### Planos de Corte - Larguras e Alturas

#### Módulo VEP

Fixo e janela projetante



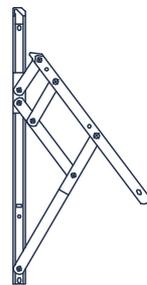
#### Módulo VEC



### Aplicação de acessórios

-  **X.44.0029**  
Vedante Vidros G1.008
-  **X.46.0002**  
Vedante EPDM G1.032
-  **X.45.0002**  
Vedante EPDM G1.061
-  **X.55.0051**  
Fixador de Vidros G4.433
-  **X.30.0128**  
Ponto de fecho. G4.861

Compasso projetante  
para largura máxima  
de 2000 mm de folha



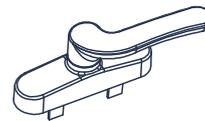
**X.37.0042**  
G.004.748 - 40kg  
de 300 a 600 mm altura

**X.37.0043**  
G.004.488 - 50kg  
de 600 a 800 mm altura

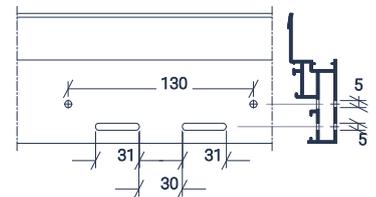
**X.37.0006**  
G.004.393 - 55kg  
de 787 a 1100 mm altura

**X.37.0018**  
G.004.275 - 100kg  
de 1270 a 2500 mm altura

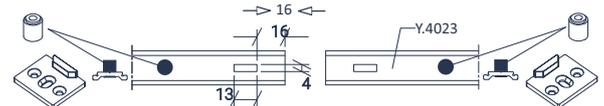
**X.37.0032**  
G.004.747 - 120kg  
de 1300 a 1900 mm altura



**X.30.0155**  
Cremone projet. G4.860

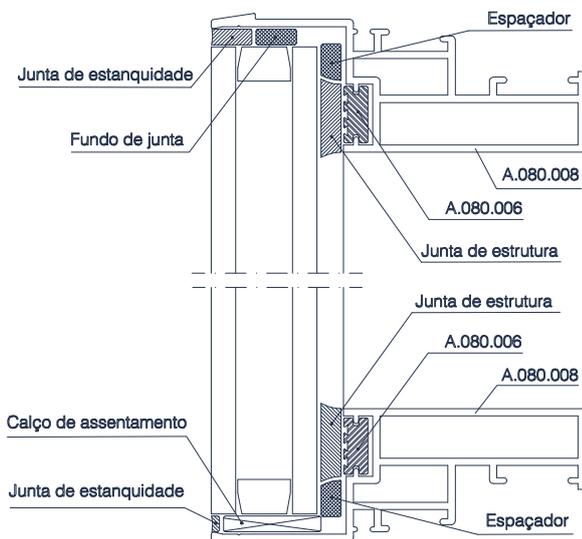


**Y.4023**  
Vareta do cremone

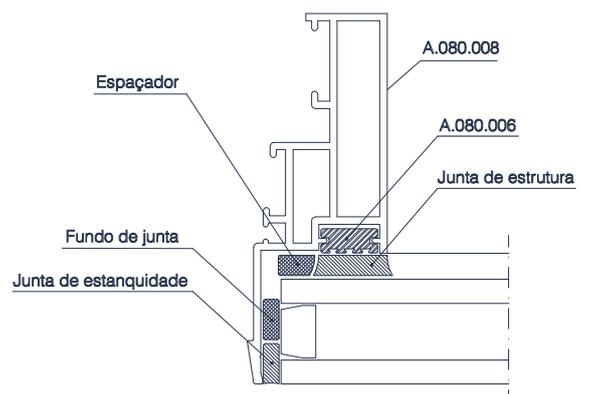


### Colagem de vidros (VEC)

#### Larguras



#### Alturas



### Helios - Fachada com sombreamento

#### Características

Vista exterior:

- Vertical 50 mm
- Horizontal 50 mm
- Perfis sombreamento com 170 / 200 mm

Barra isoladora em Poliamida TK 6.6

Capacidade de envidraçamento:

- Duplo 26 / 30 mm
- Simples 6 / 10 / 12 / 16 mm

Junta de estanquidade do vidro assegurada por vedantes em EPDM

Peso máximo admissível por folha fixa: 500kg

Possibilidades de abertura:

Portas e janelas dos vários sistemas

#### Resultados no banco de ensaios

Permeabilidade ao ar - A 4

Estanquidade à água - R 750

Índice de atenuação acústica RW = 38 dB

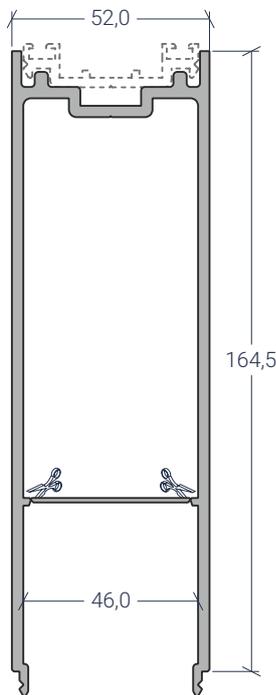
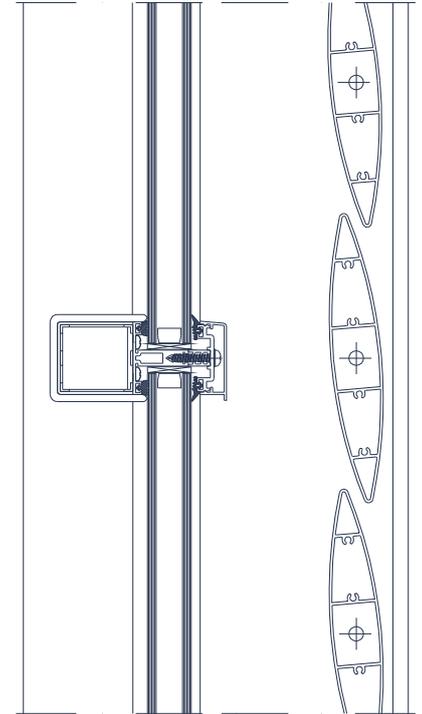
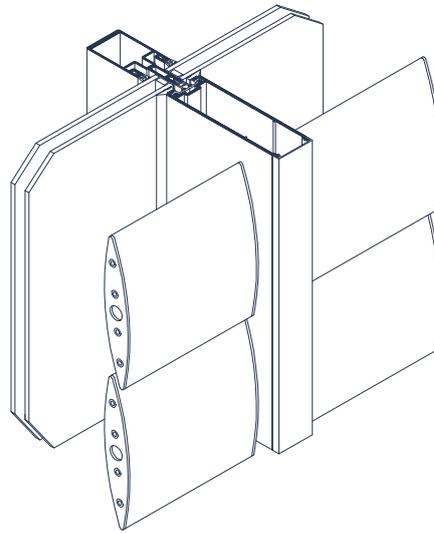
Coef. de transmissão térmica da

janela Uw = 3,1 W/m<sup>2</sup>K

Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para cálculo Rw e Uw, o preenchimento considerado foi um vidro de baixa emissividade ( $e \leq 0,05$ ) composto por 4.4.2+12+6mm, com Rw = 40 dB e Ug = 2,7 W/m<sup>2</sup>K.

Os valores apresentados estão condicionados pelas dimensões e características do caixilho, sua localização e preenchimento utilizado.



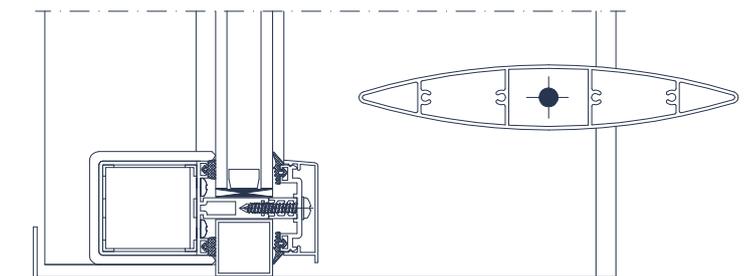
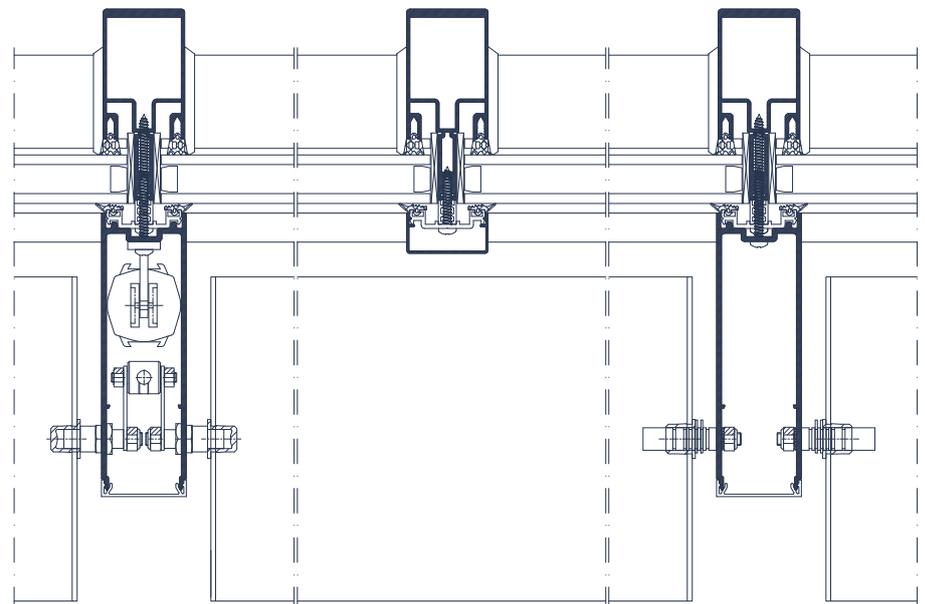
**A.080.053**



**A.080.059**



**G.08**



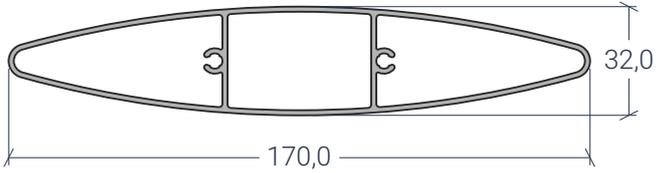
Fixação inferior : Estrutura totalmente apoiada p/ sistemas fixo e movél

Perfis e cortes (sem escala)

Módulo Helios - A.080

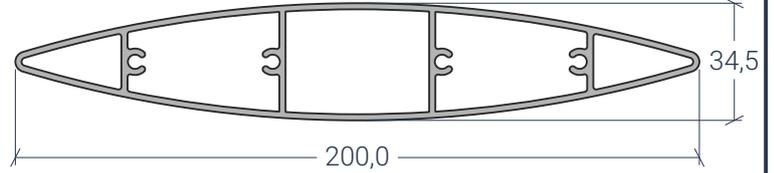
## Aplicação das Lâminas

Helios - 170



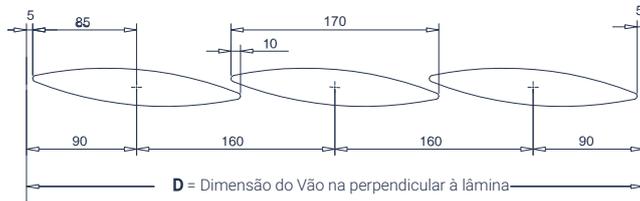
**F.016.001**

Helios - 200

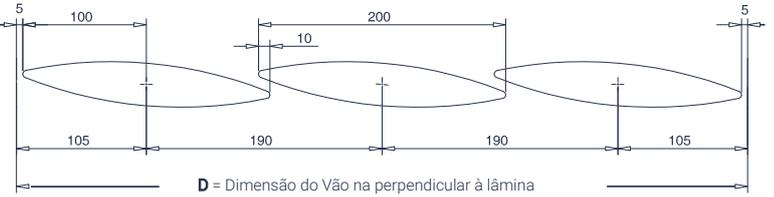


**F.016.002**

Comprimento máximo aconselhado da lâmina - 2600 mm



Comprimento máximo aconselhado da lâmina - 3600 mm



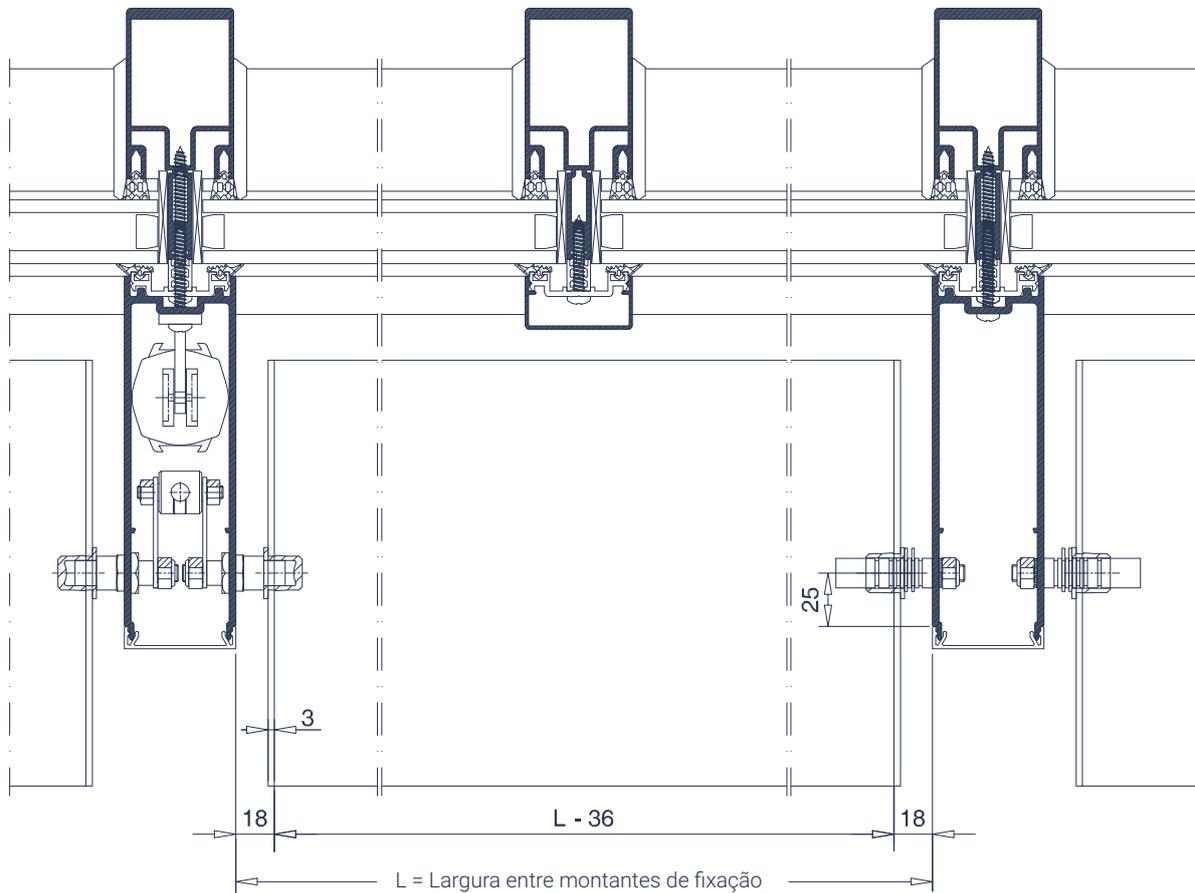
Quant. lâminas =  $(D - 20) / 160$  (mm) arredondada, por defeito, à unidade.

Quant. lâminas =  $(D - 20) / 190$  (mm) arredondada, por defeito, à unidade.

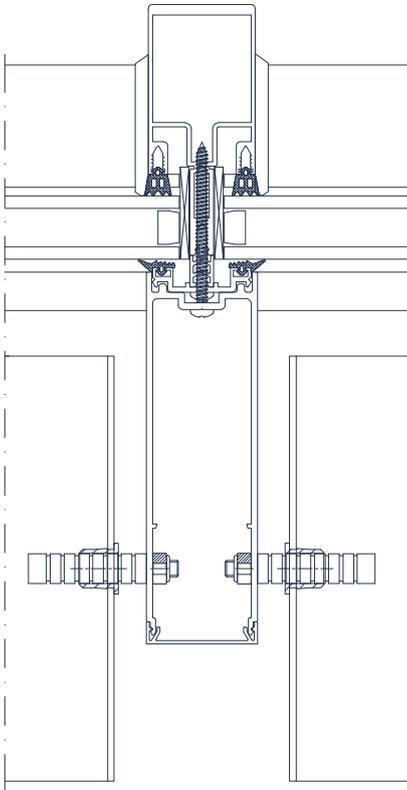
Quando fechadas, as lâminas devem ter, pelo menos, 5mm de folga nos extremos de forma a não tocarem na estrutura.

A distância entre os eixos das lâminas deverá ser menor 10 mm que a dimensão da própria lâmina para permitir a sua sobreposição, quando fechadas.

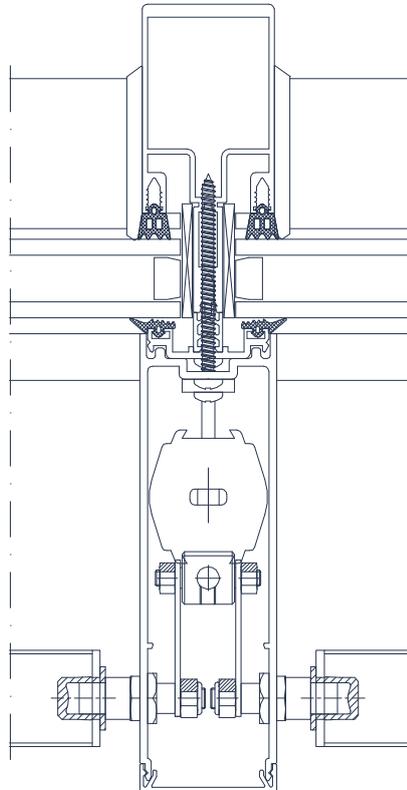
## Medida de corte das Lâminas



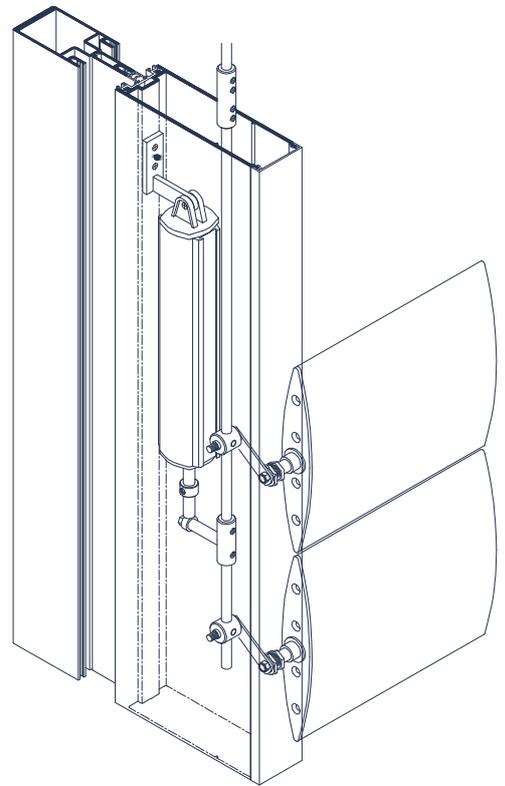
Lâminas Fixas



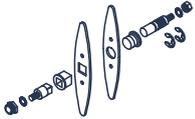
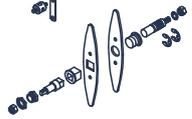
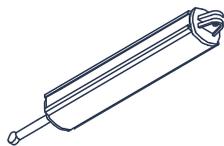
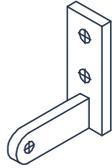
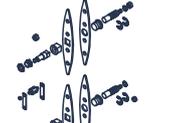
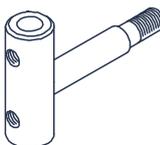
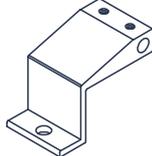
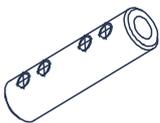
Lâminas Móveis



Aplicação do motor



### Acessórios

<p><b>X.59.0015</b> Sistema Fixo G21.172</p>  <p>Lâmina F.016.001</p>	<p><b>X.59.0167</b> Sist. Móvel simpl. G21.170</p>  <p>Lâmina F.016.001</p>	<p><b>X.59.0168</b> Sist. Móvel duplo G21.171</p>  <p>Lâmina F.016.001</p>	<p><b>X.67.0018</b> Motor T20 180Beta G16.60</p> 	<p><b>X.59.0085</b> Fixador do motor G21.010</p> 
<p><b>X.59.0120</b> Sistema Fixo G21.202</p>  <p>Lâmina F.016.002</p>	<p><b>X.59.0087</b> Sist. Móvel simpl. G21.200</p>  <p>Lâmina F.016.002</p>	<p><b>X.59.0169</b> Sist. Móvel duplo G21.201</p>  <p>Lâmina F.016.002</p>	<p><b>X.59.0086</b> Ligad. Varão/motor G21.7</p> 	<p><b>X.67.0017</b> Anilha limit. motor G16.59</p> 
			<p><b>X.67.0016</b> Ligação Sistema G16.40</p> 	<p><b>X.59.0116</b> União de varão G21.011</p> 

### Características

Vista exterior:

Vertical 50 mm

Horizontal 50 mm

Barra isoladora em Poliamida TK 6.6

Capacidade de envidraçamento:

Duplo 30 mm

Simples 16 mm

Junta de estanquidade do vidro assegurada

por vedantes em EPDM

Possibilidades de abertura:

Janela projectante

### Resultados no banco de ensaios

Permeabilidade ao ar - A 4

Estanquidade à água - R 750

Índice de atenuação acústica RW = 38 dB

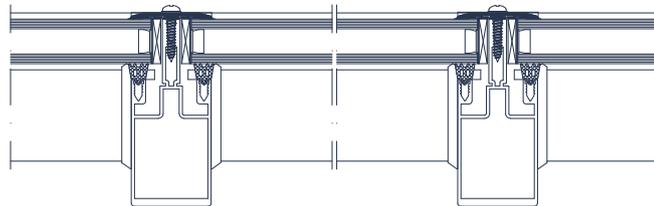
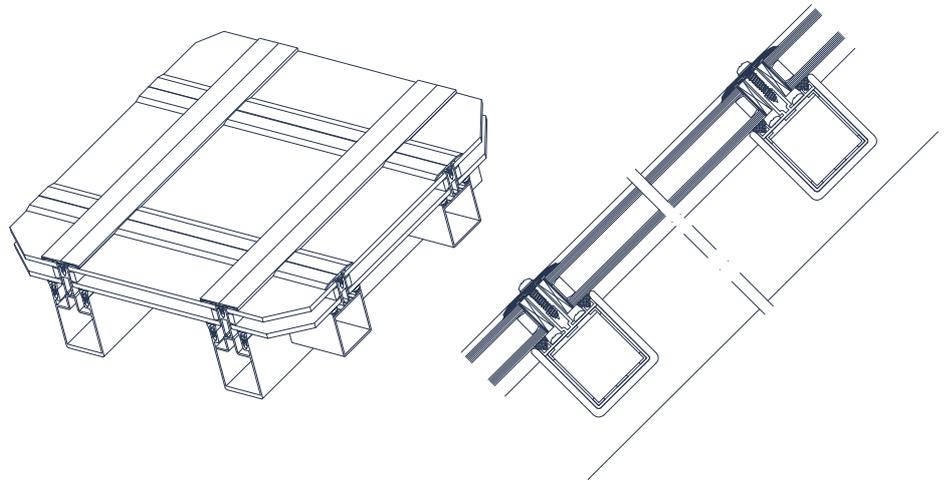
Coef. de transmissão térmica da

janela Uw = 3,1 W/m<sup>2</sup>K

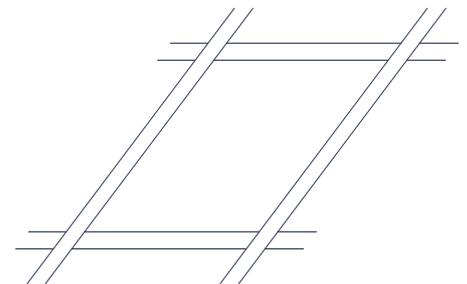
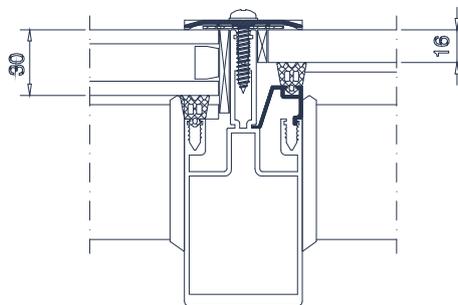
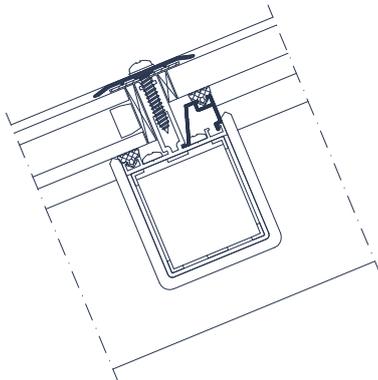
Nota: Valores comprovados por ensaios realizados em laboratórios privados.

Para cálculo Rw e Uw, o preenchimento considerado foi um vidro de baixa emissividade (e 0,05) composto por 4.4.2+14+6mm, com Rw = 40 dB e Ug = 2,7 W/m<sup>2</sup>K.

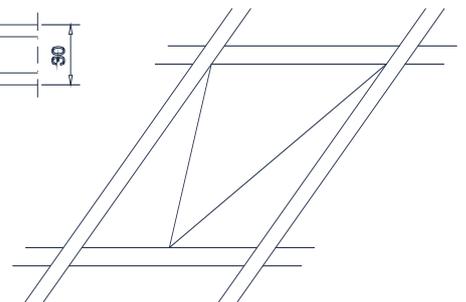
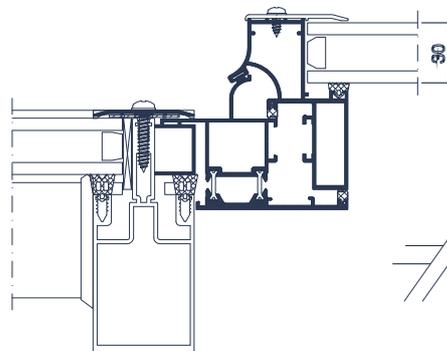
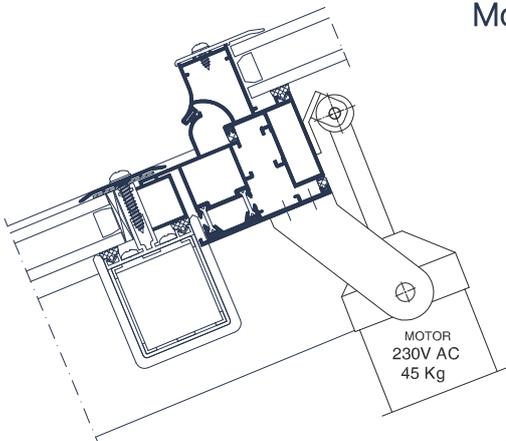
Os valores apresentados estão condicionados pelas dimensões e características do caixilho, sua localização e preenchimento utilizado.



### Módulo Fixo



### Módulo Janela projectante de cobertura



X.45.0001

G.001.060 - Vedante do montante



X.45.0002

G.001.061 - Vedante da travessa

X.43.0001

Ved. Batente G1.132  
EPDM



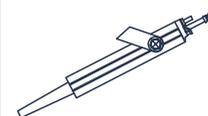
X.40.0015

Pelucia 7.0x7.0



X.67.0019

Motor 230v 45kgf G16.63



P/ Claraboia

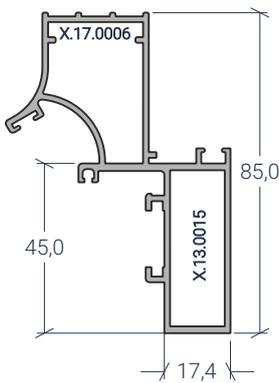
X.67.0017

Anilha fim curso G16.59

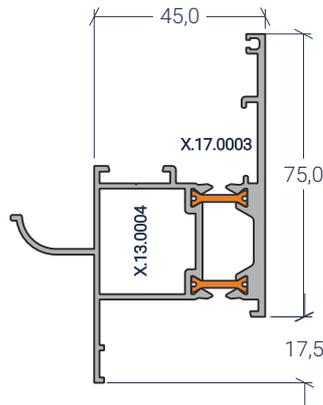


Perfis (escala 1:2) Cortes (sem escala)

## Claraboia - A.080



**A.080.047**



**A.080.050**



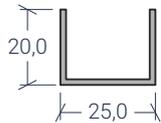
**A.080.061**



**A.080.012**

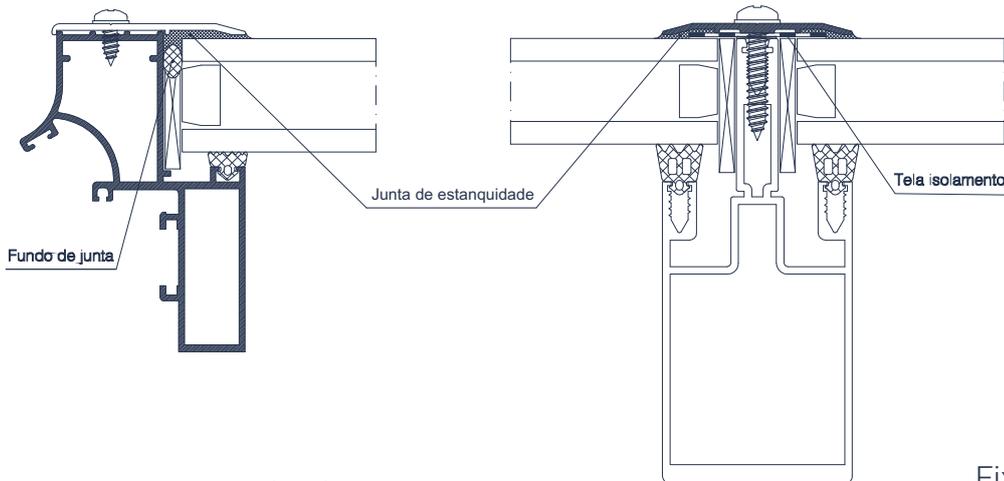


**A.080.051**



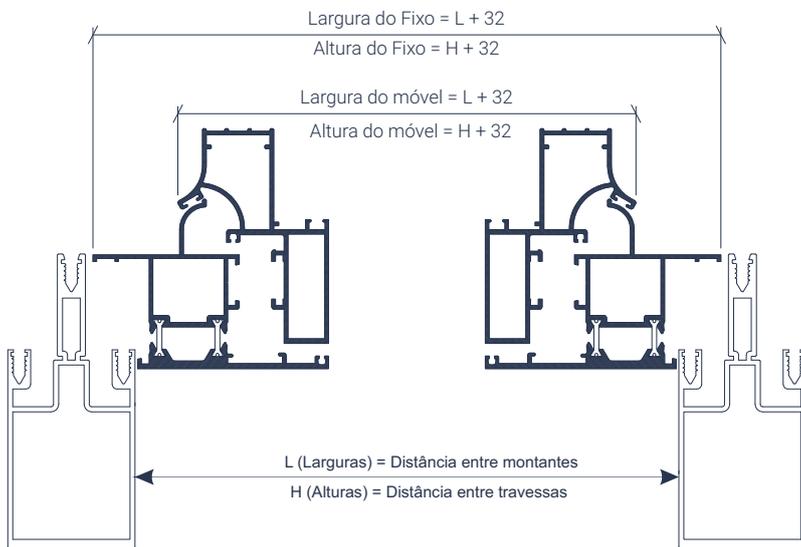
**U.25x20x1,5**

Estanquidade

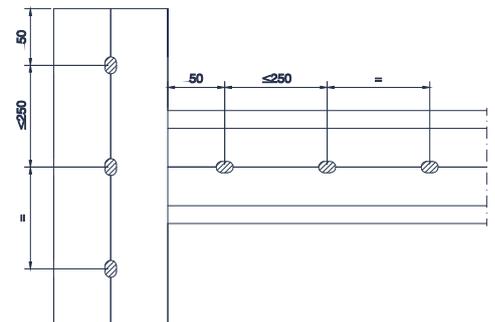
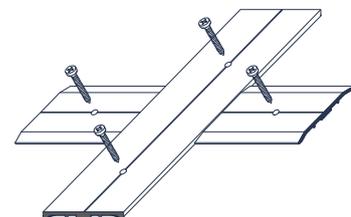


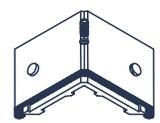
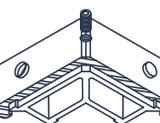
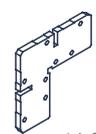
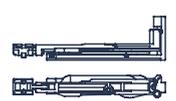
Claraboia Projetante

Planos de corte - Larguras e Alturas



Fixação das Capas

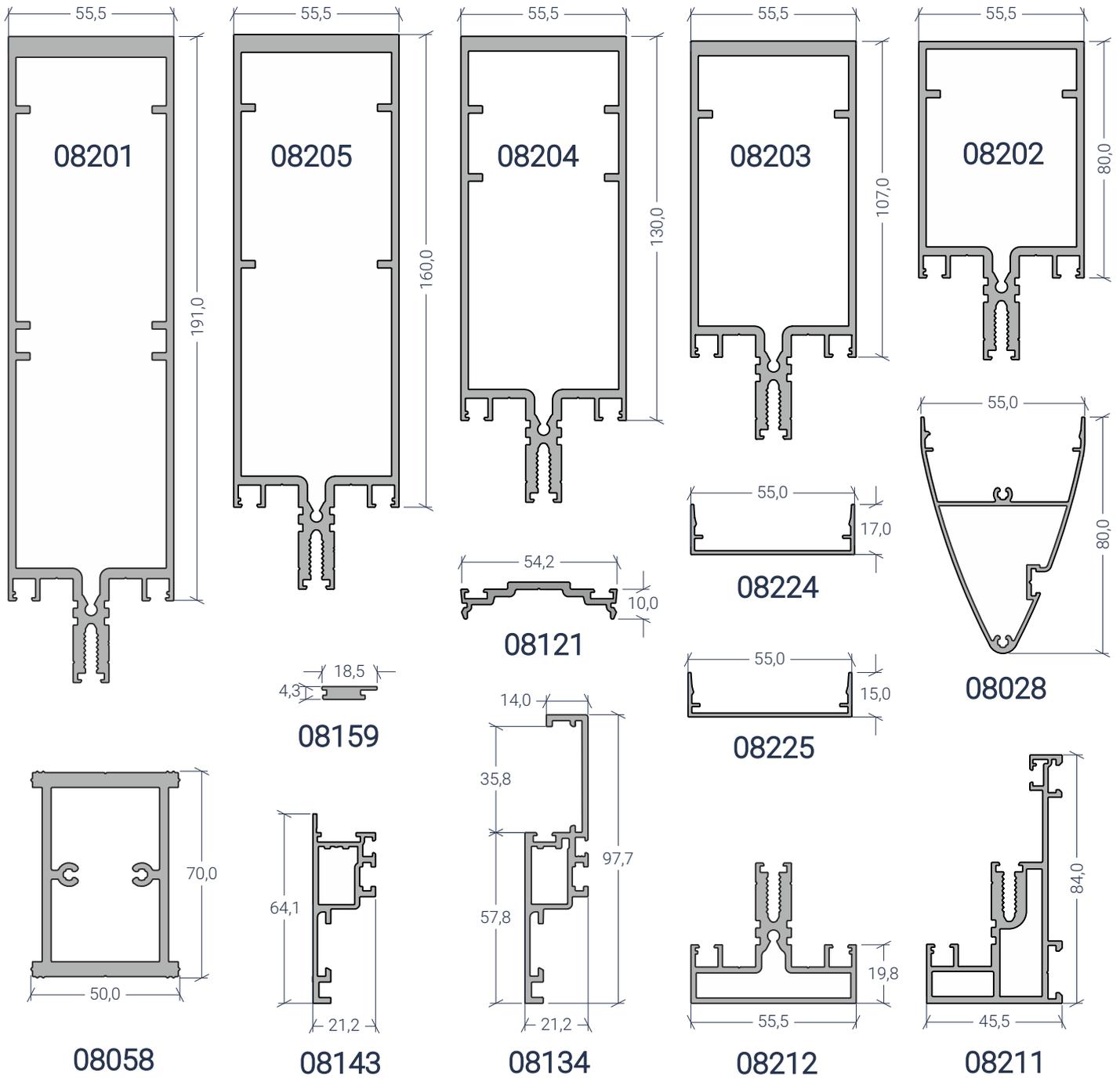


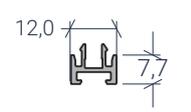
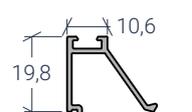
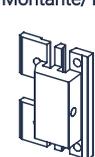
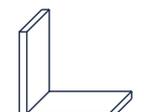
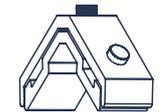
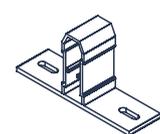
<p><b>X.13.0015</b> Esq. Ap. 40x15 G4.233</p>  <p>P/ A.080.047</p>
<p><b>X.13.0004</b> Esq. Ap. 37x25 G4.224</p>  <p>P/ A.080.050</p>
<p><b>X.17.0006</b> Esq. Reforço G4.13</p>  <p>p/ A.080.047</p>
<p><b>X.17.0003</b> Esq. Al. 21x3 G4.90</p>  <p>P/ A.080.050</p>
<p><b>X.20.0032</b> Dob. Invisível 80kg G4.580</p>  <p>Max. Larg. Alt. 1500mm</p>

Perfis (escala 1:2)

Montante=Travessa - Alas 80

Perfis Estruturais



 <b>08199</b>	 <b>08062</b>	 <b>08020</b>	<b>X.15.0005</b> Esq. Aperto 23 x 14  Para 08211	<b>X.55.0008</b> União Montante/Travessa 	<b>X.54.0028</b> Sapata Frontal Lage 
<b>X.17.0079</b> Esq. apoio. 37x2 	<b>X.17.0080</b> Esq. Apoio 20x2,5 	<b>X.17.0026</b> Esq. Alinham. 1,0x4,7 	<b>X.15.0023</b> Esq. Aperto. 18,5x12  Para 08134/08143	<b>X.55.0009</b> Antigiros 	<b>X.54.0029</b> Sapata de topo sup. inf. 

## Montante=Travessa - Alas 80

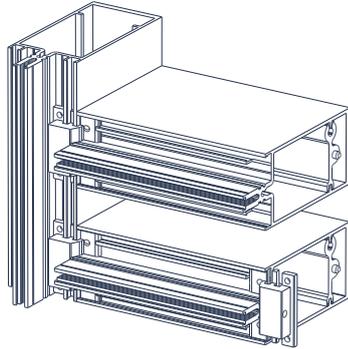
**X.45.0031**  
Vedante EPDM



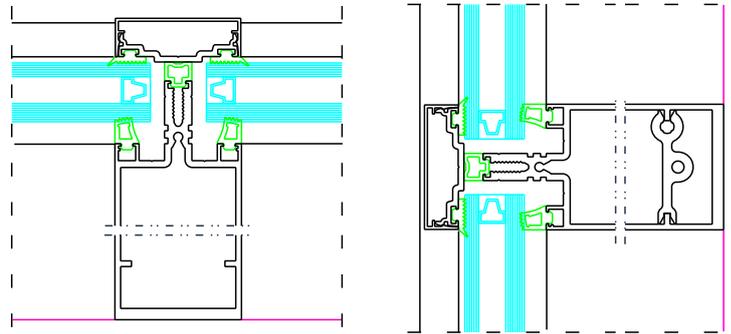
**X.45.0027**  
Vedante EPDM



Ligação Montante/  
Travessa



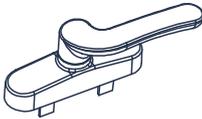
Sistema Clássico



**X.45.0029**  
Vedante EPDM



**X.30.0155**  
Cremone projet. G4.860



**X.45.0030**  
Vedante EPDM



**X.33.0128**  
Ponto de fecho. G4.861



**X.45.0026**  
Vedante EPDM

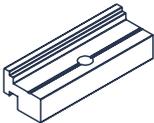


**X.37.0006**  
Compasso Projet. G4.393



55kg - Alt. de 787 a 1100

**X.55.0013**  
Fixador folhas fixas

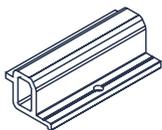


**X.37.0018**  
Compasso Projet. G4.275



100kg - Alt. de 1270 a 2500

**X.55.0070**  
Apoio folhas fixas

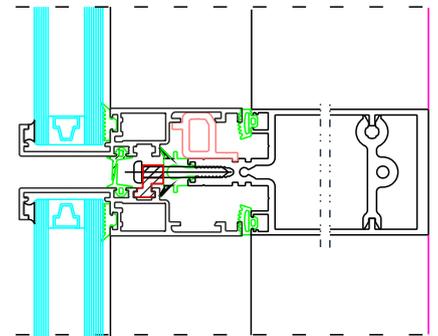


**X.37.0032**  
Compasso Projet. G4.747

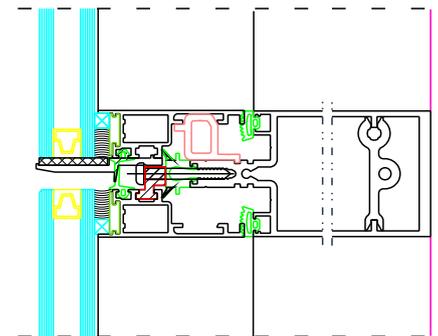


120kg - Alt. de 1300 a 1900

Sistema VEP  
(vidro exterior preso)



Sistema VEC  
(vidro exterior colado)



Sistema VEP e VEC

(para vãos ligeiros com vista de fachada)

