

The background of the page is a black and white photograph of a modern glass and metal structure. It shows a glass wall with a metal frame and a glass door with a handle. The lighting is soft, creating a clean and professional atmosphere.

# PATCH FITTINGS

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Universal, ARCOS & EA Patch Fittings for Tempered Glass Assemblies

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# DORMA PATCH FITTINGS

## For tempered glass assemblies

DORMA offers one of the most comprehensive ranges of patch fittings available today, providing tempered glass assemblies that are technically sound and visually attractive. This range gives the architect or designer a wide variety of creative options for expression with tempered glass—either internally or externally.

All DORMA fittings are based on a modular system, consisting of a base unit, functional inserts, and clip-on covers in a wide range of finishes. Glass preparations are quick and easy. Quality materials and thorough workmanship guarantee a long service life and a reflection of excellence for years to come.

In addition to standard patch fitting solutions found in the DORMA USA, Inc offering, the DORMA family may have additional products available to address unusual, curved, angled or other application challenges.

Please contact our Customer Service or Technical Service teams for assistance with application solutions not found in America's literature or price lists. Additional cost and lead-time may be required.

### General care instructions

The surface finishes of the fittings are not maintenance-free and should be cleaned according to their material and design.

- For metallic surfaces (anodized finishes, stainless steel), please use only appropriate cleaning agents without abrasive additives.
- For varnished surfaces, please use only appropriate solvent-free cleaning agents.
- Brass surfaces (without surface protection) have to be treated occasionally with an appropriate maintenance agent to avoid tarnishing.



### DORMA Universal

With their broad range of options and configurations, DORMA Universal patch fittings are ideal for almost any design. Tempered glass assemblies are provided with fixed parts in a variety of arrangements—with corner fittings or fin fittings at different angles, and with double or single-action doors in single-leaf or double-leaf designs.



### ARCOS Universal

The ARCOS Universal range offers patch fittings and connector hardware for transoms and sidelites, and fin fittings for particularly large systems—with the curved arc motif of the ARCOS design always incorporated into each component. Gentle reflections that change with the planes give both the glass and its fittings a uniform appearance.



### DORMA EA

DORMA EA patch fittings are characterized by their slim, neat shape and skillful Euro hinge design. This comprehensive range of fittings allows the transparent elegance of single-acting doors to reach their full potential—whether hung in frames or integrated into tempered glass openings.

# PATCH FITTING SELECTION CHART

Applications & features	DORMA Universal	ARCOS Universal	DORMA EA	Accessories
For external assemblies	+++	+++	+++	
For internal assemblies	+++	+++	+++	
For standard tempered glass applications	+++	+++	+++	
For individually designed assemblies with corner fittings, fin fittings, etc.	+++	+	+	+++
For double-acting doors	•	•		
For single-acting doors	•	•	•	
Glass thickness – in (mm)	3/8" (10), 1/2" (12) <sup>1</sup>	3/8" (10), 1/2" (12) <sup>1</sup>	3/8" (10), 1/2" (12) <sup>1</sup>	
Max. door weight– lb (kg)	275 lb (125 kg)	220 lb (100 kg)	220 lb (100 kg)	
Max. door width – in (mm)	48" (1219)	43" (1092)	43" (1092)	
<b>Materials &amp; finishes*</b>				
Aluminum, silver anodized, EV1 (101)	■		■	
Similar to satin stainless (107)			■	
Aluminum, dark bronze anodized (108)	■		■	
Black anodized (109)	■	■		
Aluminum, EV1 (114)		■		
Special anodizing (199)	■		■	
Special clad plated (299)	■	■		
Brass, polished (503)	■	■ <sup>2</sup>	■ <sup>2</sup>	
Satin brass w/o lacquer (599)	■			
Satin bronze no lacquer (600)	■			
Polished bronze w/o lacquer (601)	■			
Stainless steel, satin (700)	■	■		
Stainless steel, polish (701)	■	■		
Special paint or powder coating (999)	■ <sup>2</sup>	■	■	
<b>Page</b>	<b>6</b>	<b>21</b>	<b>28</b>	<b>34</b>

- +++ Suitable
- + Partially Suitable
- Standard
- Optional
- <sup>1</sup> Under certain circumstances also 5/8" (15) and 3/4" (19) glass thickness
- <sup>2</sup> Available upon request

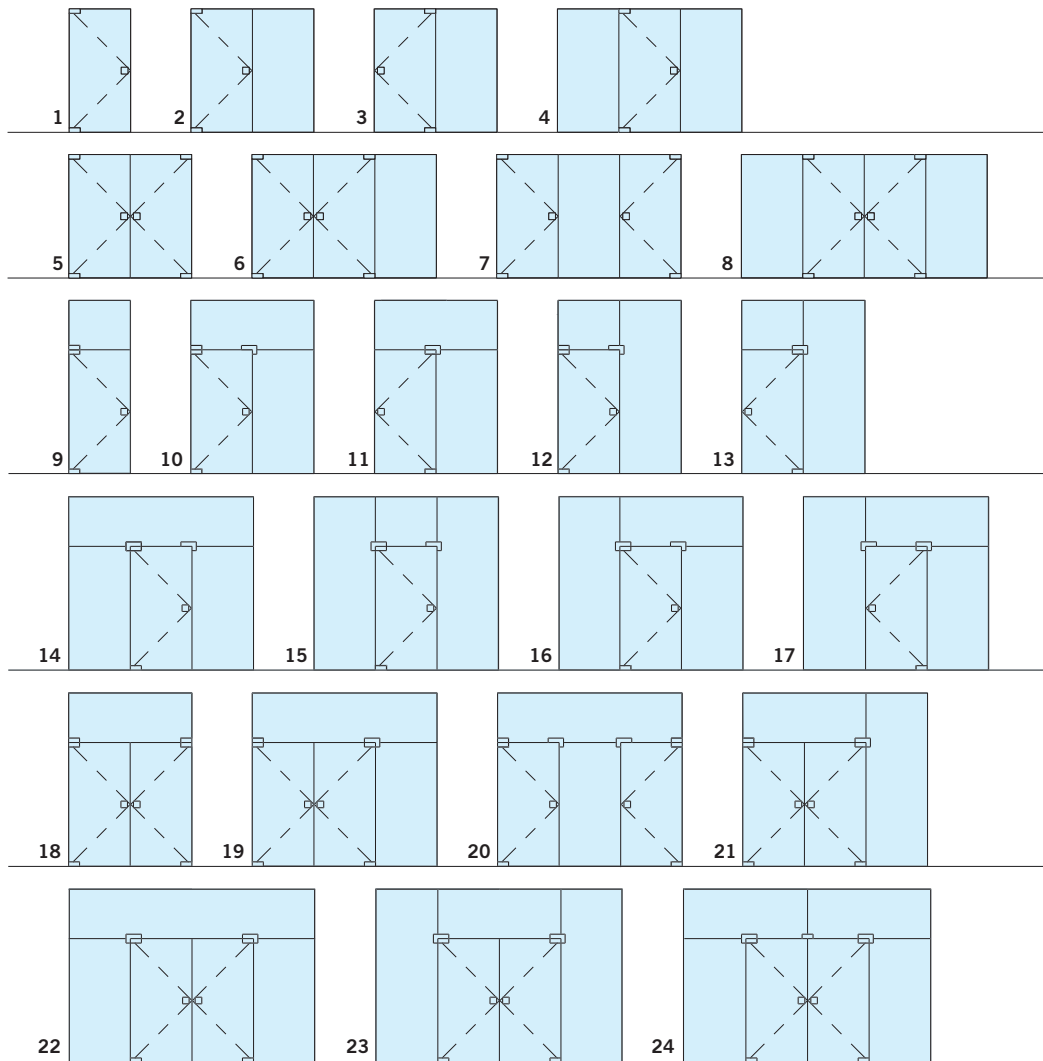
**NOTE:**  
All measurements are shown in inches followed by (millimeters); for example: 3/8" (10).

\*Not all finishes are available with all products.



# STANDARD ASSEMBLY TYPES

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# DORMA UNIVERSAL

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## Universal ... as the name says

With their broad range of options and configurations, DORMA Universal patch fittings are ideal for almost any design. Tempered glass assemblies are provided with fixed parts in a variety of arrangements—with corner fittings or fin fittings at different angles, and with double or single-acting doors in single-leaf or double-leaf designs.

### **Easy glass preparation, secure mounting**

DORMA understands the special properties of glass as a building material, designing fittings that require only minimal glass preparation—a quick and easy cut-out with additional holes. Careful consideration and positive measures have been taken to create the maximum clamping surface with optimum clamping efficiency.

### **Suitable for common glass thicknesses**

DORMA Universal fittings are available for 3/8" (10) through 3/4" (19) for most fittings.

### **Reliability built in**

Quality materials and thorough workmanship mean that DORMA Universal fittings have the features necessary to meet the most demanding specifications. The fittings are designed to withstand large and heavy doors up to a maximum weight of 275 lb (125 kg). Rails are available for heavier doors (330 lb [150 kg] maximum), wider doors (48" [1219] maximum), and high traffic doors.

### **Matching range of locks**

The DORMA Universal range includes every type of accessory, and of course, a variety of locks and strike boxes in a matching design concept, giving the designer plenty of options to choose from. Contact Customer Service for more details.

### **Short delivery times**

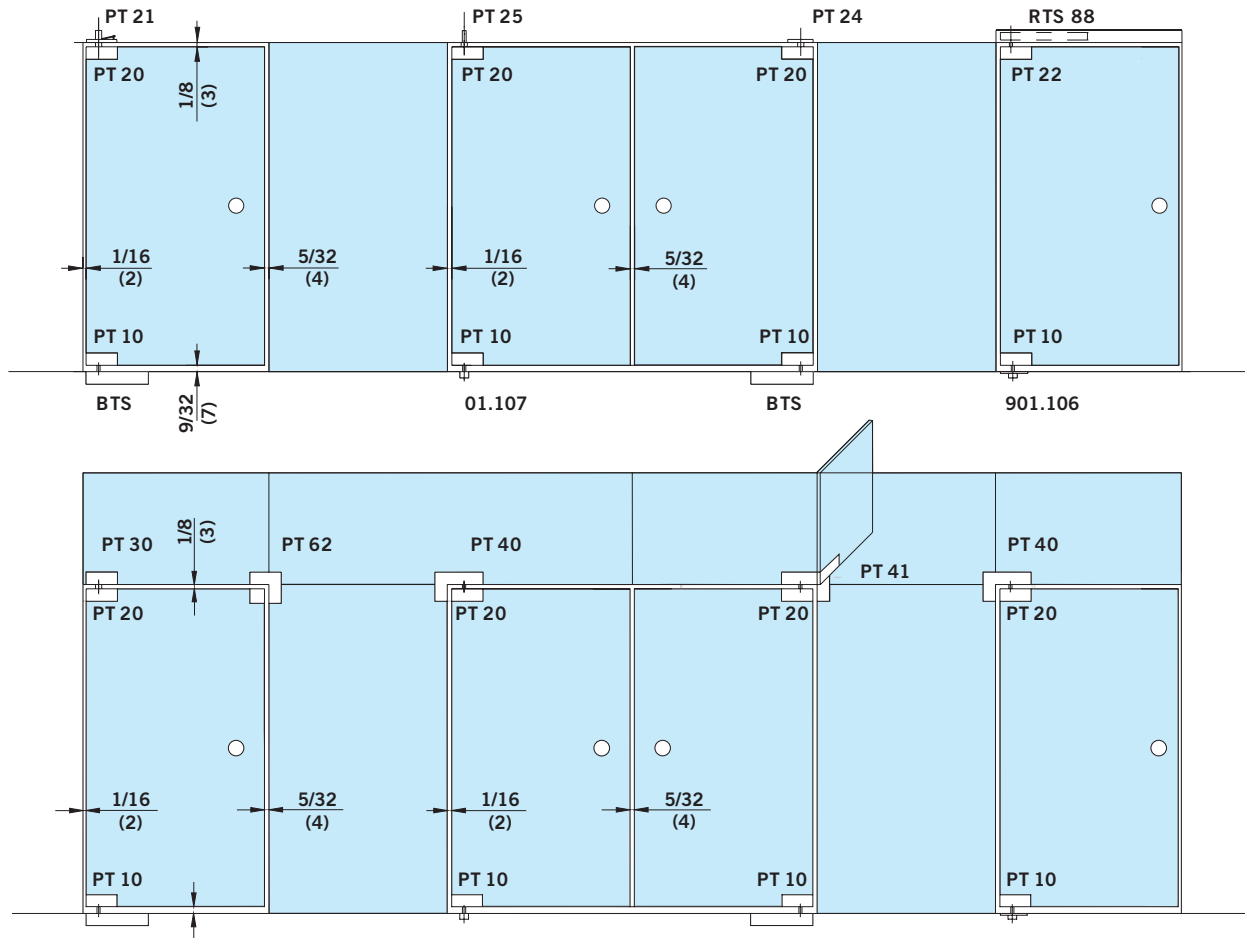
Most common patch fittings and finishes are available quickly.



# TYPE SELECTION

Tempered glass assemblies with fittings 2-3/4" (70) pivot point.

For all standard assembly types, see page 5.



**BTS** = Floor closer  
**PT** = Center hung door fittings  
**RTS** = Header/Transom closer (see Technical Information DORMA RTS Series for details)

**Maximum door weight & width for DORMA Universal fittings**

**Max. door weight**  
 275 lb (125 kg)  
**Max. door width**  
 48" (1219)

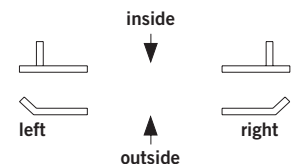
For door weights up to 330 lb (150 kg) and widths up to 48" (1219), DRS door rails should be used.

**Torque for mounting screws**

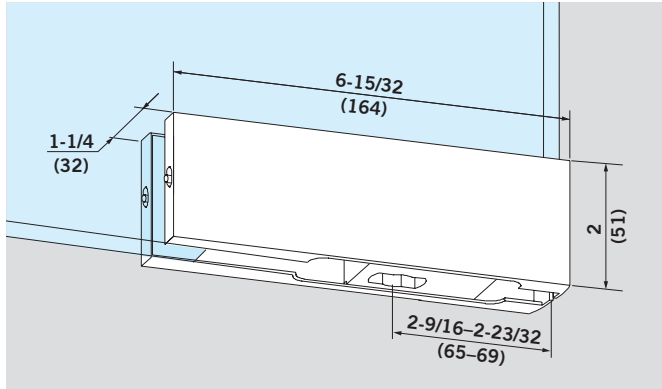
**Screws M 6**  
 7.5 lb-ft / 10 Nm (4)\*  
**Screws M 6**  
 11 lb-ft / 15 Nm (5)\*  
**Screws M 8**  
 15 lb-ft / 20 Nm (5)\*  
 \*Allan key size

**NOTE:**

If angle fittings or fin fittings are used "Left" or "Right" has to be determined by view from outside and above.



# PATCH FITTINGS



**PT 10 bottom patch**

with insert for DORMA floor closer, pivot, or round pivot  
 Ø 9/16" (14)

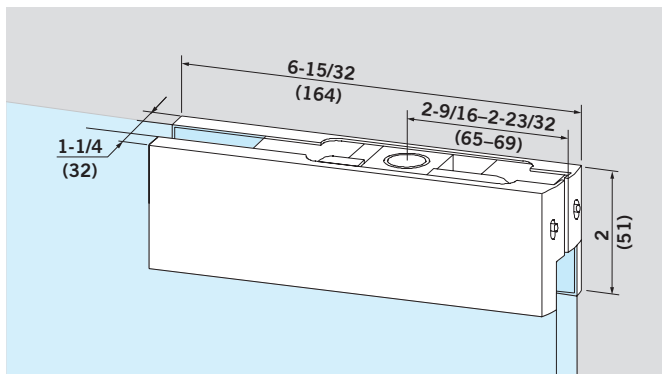
- 3/8" (10) glass  
**Ref. No. 833.300**
- 1/2" (12) glass  
**Ref. No. 833.100**
- 5/8" (15) glass  
**Ref. No. 833.301**
- 3/4" (19) glass  
**Ref. No. 833.101**

**Pivot location**

2-3/4" (70)

**Weight in lb (kg)**

Aluminum	1.241 (0.564)
Brass	1.496 (0.680)
Stainless steel	1.456 (0.662)



**PT 20 top patch**

with safety insert for top pivot Ø 19/32" (15)  
 used with PT21

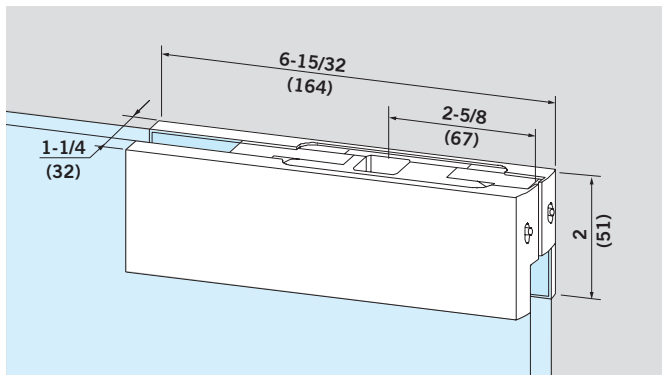
- 3/8" (10) glass  
**Ref. No. 833.310**
- 1/2" (12) glass  
**Ref. No. 833.110**
- 5/8" (15) glass  
**Ref. No. 833.311**
- 3/4" (19) glass  
**Ref. No. 833.111**

**Pivot location**

2-3/4" (70)

**Weight in lb (kg)**

Aluminum	1.049 (0.477)
Brass	1.305 (0.593)
Stainless steel	1.265 (0.575)



**PT 22 top patch**

with insert for DORMA RTS concealed overhead closer

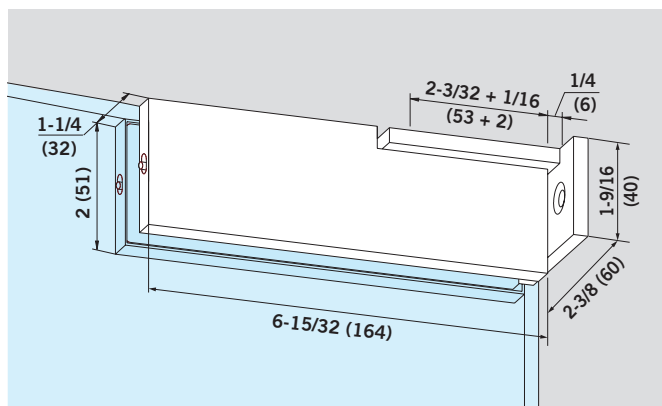
- 3/8" (10) glass  
**Ref. No. 833.312**
- 1/2" (12) glass  
**Ref. No. 833.112**
- 5/8" (15) glass  
**Ref. No. 833.313**
- 3/4" (19) glass  
**Ref. No. 833.113**

**Pivot location**

2-3/4" (70)

**Weight in lb (kg)**

Aluminum	1.272 (0.578)
Brass	1.529 (0.695)
Stainless steel	1.489 (0.677)



**PT 29 top patch**

with pivot fixing plate, wall mount

- 3/8" (10) glass  
**Ref. No. 833.314**
- 1/2" (12) glass  
**Ref. No. 833.109**
- 5/8" (15) glass  
**Ref. No. n/a**
- 3/4" (19) glass  
**Ref. No. n/a**

**Pivot location**

2-3/16" (55)

**Weight in lb (kg)**

Aluminum	1.197 (0.544)
Brass	1.522 (0.692)
Stainless steel	1.483 (0.674)

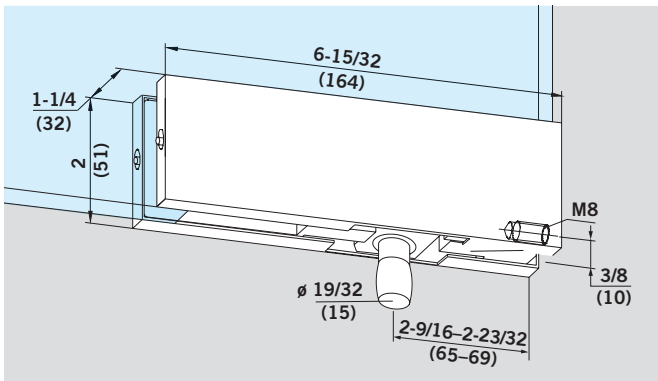
**Max. door width**

39-3/8" (1000)

**Max. door weight**

154 lb (70 kg)





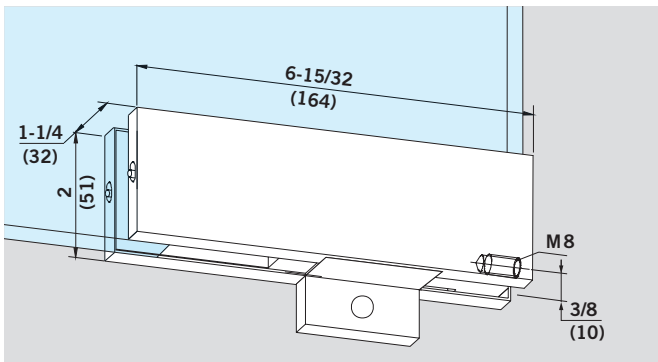
**PT 30 transom patch**  
with pivot  $\varnothing$  19/32" (15),  
with M8 tapped hole at side

- 3/8" (10) glass  
**Ref. No. 833.330**
- 1/2" (12) glass  
**Ref. No. 833.131**
- 5/8" (15) glass  
**Ref. No. 833.321**
- 3/4" (19) glass  
**Ref. No. 833.121**

**Pivot location**  
2-3/4" (70)

**Weight in lb (kg)**

Aluminum	1.162 (0.528)
Brass	1.439 (0.654)
Stainless steel	1.399 (0.636)



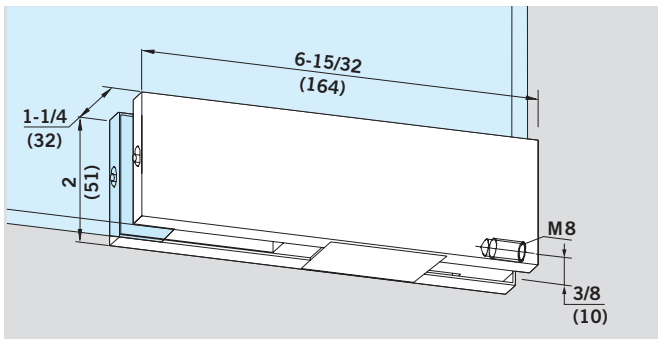
**PT 30 transom patch**  
with stop insert, with  
M8 tapped hole at side

- 3/8" (10) glass  
**Ref. No. 833.332**
- 1/2" (12) glass  
**Ref. No. 833.132**
- 5/8" (15) glass  
**Ref. No. 833.333**
- 3/4" (19) glass  
**Ref. No. 833.133**

**Pivot location**  
2-3/4" (70)

**Weight in lb (kg)**

Aluminum	1.162 (0.528)
Brass	1.439 (0.654)
Stainless steel	1.276 (0.580)

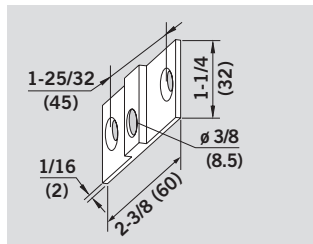


**PT 30 transom patch**  
with blank insert, with  
M8 tapped hole at side

- 3/8" (10) glass  
**Ref. No. 833.334**
- 1/2" (12) glass  
**Ref. No. 833.134**
- 5/8" (15) glass  
**Ref. No. 833.335**
- 3/4" (19) glass  
**Ref. No. 833.135**

**Weight in lb (kg)**

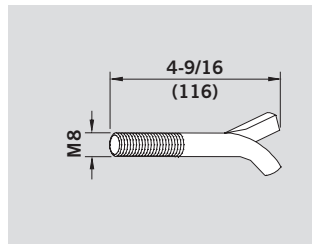
Aluminum	1.142 (0.519)
Brass	1.419 (0.645)
Stainless steel	1.256 (0.571)



**Fixing plate**  
for transom patch PT 30  
**Ref. No. 903.128**

**Weight in lb (kg)**

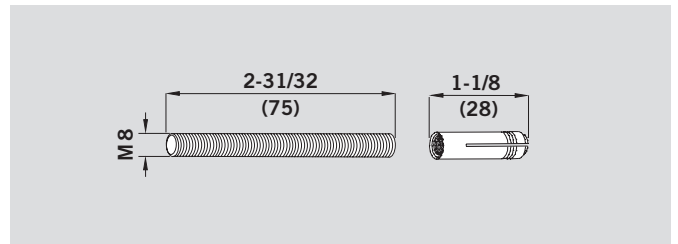
Aluminum	0.035 (0.016)
Brass	0.084 (0.038)
Stainless Steel	not available,
Satin Chrome on Brass	supplied.



**Wall anchor**  
with thread M 8 for transom  
patch PT 30  
**Ref. No. 901.133**

**Weight in lb (kg)**

0.088 (0.040)
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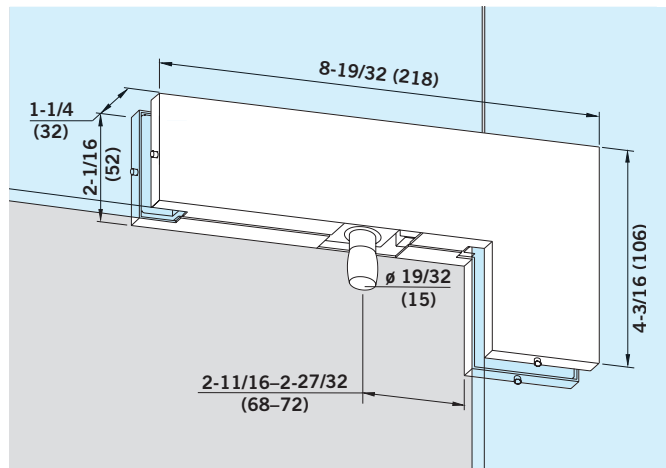


**Threaded rod**  
M 8 with plug for transom  
patch PT 30  
**Ref. No. 901.134**

**Weight in lb (kg)**

0.070 (0.032)
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# CONNECTORS



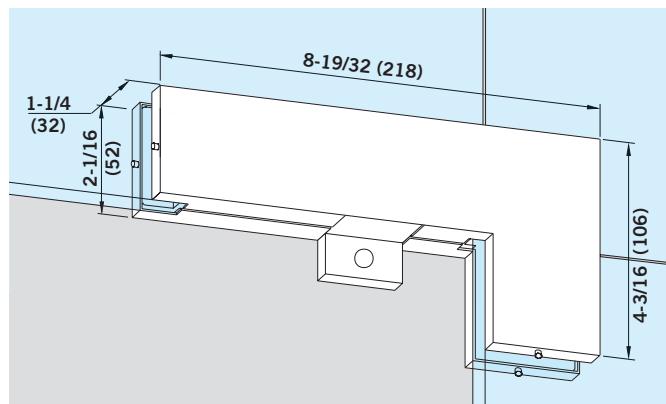
**PT 40 transom sidelite patch with pivot ø 19/32 (15)**

- 3/8" (10) glass  
**Ref. No. 833.343**
- 1/2" (12) glass  
**Ref. No. 833.143**
- 5/8" (15) glass  
**Ref. No. 833.344**
- 3/4" (19) glass  
**Ref. No. 833.144**

**Pivot location**  
2-3/4" (70)

**Weight in lb (kg)**

Aluminum	2.955 (0.755)
Brass	2.108 (0.958)
Stainless steel	2.061 (0.937)

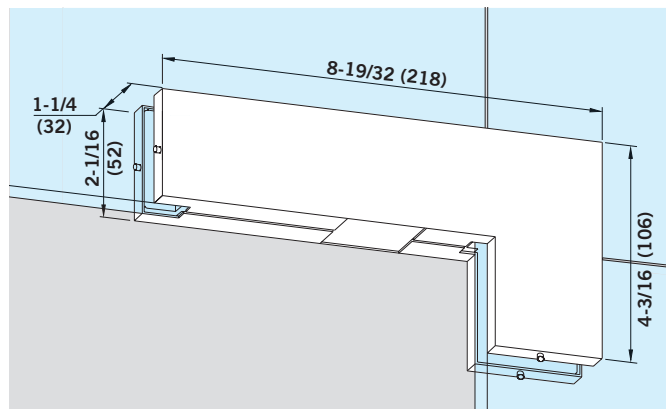


**PT 40 transom sidelite patch with stop insert**

- 3/8" (10) glass  
**Ref. No. 833.336**
- 1/2" (12) glass  
**Ref. No. 833.136**
- 5/8" (15) glass  
**Ref. No. 833.337**
- 3/4" (19) glass  
**Ref. No. 833.137**

**Weight in lb (kg)**

Aluminum	1.661 (0.755)
Brass	2.108 (0.958)
Stainless steel	2.061 (0.937)



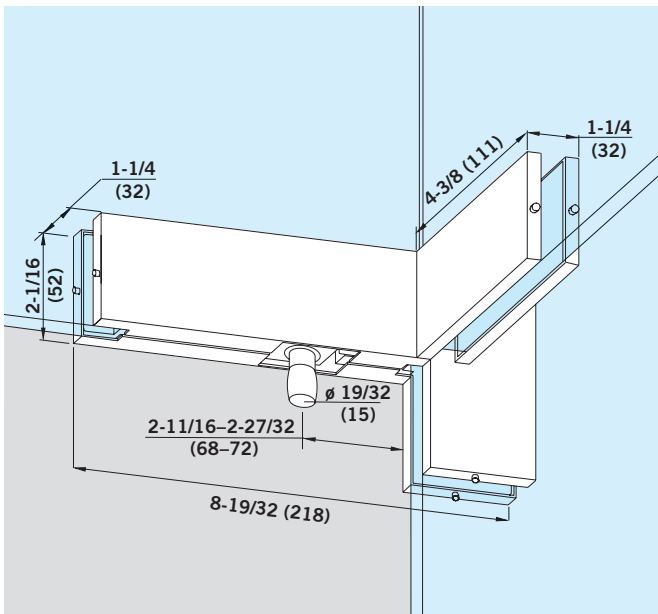
**PT 40 transom sidelite patch with blank insert**

- 3/8" (10) glass  
**Ref. No. 833.338**
- 1/2" (12) glass  
**Ref. No. 833.138**
- 5/8" (15) glass  
**Ref. No. 833.339**
- 3/4" (19) glass  
**Ref. No. 833.139**

**Weight in lb (kg)**

Aluminum	1.641 (0.746)
Brass	2.088 (0.949)
Stainless steel	2.042 (0.928)

\* Left hand fin (illustration shows left hand) / Right hand fin. Left or right hand is determined by view from outside.



**PT 41 transom sidelite patch with fin fitting inside**  
with pivot  $\phi$  19/32 (15) (shown) (LH)/(RH)

- 3/8" (10) glass  
**Ref. No. \*833.355/833.354**
- 1/2" (12) glass  
**Ref. No. \*833.155/833.154**
- 5/8" (15) glass  
**Ref. No. \*833.356/833.357**
- 3/4" (19) glass  
**Ref. No. \*833.156/833.157**

**Pivot location**  
2-3/4" (70)

**Weight in lb (kg)**

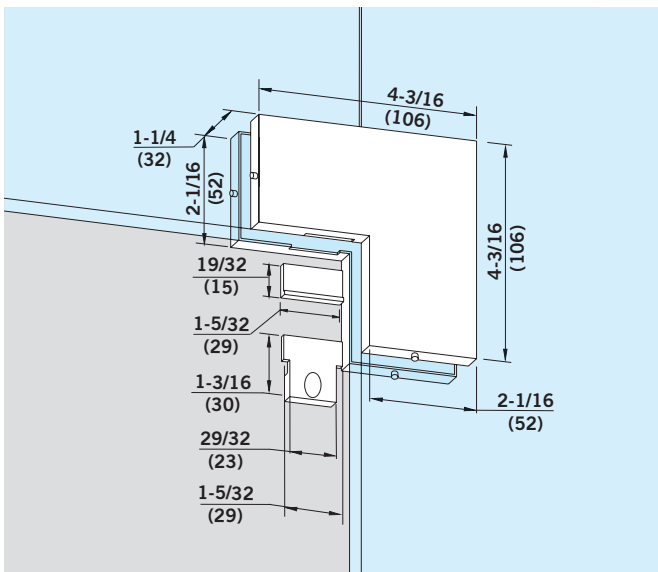
Aluminum	2.094 (0.952)
Brass	2.708 (1.231)
Stainless steel	2.633 (1.197)

**PT 41 transom sidelite patch with fin fitting inside**  
with stop insert (not shown) (LH)/(RH)

- 3/8" (10) glass  
**Ref. No. \*833.391/833.393**
- 1/2" (12) glass  
**Ref. No. \*833.191/833.193**
- 5/8" (15) glass  
**Ref. No. \*833.392/833.394**
- 3/4" (19) glass  
**Ref. No. \*833.192/833.194**

**PT 41 transom sidelite patch with fin fitting inside**  
with blank insert (not shown) (LH)/(RH)

- 3/8" (10) glass  
**Ref. No. \*833.395/833.397**
- 1/2" (12) glass  
**Ref. No. \*833.195/833.197**
- 5/8" (15) glass  
**Ref. No. \*833.396/833.398**
- 3/4" (19) glass  
**Ref. No. \*833.196/833.198**



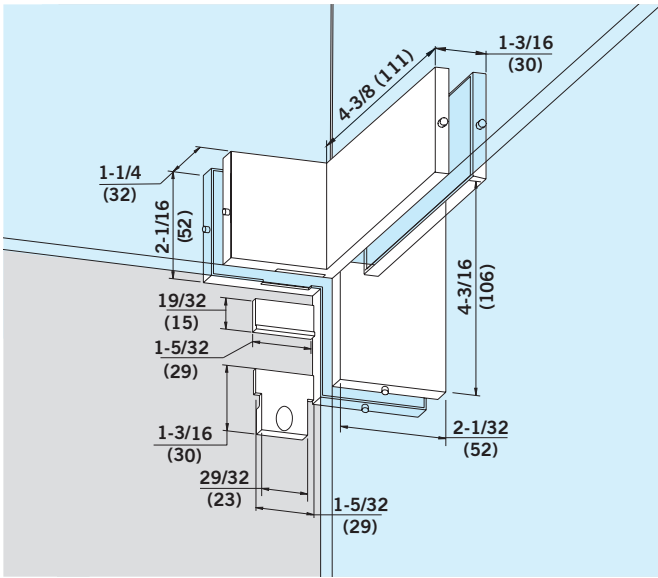
**PT 60/61 transom sidelite connector**  
for double or single acting doors,  
includes 1 stop and 2 blank inserts

- 3/8" (10) glass  
**Ref. No. 803.150**
- 1/2" (12) glass  
**Ref. No. 803.150**
- 5/8" (15) glass  
**Ref. No. 803.452**
- 3/4" (19) glass  
**Ref. No. 803.452**

**Specify glass thickness.**

**Weight in lb (kg)**

Aluminum	0.755 (0.343)
Brass	1.014 (0.461)
Stainless steel	0.959 (0.436)



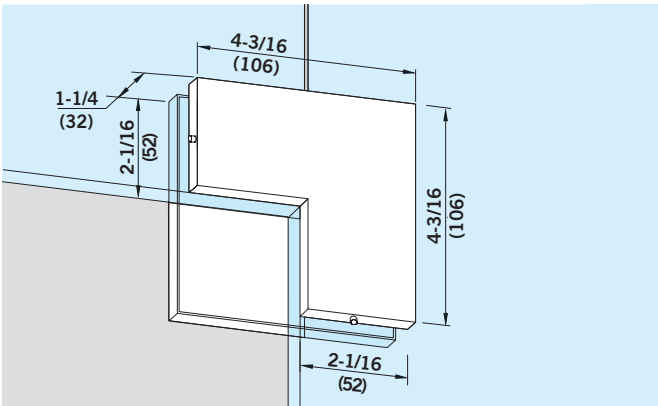
**PT 60/61 transom sidelite connector with fin fitting inside**  
for double or single acting doors, includes 1 stop and 2 blank inserts (LH)/(RH)

- 3/8" (10) glass  
**Ref. No. 803.158/803.157**
- 1/2" (12) glass  
**Ref. No. 803.158/803.157**
- 5/8" (15) glass  
**Ref. No. n/a**
- 3/4" (19) glass  
**Ref. No. n/a**

**Weight in lb (kg)**

Aluminum	0.986 (0.448)
Brass	1.415 (0.643)
Stainless steel	1.320 (0.600)

Left hand fin (illustration shows left hand) / Right hand fin. Left or right hand is determined by view from outside.

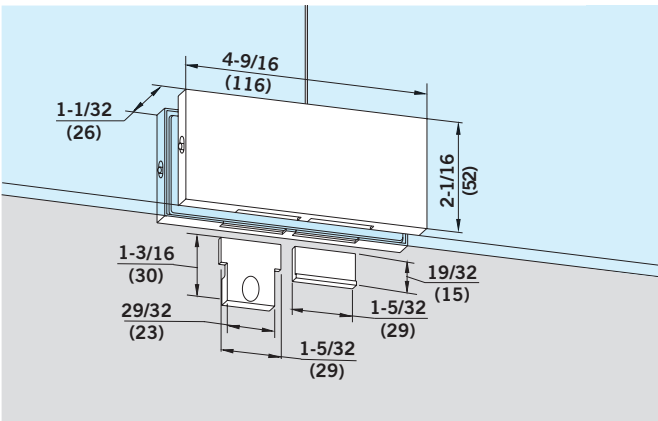


**PT 62 transom sidelite connector with fixed stop**

- 3/8" (10) glass  
**Ref. No. 803.173**
- 1/2" (12) glass  
**Ref. No. 803.173**
- 5/8" (15) glass  
**Ref. No. n/a**
- 3/4" (19) glass  
**Ref. No. n/a**

**Weight in lb (kg)**

Aluminum	1.045 (0.475)
Brass	1.507 (0.685)
Stainless steel	1.474 (0.670)



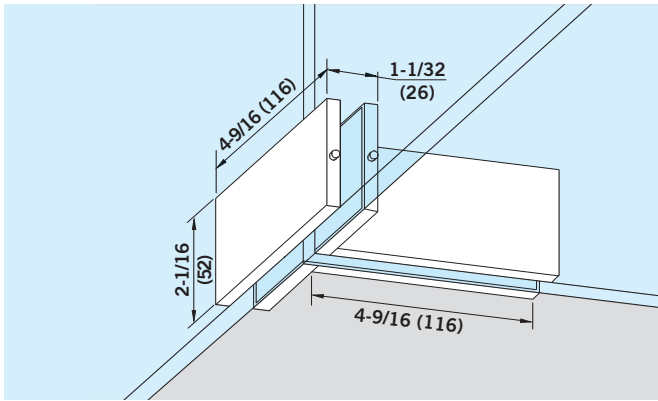
**PT 70 transom connector**  
includes 2 stop and 2 blank inserts

- 3/8" (10) glass  
**Ref. No. 801.150**
- 1/2" (12) glass  
**Ref. No. 801.150**
- 5/8" (15) glass  
**Ref. No. 801.158**
- 3/4" (19) glass  
**Ref. No. 803.158**

**Weight in lb (kg)**

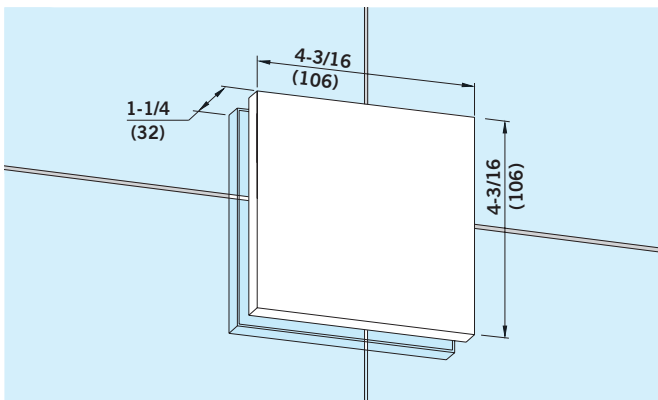
Aluminum	0.598 (0.272)
Brass	0.766 (0.348)
Stainless steel	0.737 (0.335)

Specify glass thickness.



**PT 71 transom connector**  
with fin fitting  
- 3/8" (10) glass  
**Ref. No. 801.161**  
- 1/2" (12) glass  
**Ref. No. 801.161**

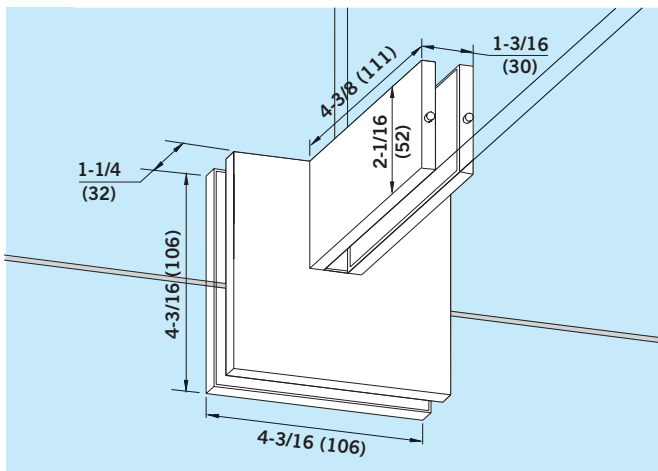
Weight in lb (kg)	
Aluminum	1.008 (0.458)
Brass	1.375 (0.625)
Stainless steel	1.338 (0.608)



**PT 80 connector**  
- 3/8" (10) glass  
**Ref. No. 803.170**  
- 1/2" (12) glass  
**Ref. No. 803.170**  
- 5/8" (15) glass  
**Ref. No. 803.472**  
- 3/4" (19) glass  
**Ref. No. 803.472**

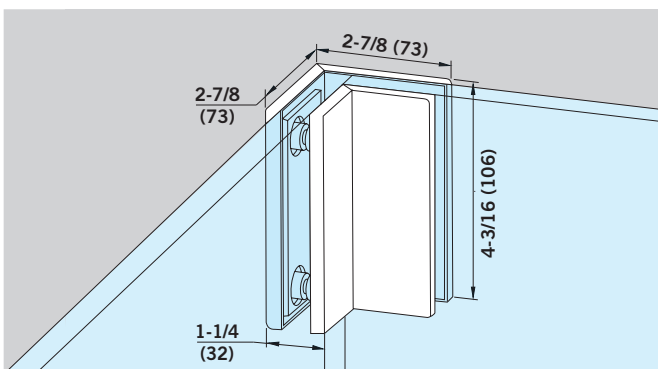
Weight in lb (kg)	
Aluminum	1.221 (0.555)
Brass	1.760 (0.800)
Stainless steel	1.716 (0.780)

Specify glass thickness



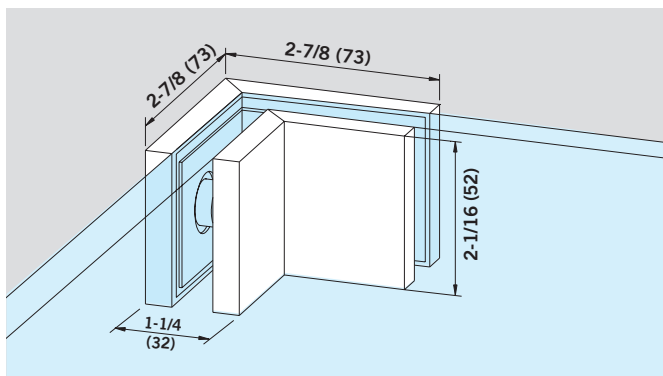
**PT 81 connector**  
with fin fitting  
- 3/8" (10) glass  
**Ref. No. 803.175**  
- 1/2" (12) glass  
**Ref. No. 803.175**

Weight in lb (kg)	
Aluminum	1.725 (0.784)
Brass	2.372 (1.078)
Stainless steel	2.343 (1.065)



**PT 80-90 connector**  
angled 90°  
- 3/8" (10) glass  
**Ref. No. 803.171**  
- 1/2" (12) glass  
**Ref. No. 803.171**

Weight in lb (kg)	
Aluminum	1.027 (0.467)
Brass	1.232 (0.560)
Stainless steel	1.188 (0.540)



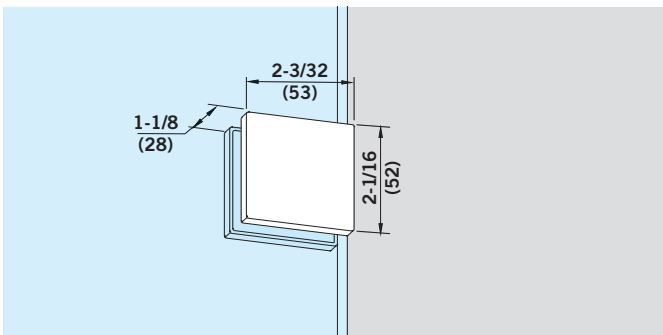
**PT 80-90 short connector**

shortened, angle 90°

- 3/8" (10) glass  
**Ref. No. 803.470**
- 1/2" (12) glass  
**Ref. No. 803.470**

**Weight in lb (kg)**

Aluminum	0.519 (0.236)
Brass	0.616 (0.280)
Stainless steel	0.594 (0.270)



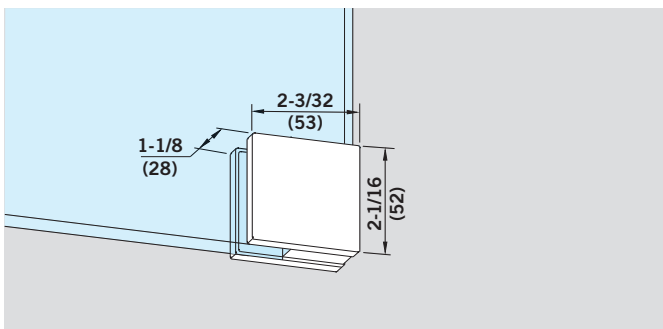
**PT 90 screw on fitting**

- 3/8" (10) glass  
**Ref. No. 807.021**
- 1/2" (12) glass  
**Ref. No. 807.021**
- 5/8" (15) glass  
**Ref. No. 807.210**
- 3/4" (19) glass  
**Ref. No. 807.210**

**Weight in lb (kg)**

Aluminum	0.264 (0.120)
Brass	0.352 (0.160)
Stainless steel	0.341 (0.155)

Specify glass thickness.



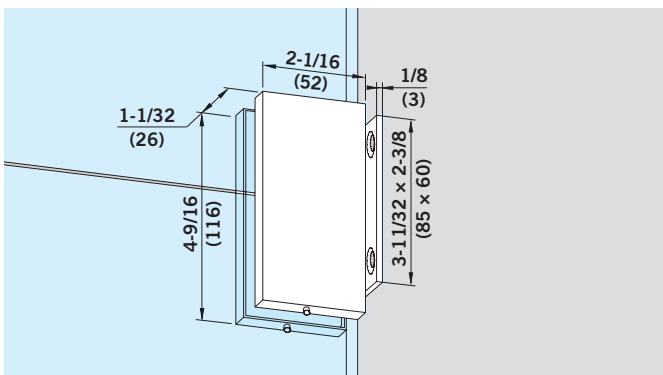
**PT 91 corner fitting**

- 3/8" (10) glass  
**Ref. No. 807.023**
- 1/2" (12) glass  
**Ref. No. 807.023**
- 5/8" (15) glass  
**Ref. No. 807.211**
- 3/4" (19) glass  
**Ref. No. 807.211**

**Weight in lb (kg)**

Aluminum	0.264 (0.120)
Brass	0.352 (0.160)
Stainless steel	0.341 (0.155)

Specify glass thickness.



**Side connector**

with wall mounting plate

- 3/8" (10) glass  
**Ref. No. 801.153**
- 1/2" (12) glass  
**Ref. No. 801.153**

**Weight in lb (kg)**

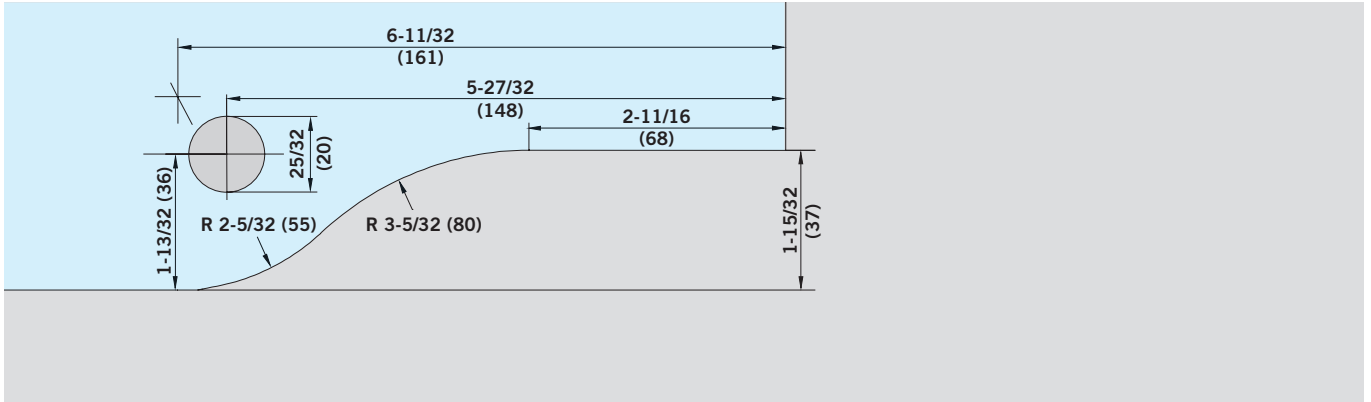
Aluminum	0.689 (0.313)
Brass	0.856 (0.389)
Stainless steel	0.827 (0.376)

# GLASS PREPARATION DETAILS

## PT 10, PT 20, PT 22, PT 29, PT 30

Top and bottom patches, transom patch

Scale 1 : 2

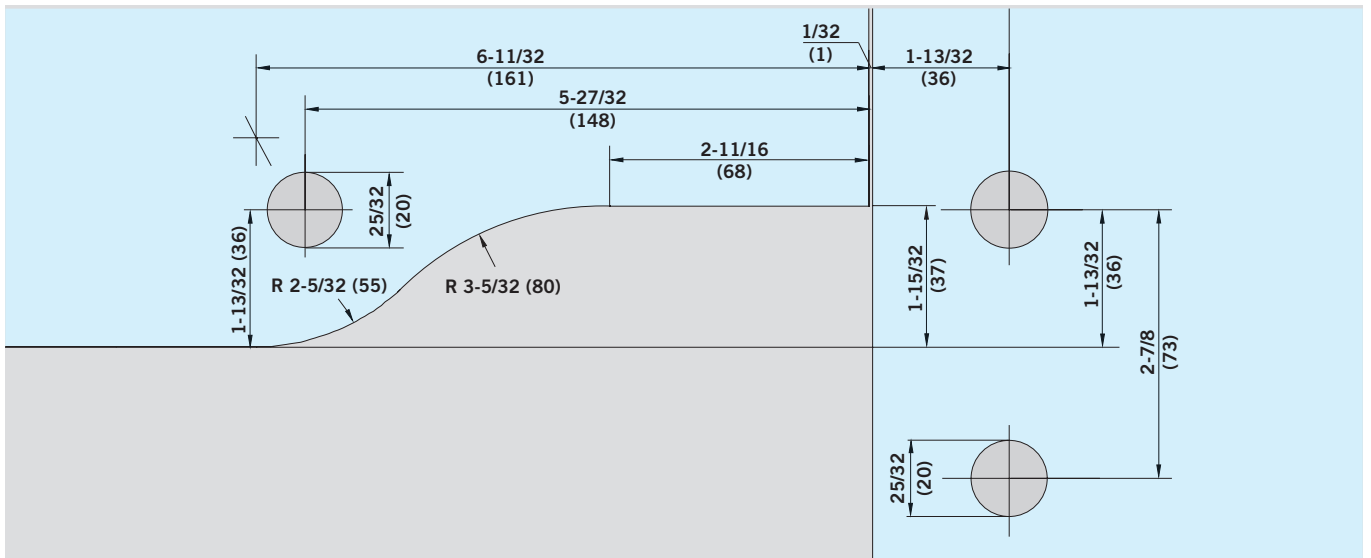


Ref. No.	833.300	833.310	833.312	803.114	833.330	833.332	833.334
	833.100	833.110	833.112	833.109	833.131	833.132	833.134
	833.301	833.311	833.313		833.321	833.333	833.335
	833.101	833.111	833.113		833.121	833.133	833.135

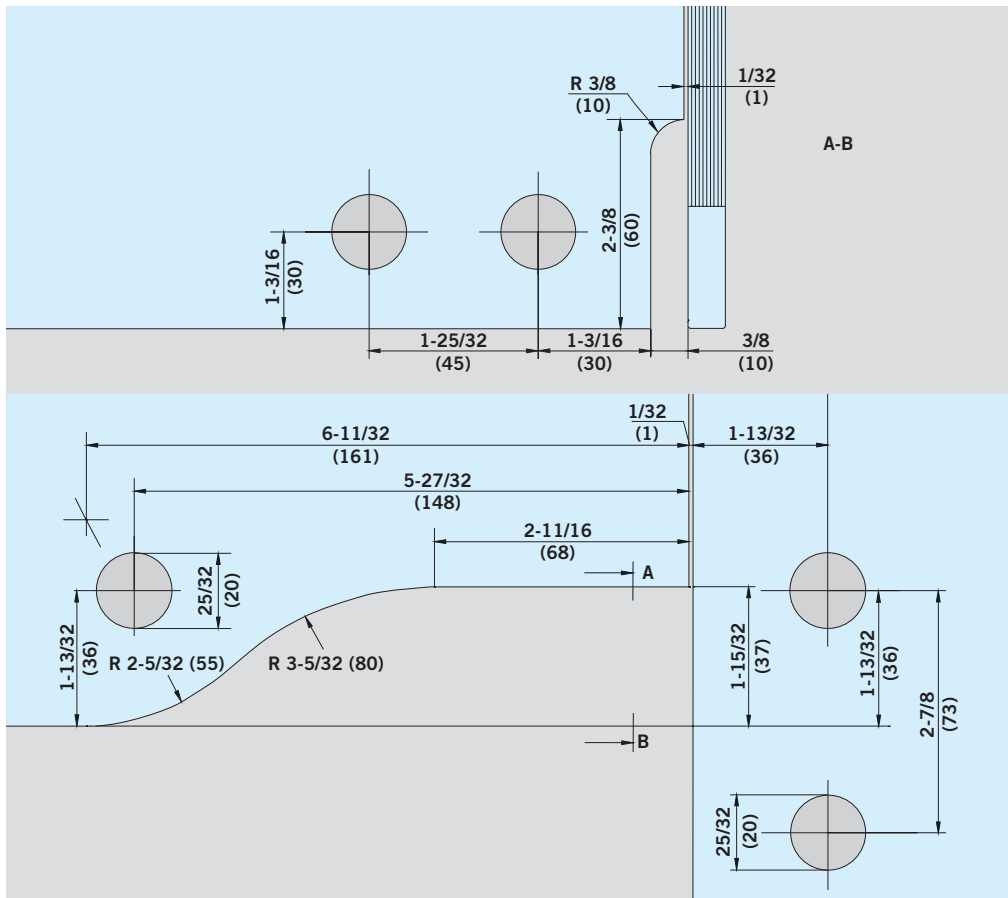
## PT 40

Patch for transom and sidelite

Scale 1 : 2



Ref. No.	833.343	833.333	833.335
	833.143	833.133	833.135
	833.344	833.334	833.336
	833.144	833.134	833.136



**PT 41**

Patch for transom and sidelite  
with fin fitting inside

**Ref. No. see below.**

**Scale 1 : 2**

**Ref. No.**

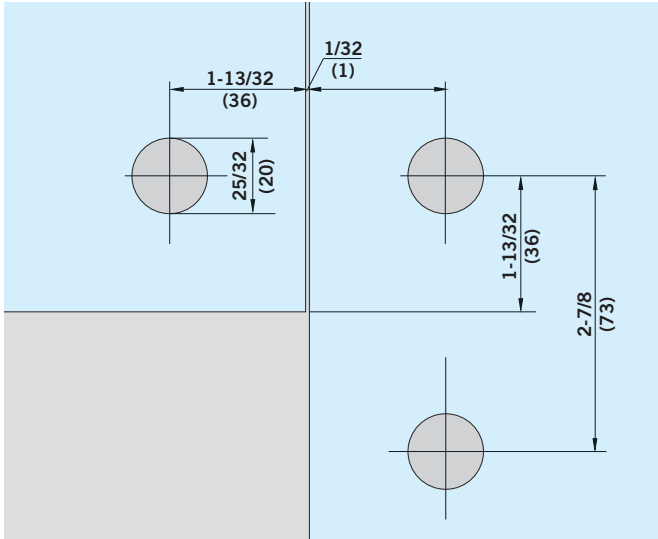
- 833.355/833.354
- 833.155/833.154
- 833.356/833.357
- 833.156/833.157
- 833.391/833.393
- 833.191/833.193
- 833.392/833.394
- 833.192/833.194
- 833.395/833.397
- 833.195/833.197
- 833.396/833.398
- 833.196/833.198



**PT 60/61, PT 62**  
 Connectors for transoms  
 and sidelites  
**Ref. No. 803.150/803.452**  
 and connector with stop  
**Ref. No. 803.173**

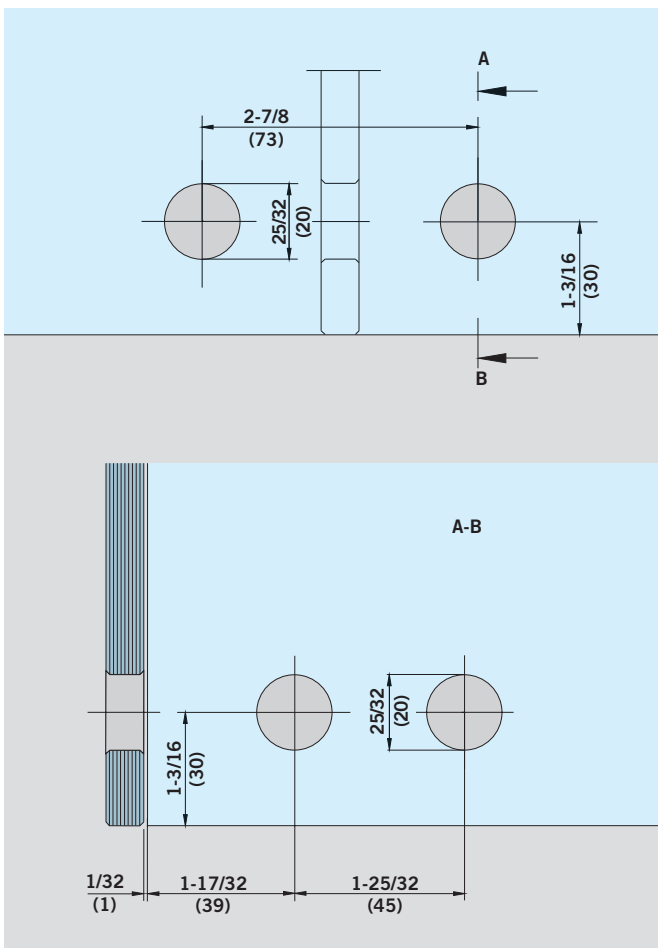
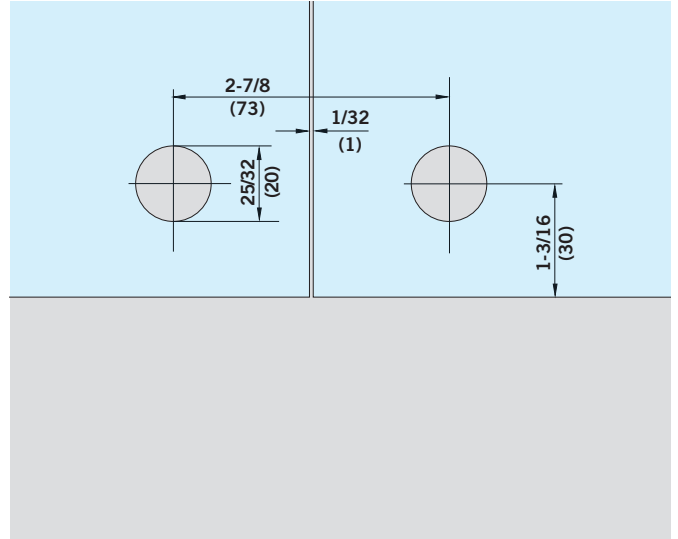
Ref. No. 803.157/803.158  
 Glass preparation for fin  
 fitting see PT 81 (page 18)

Scale 1 : 2



**PT 70**  
 Transom connector  
 Ref. No. 801.150/801.158

Scale 1 : 2



**PT 71**  
 Transom connector  
 with fin fitting  
**Ref. No. 801.161**

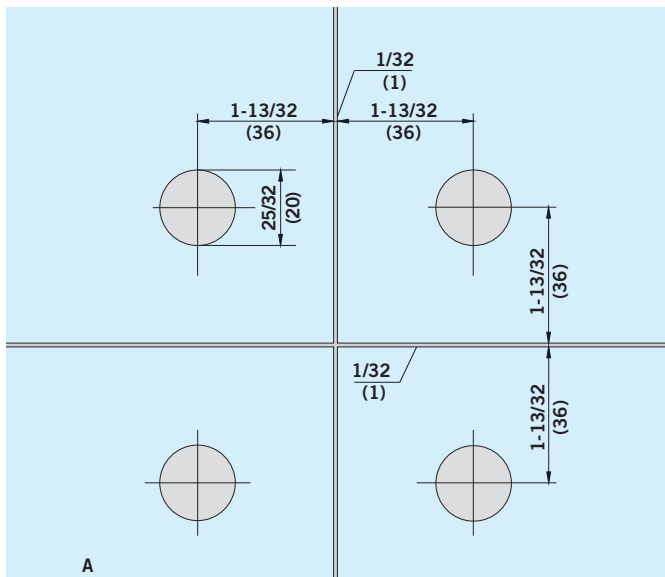
Scale 1 : 2

**PT 80**

Connector

Ref. No. 803.170/803.472

Scale 1 : 2



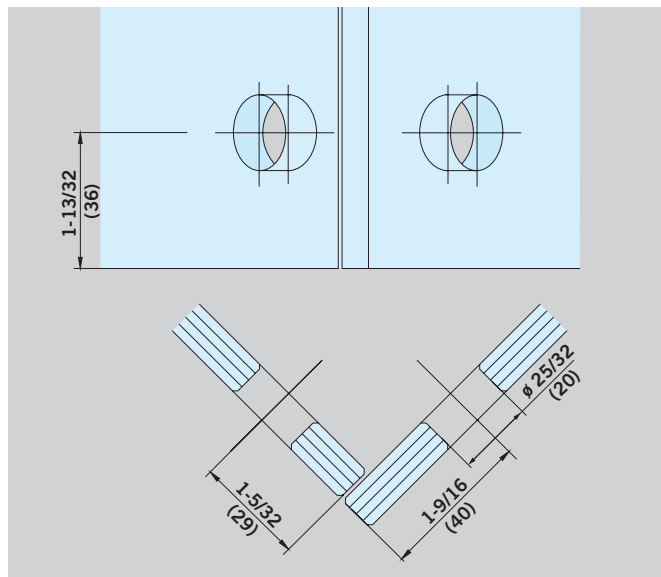
**PT 80-90 short**

Angled connector, 90°

shortened

Ref. No. 803.470

Scale 1 : 2

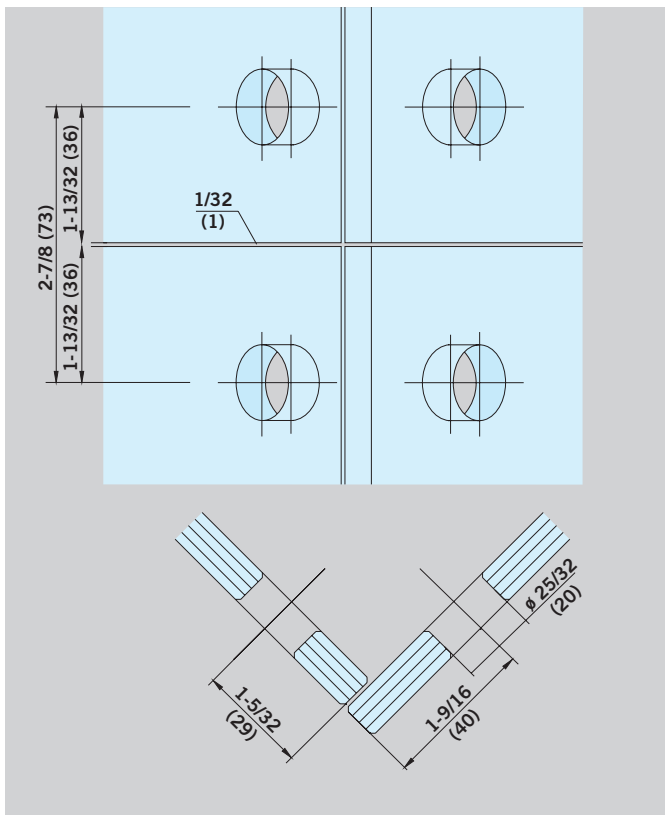


**PT 80 - 90**

Angled connector, 90°

Ref. No. 803.171

Scale 1 : 2

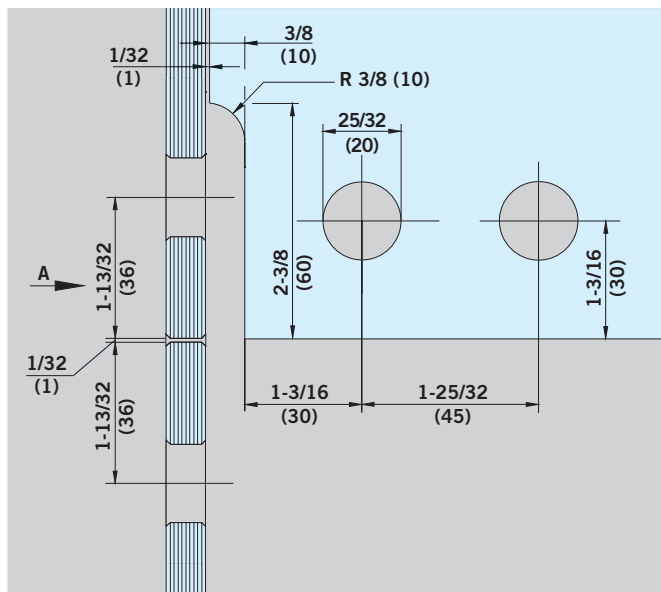


**PT 81**

Connector with fin fitting

Ref. No. 803.175

Scale 1 : 2

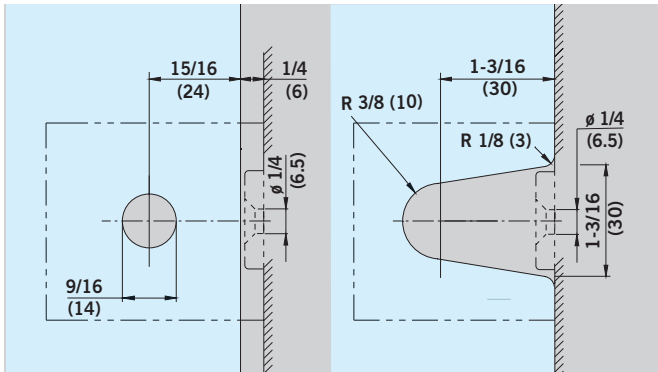


**PT 90**

Screw on fitting

Ref. No. 807.021/807.210

Scale 1 : 2

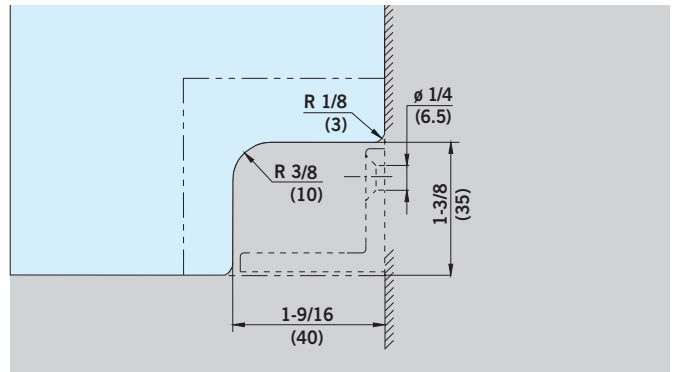


**PT 91**

Corner fitting

Ref. No. 807.023/807.211

Scale 1 : 2

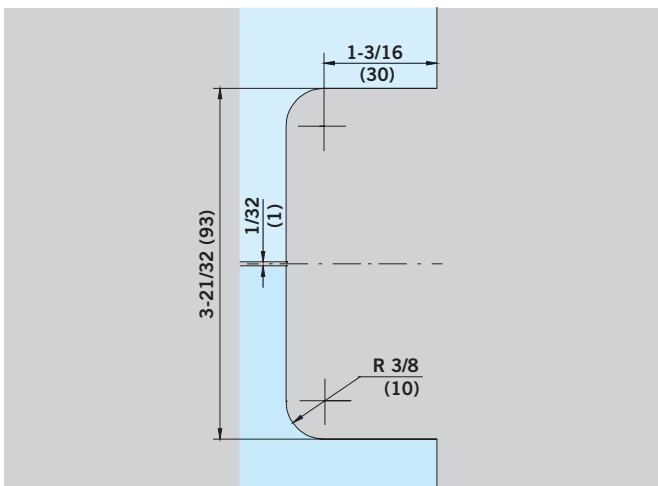


**Side connector**

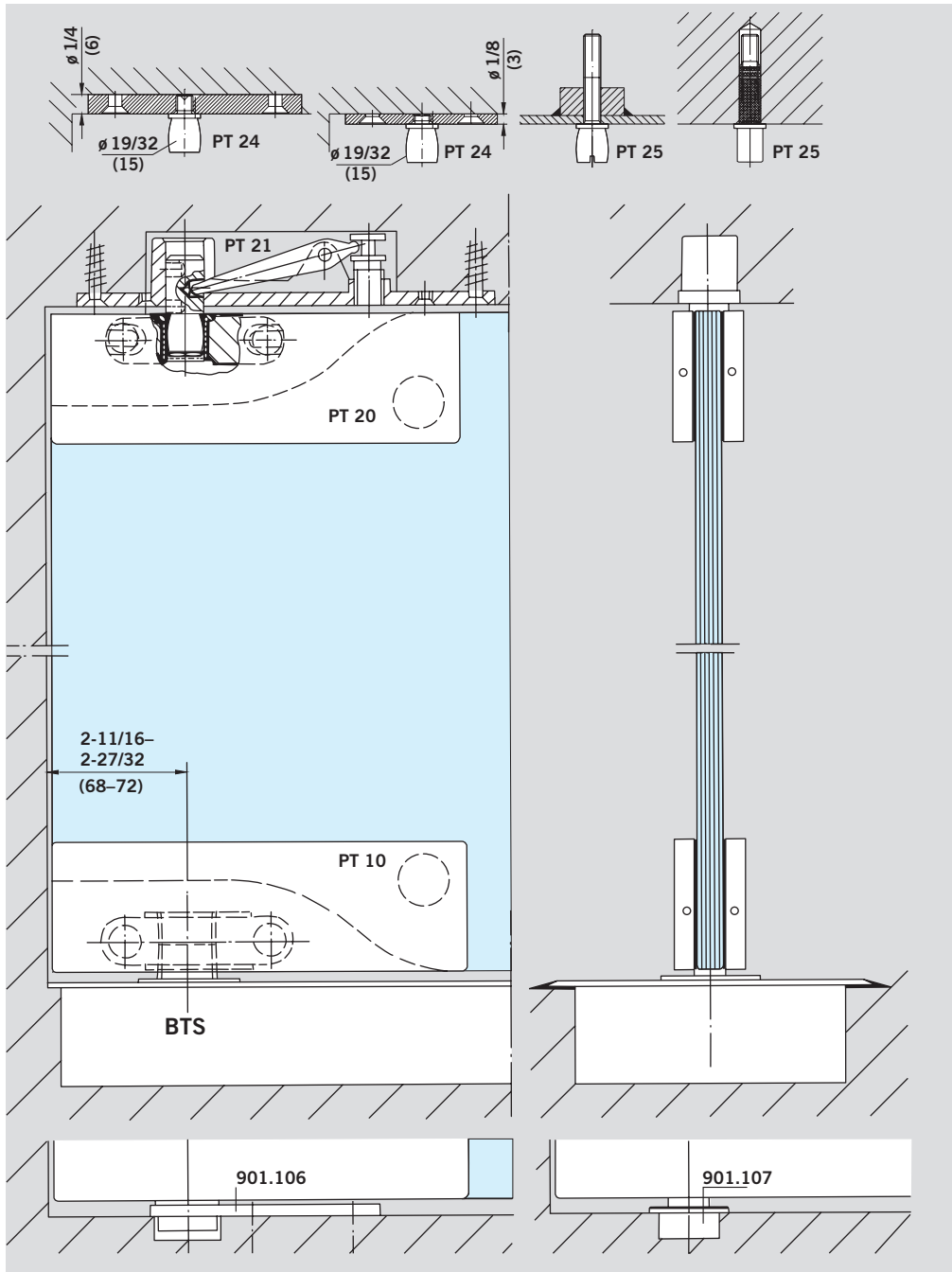
with fixing plate

Ref. No. 801.153

Scale 1 : 2



# CONSTRUCTION



## Mounting of pivots and top pivot pins

Mounting of top pivots and top pivot pins for PT 20

Mounting of floor closers or pivot bearings for PT 10

# ARCOS UNIVERSAL

## Unique design with in-built system versatility

The ARCOS Universal range offers patch fittings and connector hardware for transoms and side panels, and fin fittings for particularly large systems—with the curved arc motif of the ARCOS design incorporated into each component. Gentle reflections that change with the planes give the glass and its fittings a uniform appearance.

### Easy glass preparation, secure fixing

DORMA understands the special properties of glass as a building material, designing fittings that require only minimal glass preparation—a quick and easy cut-out with additional holes. Careful consideration and positive measures have been taken to create the maximum clamping surface with optimum clamping efficiency.

### Suitable for common glass thicknesses

ARCOS Universal fittings are available for 3/8" (10) and 1/2" (12) glass thicknesses.

### Reliability built in

Quality materials and thorough workmanship mean that ARCOS Universal fittings have the features necessary to meet the most demanding of specifications.

The fittings are designed to withstand large and heavy doors up to a maximum weight of 220 lb (100 kg).

Rails are available for heavier doors—330 lb (150 kg) maximum, for wider doors—48" (1219) maximum, and for high traffic doors.

### Clip-on technique

The innovative clip-on technique incorporated into the hardware ensures that the cover caps are secured to the basic components, so that the fixing pin is virtually invisible.

### Matching range of locks

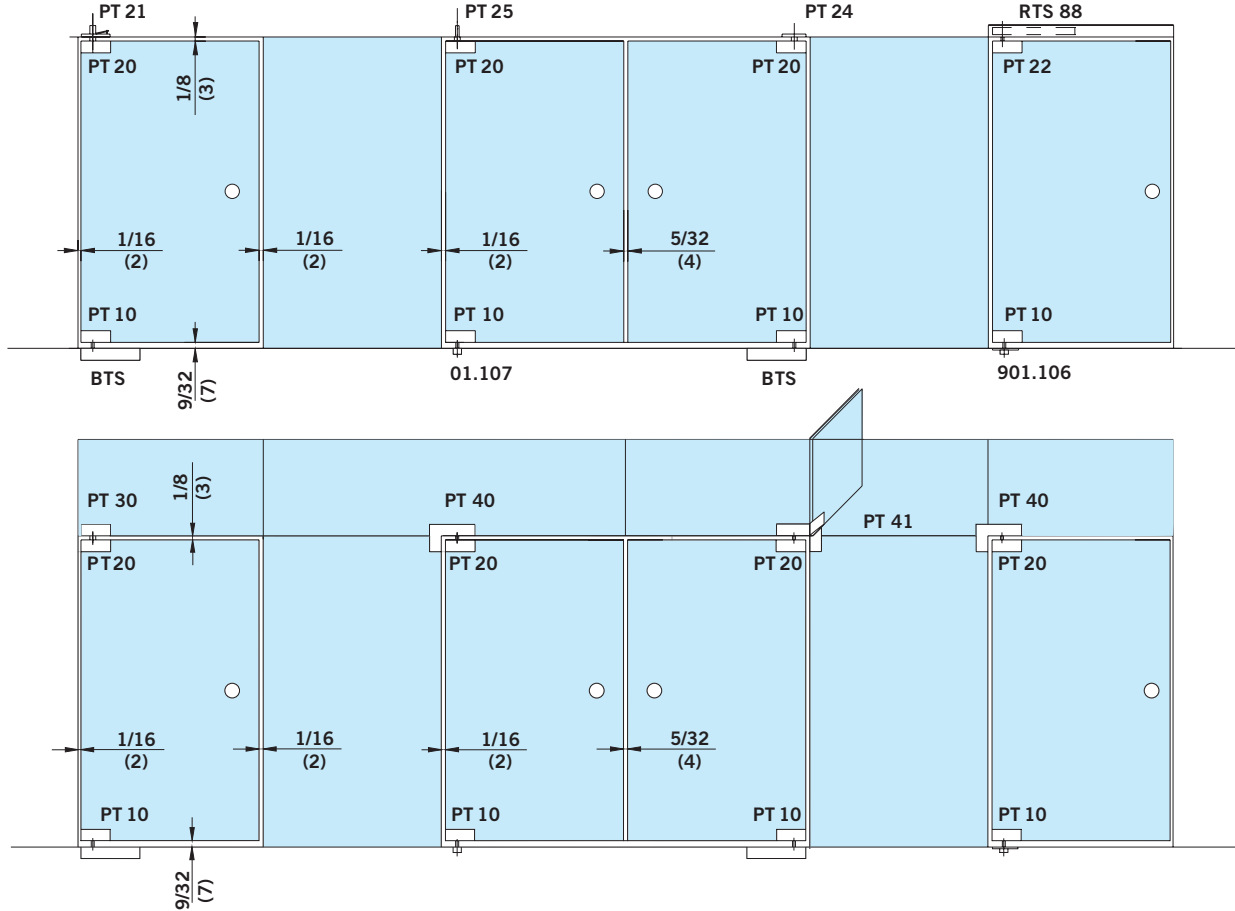
The ARCOS Universal range includes every type of accessory, and of course, a variety of locks and strike boxes in a matching design concept, giving the designer plenty of options to choose from. Contact Customer Service for more details.



# TYPE SELECTION

Tempered glass assemblies with fittings 2-3/4" (70) pivot point.

For all standard assembly types, see page 5.



**BTS** = Floor closer  
**PT** = Center hung door fittings  
**RTS** = Header/Transom closer (see Technical Information DORMA RTS Series for details)

**Maximum door weight & width for DORMA Universal fittings**

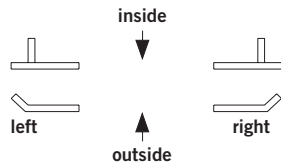
**Max. door weight**  
 220 lb (100 kg)  
**Max. door width**  
 43" (1100)

For door weights up to 330 lb (150 kg) and widths up to 48" (1219), DRS door rails should be used.

**Torque for mounting screws**

- Screws M 6**  
7.5 lb-ft / 10 Nm (4)\*
  - Screws M 6**  
11 lb-ft / 15 Nm (5)\*
  - Screws M 8**  
15 lb-ft / 20 Nm (5)\*
- \*Hex key size

**NOTE:**  
 If angle fittings or fin fittings are used "Left" or "Right" has to be determined by view from outside and above.



**ARCOS Universal is available in the following surface finishes**

- Aluminum, EV1 (114)
- Satin stainless steel (700)
- Polished stainless steel (701)
- Aluminum, dark bronze anodized (108)
- Black Anodized (109)

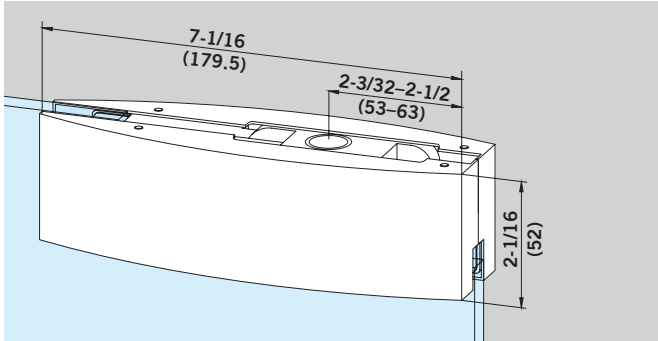
Special finishes may be available upon request.

1. Available upon request

# PATCH FITTINGS

Shown with 3/8" (10) and 1/2" (12) glass.

For accessories, see page 34.



### ARCOS PT 20

#### top patch

with plastic socket for top pivot  
 $\varnothing$  19/32 (15), used with PT21

- 3/8" (10) glass

**Ref. No. 826.110**

- 1/2" (12) glass

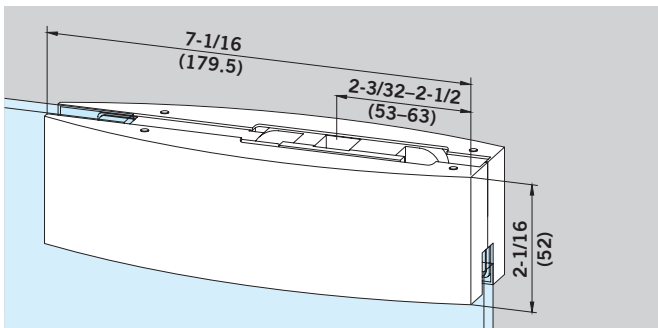
**Ref. No. 833.210**

#### Pivot location

2-5/8" (67)

#### Weight in lb (kg)

Aluminum	1.049 (0.477)
Stainless steel	1.265 (0.575)



### ARCOS PT 22

#### top patch

with insert for DORMA RTS over-  
 head concealed closer (see also  
 Technical Information DORMA  
 RTS Series)

- 3/8" (10) glass

**Ref. No. 826.112**

- 1/2" (12) glass

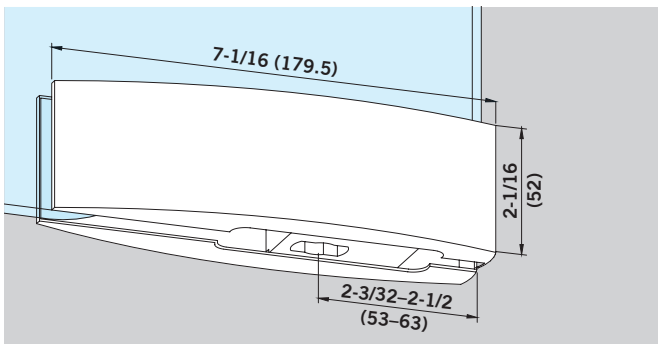
**Ref. No. 833.208**

#### Pivot location

2-5/8" (67)

#### Weight in lb (kg)

Aluminum	1.272 (0.578)
Stainless steel	1.489 (0.677)



### ARCOS PT 10

#### bottom patch

with insert for DORMA floor  
 closer spindle, or round pivot  
 $\varnothing$  9/16" (14)

- 3/8" (10) glass

**Ref. No. 826.100**

- 1/2" (12) glass

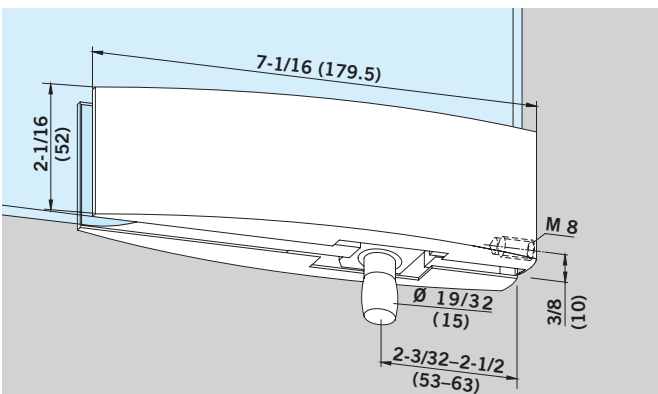
**Ref. No. 833.200**

#### Pivot location

2-5/8" (67)

#### Weight in lb (kg)

Aluminum	1.241 (0.564)
Stainless steel	1.456 (0.662)



### ARCOS PT 30

#### transom patch

with pivot  $\varnothing$  19/32 (15),  
 with M 8 tapped hole at side

- 3/8" (10) glass

**Ref. No. 826.120**

- 1/2" (12) glass

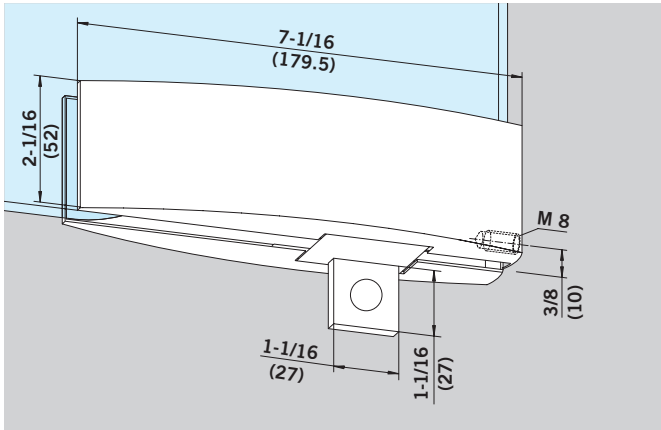
**Ref. No. 833.220**

#### Pivot location

2-5/8" (67)

#### Weight in lb (kg)

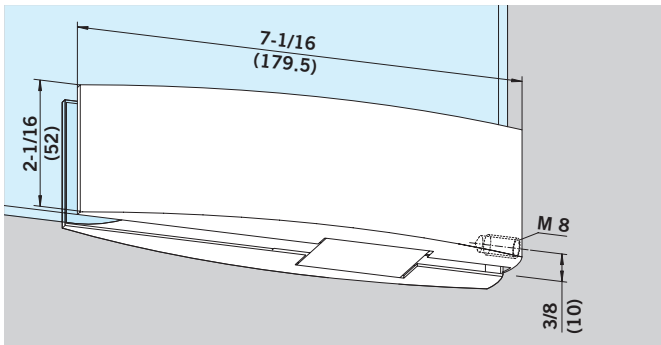
Aluminum	1.161 (0.528)
Stainless steel	1.399 (0.636)



**ARCOS PT 30**  
transom patch  
with stop insert

- 3/8" (10) glass  
**Ref. No. 826.420**
- 1/2" (12) glass  
**Ref. No. 833.222**

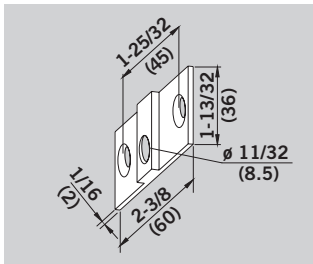
**Weight in lb (kg)**  
Aluminum 1.161 (0.528)  
Stainless steel 1.276 (0.580)



**ARCOS PT 30**  
transom patch  
with blanking insert

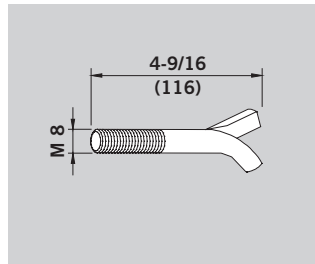
- 3/8" (10) glass  
**Ref. No. 826.421**
- 1/2" (12) glass  
**Ref. No. 833.223**

**Weight in lb (kg)**  
Aluminum 1.141 (0.519)  
Stainless steel 1.256 (0.571)



**Fixing plate**  
for transom patch PT 30  
**Ref. No. 903.128**

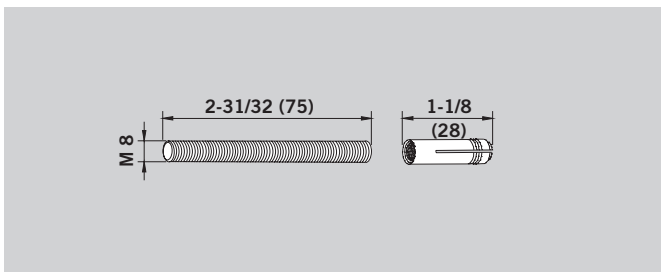
**Weight in lb (kg)**  
Aluminum 0.035 (0.016)  
Brass 0.083 (0.038)



**Wall anchor**  
with thread M 8 for transom  
patch PT 30  
**Ref. No. 901.133**

**Weight in lb (kg)**  
0.088 (0.040)

Stainless steel not available,  
satin chrome on brass supplied.

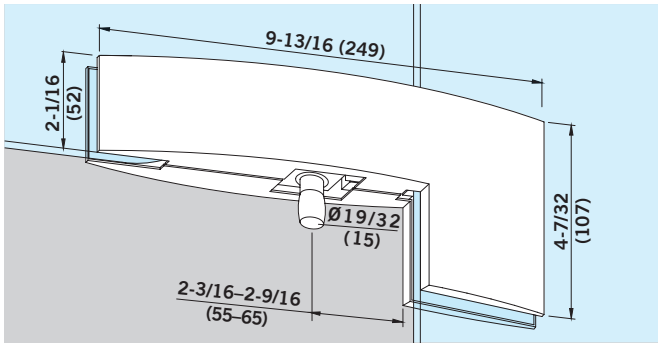


**Threaded rod**  
M 8 with plug for transom  
patch PT 30  
**Ref. No. 901.134**

**Weight in lb (kg)**  
0.070 (0.032)



# CONNECTORS



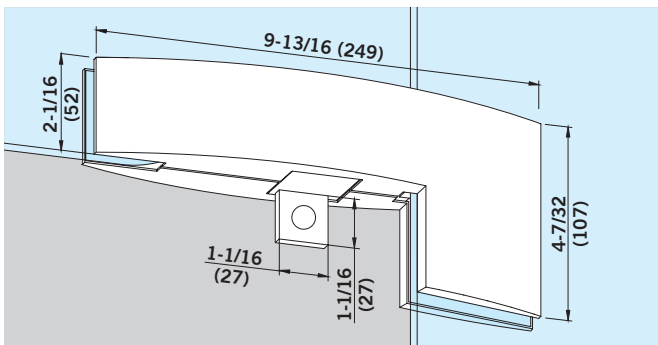
**ARCOS PT 40 patch for transom and sidelite**  
with pivot Ø 19/32 (15)

**Pivot location**  
2-5/8" (67)

- 3/8" (10) glass  
**Ref. No. 826.140**
- 1/2" (12) glass  
**Ref. No. 833.240**

**Weight in lb (kg)**

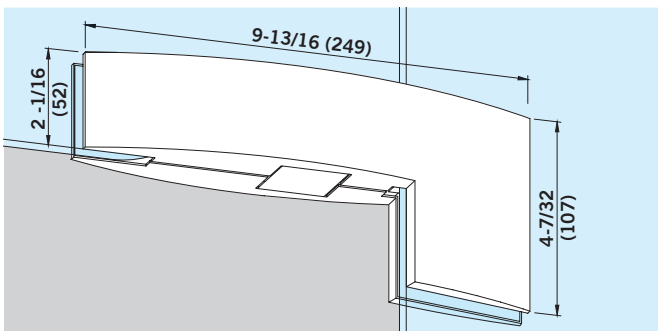
Aluminum	1.661 (0.755)
Stainless steel	2.061 (0.937)



**ARCOS PT 40 patch for transom and sidelite**  
with stop insert

**Weight in lb (kg)**  
Aluminum 1.661 (0.755)  
Stainless steel 2.061 (0.937)

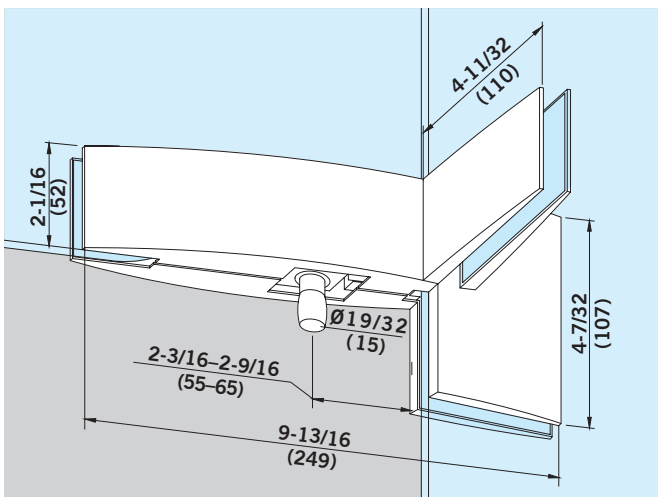
- 3/8" (10) glass  
**Ref. No. 826.440**
- 1/2" (12) glass  
**Ref. No. 833.241**



**ARCOS PT 40 patch for transom and sidelite**  
with blanking insert

**Weight in lb (kg)**  
Aluminum 1.641 (0.746)  
Stainless steel 2.041 (0.928)

- 3/8" (10) glass  
**Ref. No. 826.441**
- 1/2" (12) glass  
**Ref. No. 833.242**



**ARCOS PT 41 patch for transoms and sidelite**  
with fin fitting inside  
with pivot Ø 19/32" (15)

**With blanking insert (not illustrated)**

- 3/8" (10) glass  
**Ref. No. \*826.162/826.163**
- 1/2" (12) glass  
**Ref. No. \*833.245/833.246**

- 3/8" (10) glass  
**Ref. No. \*826.264/826.265**
- 1/2" (12) glass  
**Ref. No. \*833.250/833.251**

**Pivot location**  
2-5/8" (67)

- With stop insert (not illustrated)**
- 3/8" (10) glass  
**Ref. No. \*826.262/826.263**
  - 1/2" (12) glass  
**Ref. No. \*833.248/833.249**

**Weight in lb (kg)**

Aluminum	2.094 (0.952)
Stainless steel	2.633 (1.197)

\* Left hand fin (illustration shows left hand) / Right hand fin. Left or right hand is determined by view from outside.

# GLASS PREPARATION DETAILS

**ARCOS PT 10, PT 20, PT 22, PT 30**

Top and bottom patches, transom patch  
 Scale 1 : 2

Ref. No.	826.100	826.120	833.200	833.220
	826.110	826.420	833.210	833.222
	826.112	826.421	833.208	833.223

**ARCOS PT 40**

Patch for transom and sidelite  
 Scale 1 : 2

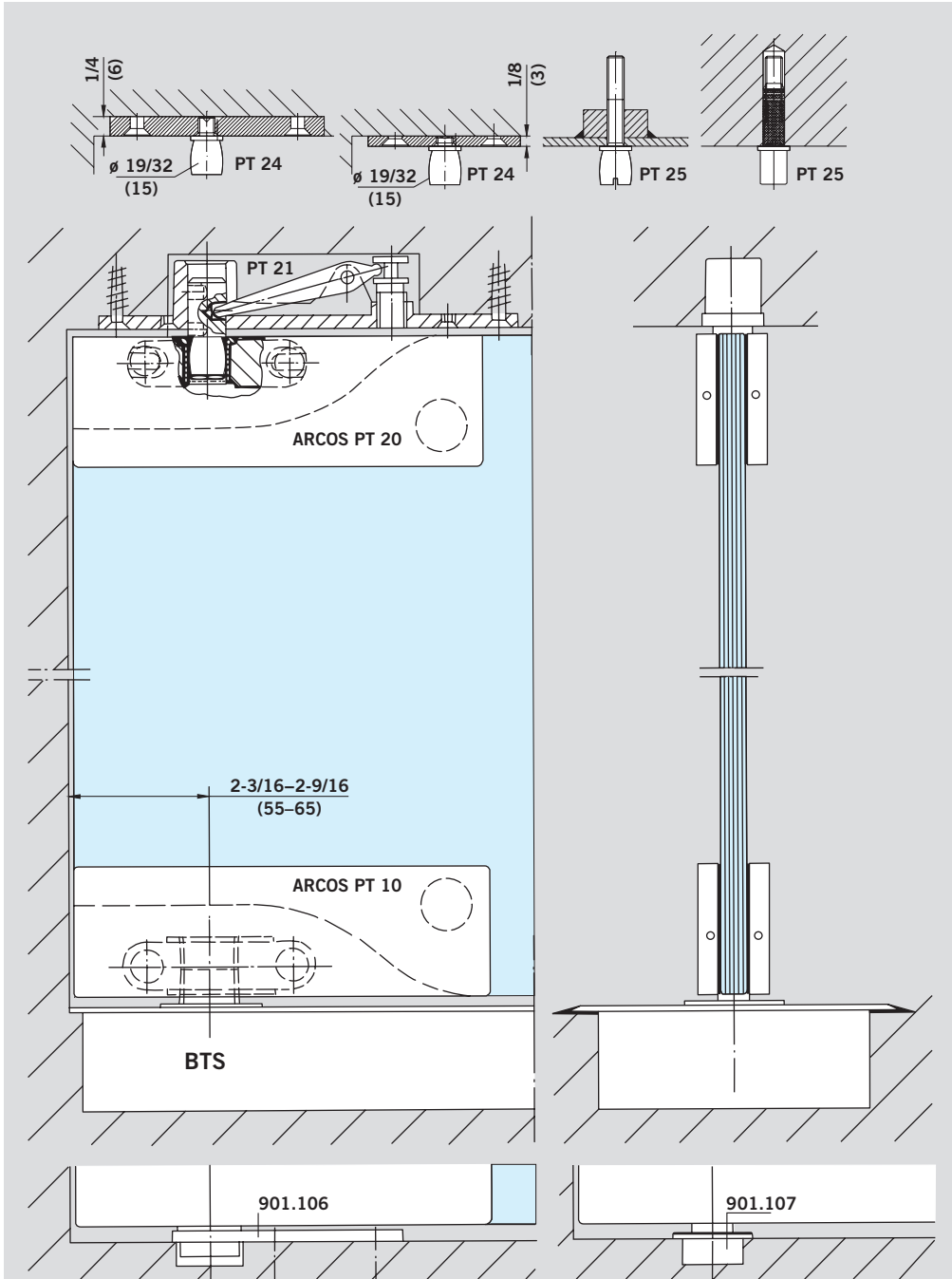
Ref. No.	826.140	833.240
	826.440	833.241
	826.441	833.242

**ARCOS PT 41**

Patch for transom and sidelite with fin fitting **inside**  
 Scale 1 : 2

Ref. No.	826.162	826.263	833.245	833.249
	826.163	826.264	833.246	833.250
	826.262	826.265	833.248	833.251

# CONSTRUCTION



## Mounting of pivots and top pivot pins

Mounting of top pivots and top pivot pins for ARCOS 20

Mounting of floor closers, floor bearings for ARCOS 10

## DORMA EA

---

The expansive range with slimline bodies for offset hung doors

DORMA EA patch fittings are characterized by their slim, neat shape and skillful European hinge design. This comprehensive range of fittings allows the transparent elegance of single-action doors to reach their full potential—whether hung in frames or integrated into tempered glass openings.

### Easy glass preparation, secure mounting

DORMA understands the special properties of glass as a building material, designing fittings that require only minimal glass preparation—a quick and easy cut-out with additional holes. Careful consideration and positive measures have been taken to create the maximum clamping surface with optimum clamping efficiency.

### Suitable for common glass thicknesses

DORMA EA patch fittings are available for 3/8" (10) and 1/2" (12) glass thicknesses.

### Reliability built in

Quality materials and thorough workmanship mean that DORMA EA patch fittings have the features necessary to meet the most demanding of specifications.

### Matching range of locks

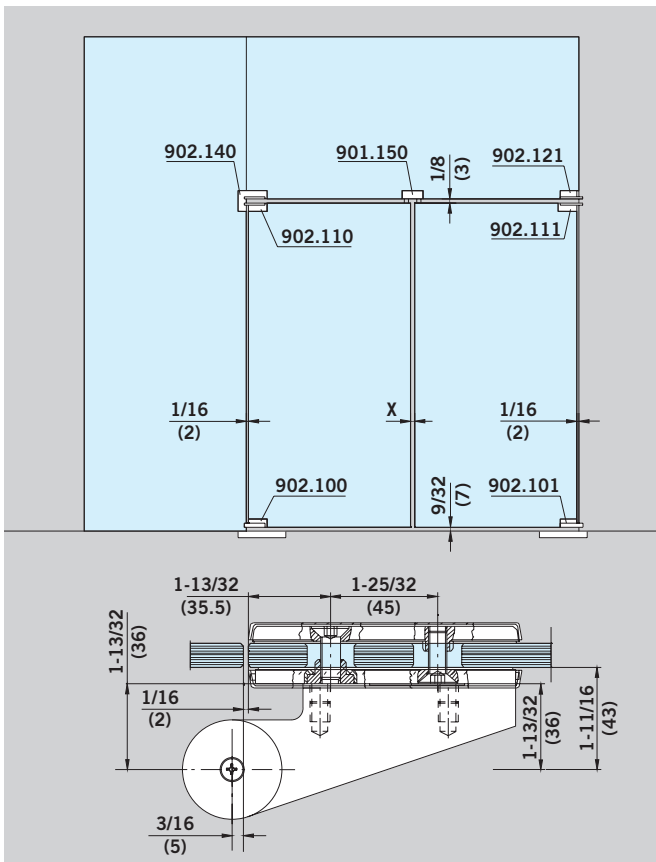
The DORMA EA range includes every type of accessory, and of course, a variety of locks and strike boxes in a matching design concept, giving the designer plenty of options to choose from. Contact Customer Service for more details.



### DORMA EA corner patches are available in the following finishes

- Aluminum, silver anodized EV1, (101)
- Similar to satin stainless steel (107)
- Aluminum, dark bronze anodized DB (108)
- Black anodized (109)
- Polished chrome plated (501)
- Brass, polished (503)





**Offset hung doors  
in tempered glass assemblies**

**Max. door weight**

220 lb (100 kg)

**Max. door width**

43" (1100)

For door weights up to 220 lb (100 kg) and widths up to 47" (1200), DRS door rails should be used.

DORMA EA patch fittings for offset hung doors in tempered glass assemblies have a 1-13/32" (36) offset = 1-11/16" (43) from pivot point to glass surface.

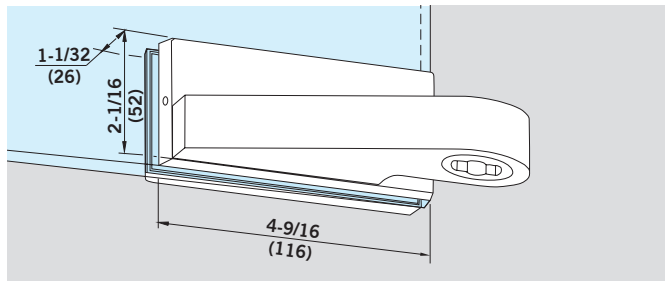
**Torque for fixing screws**

**Screws M 8**

15 lb-ft / 20 Nm

# PATCH FITTINGS

1-13/32" (36) offset = 1-11/16" (43) from pivot point to glass surface, complete, for 3/8" (10) and 1/2" (12) glass thickness.



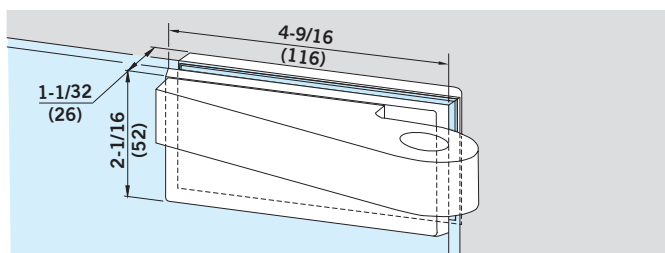
**Bottom patch**

to suit DORMA floor closer spindle, or round pivot  
Ø 9/16" (14)

**Ref. No. \*902.100/902.101**  
**(LHR)(RHR)**

**Weight in lb (kg)**

Aluminum 1.606 (0.730)  
Stainless steel 2.807 (1.276)

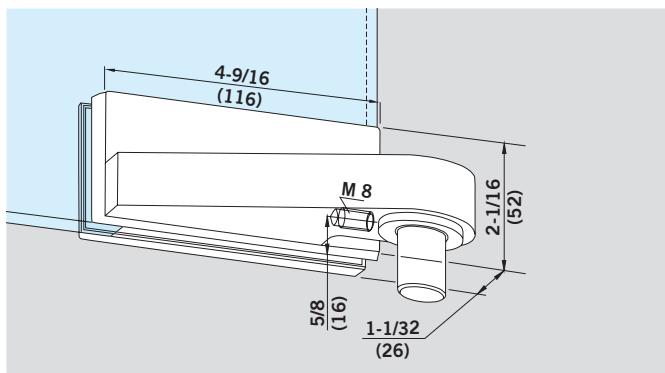


**Top patch**

**Ref. No. \*902.110/902.111**  
**(LHR)(RHR)**

**Weight in lb (kg)**

Aluminum 1.452 (0.660)  
Stainless steel 2.734 (1.243)



**Transom patch**

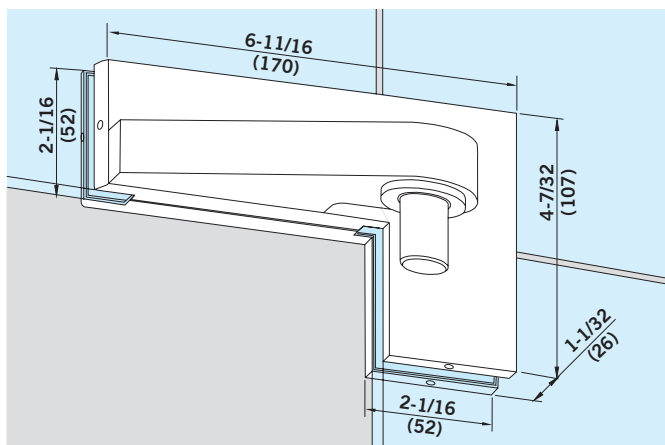
bushing outside  
Ø 25/32" (20),  
pivot Ø 19/32" (15)

**Ref. No. \*902.120/902.121**  
**(LHR)(RHR)**

**Weight in lb (kg)**

Aluminum 1.401 (0.637)  
Stainless steel 2.624 (1.193)

See page xx for wall connector plate **Ref. No. 801.127**



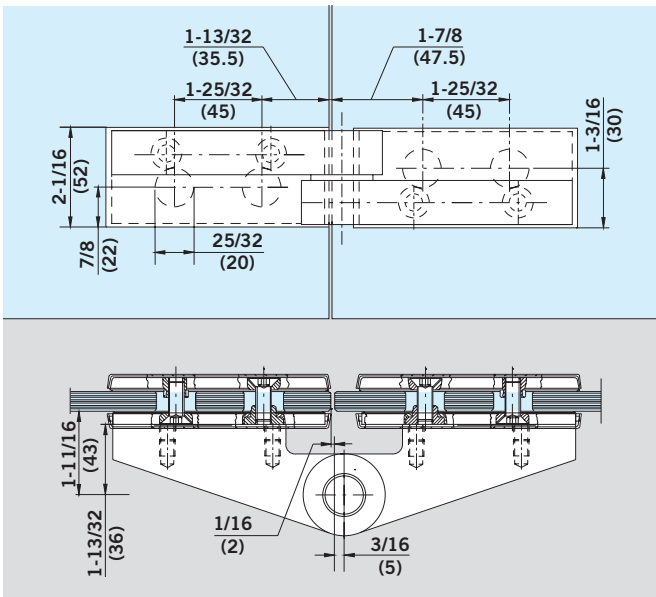
**Patch for transom and sidelite**

bushing outside  
Ø 25/32" (20),  
pivot Ø 19/32" (15)

**Ref. No. \*902.140/902.141**  
**(LHR)(RHR)**

**Weight in lb (kg)**

Aluminum 1.830 (0.832)  
Stainless steel 3.099 (1.409)



**Top patch**

complete with pivot for sidelite

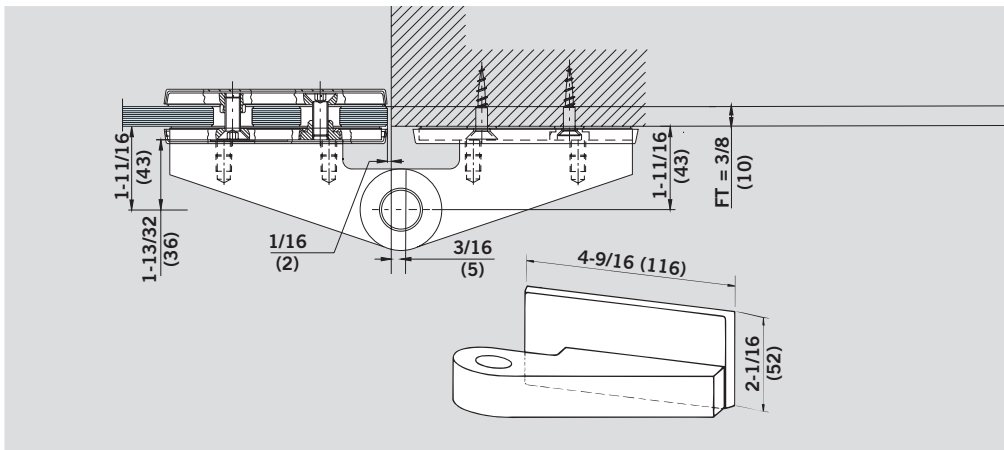
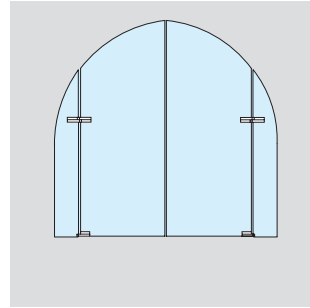
Ref. No. \*902.200/902.201

(LHR)(RHR)

**Weight in lb (kg)**

Aluminum 3.113 (1.415)

Stainless steel 5.678 (2.581)



**Top patch**

complete with pivot  
for wall mounting

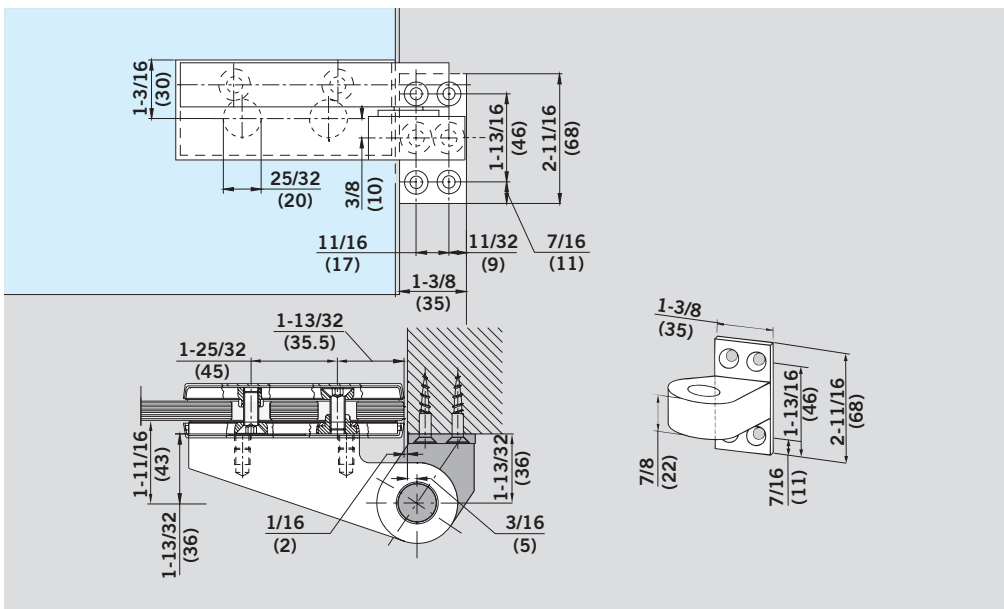
Ref. No. \*902.202/902.203

(LHR)(RHR)

**Weight in lb (kg)**

Aluminum 2.809 (1.277)

Stainless steel 5.561 (2.528)



**Top patch**

complete with pivot  
for frame mounting

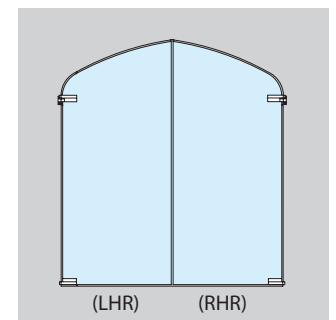
Ref. No. \*902.204/902.205

(LHR)(RHR)

**Weight in lb (kg)**

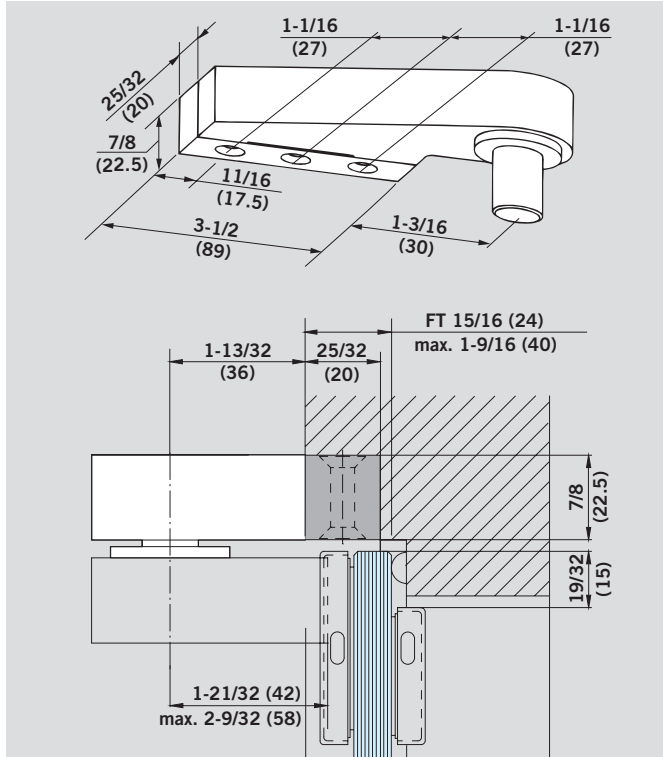
Aluminum 1.969 (0.895)

Stainless steel 3.850 (1.750)



\* Left/right hand reverse is determined by view from hanging pull side.

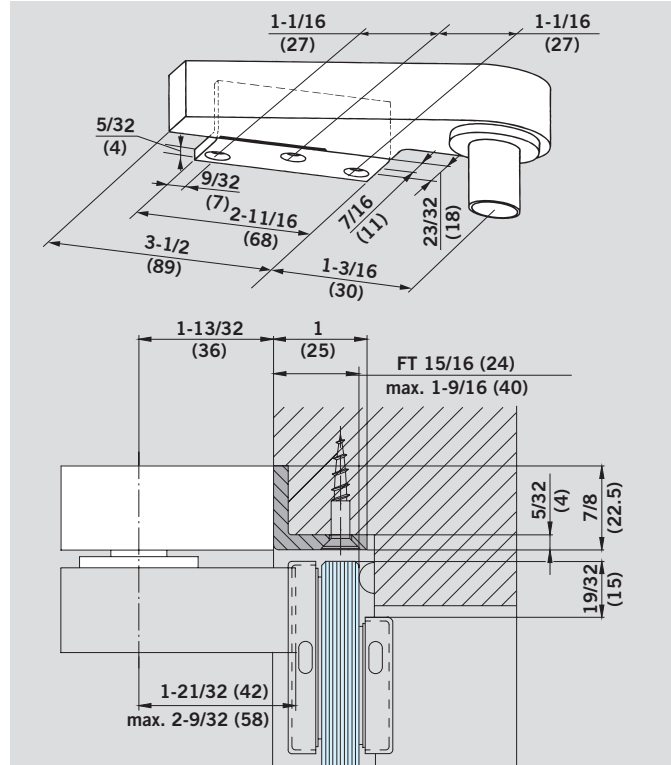
# TOP CENTERS FOR WOOD & STEEL FRAMES



**Frame top center with fixing block**  
**Ref. No. 902.150**

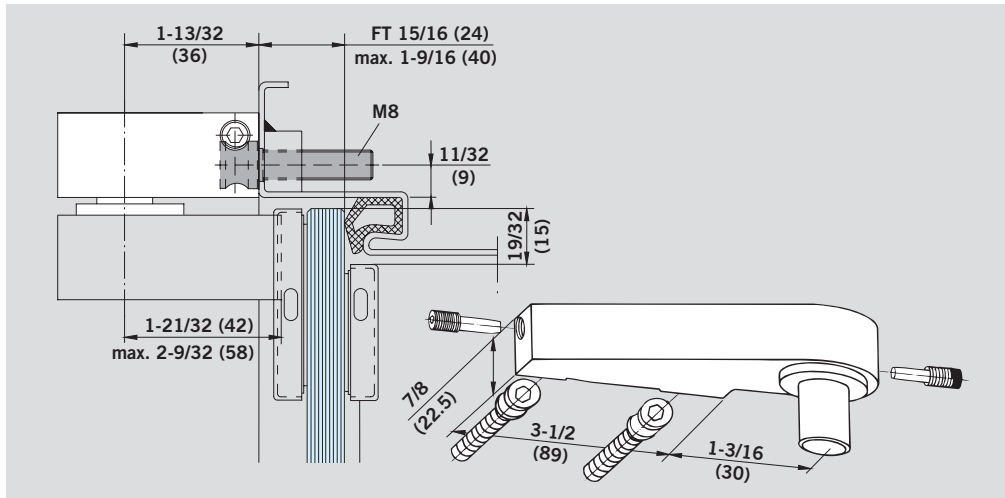
**Weight in lb (kg)**  
 Aluminum 1.036 (0.471)  
 Stainless steel 2.149 (0.977)

(If corner fittings/door rails are combined with frame top centers described below, please indicate **rebate depth** with order.)



**Frame top center with angle bracket**  
**Ref. No. 902.151**

**Weight in lb (kg)**  
 Aluminum 0.996 (0.453)  
 Brass 2.109 (0.959)



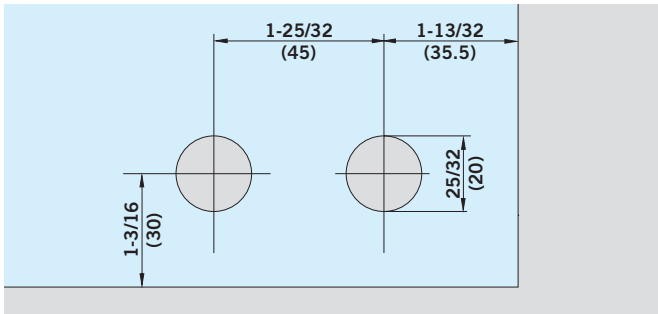
**Frame top center only for steel frames, with special wedge screw mounting**  
**Ref. No. \*902.152/902.153 (LHR)(RHR)**

**Weight in lb (kg)**  
 Aluminum 0.858 (0.390)  
 Brass 4.171 (1.896)

\* Left/right hand (illustration below shows right hand reverse) are determined by view from hanging pull side.



# GLASS PREPARATION DETAILS

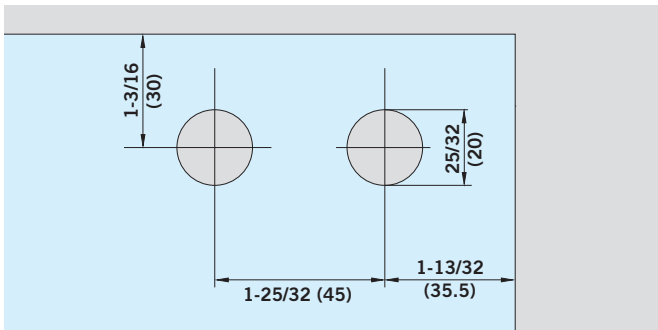


## Bottom patches

Ref. No:  
left hand  
**902.100**

right hand  
**902.101**

Scale 1 : 2

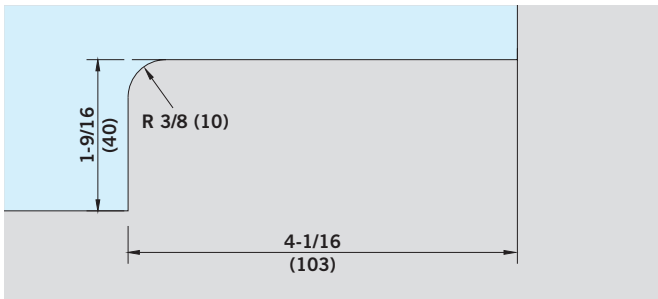


## Top patches

Ref. No:  
left hand  
**902.110**

right hand  
**902.111**

Scale 1 : 2

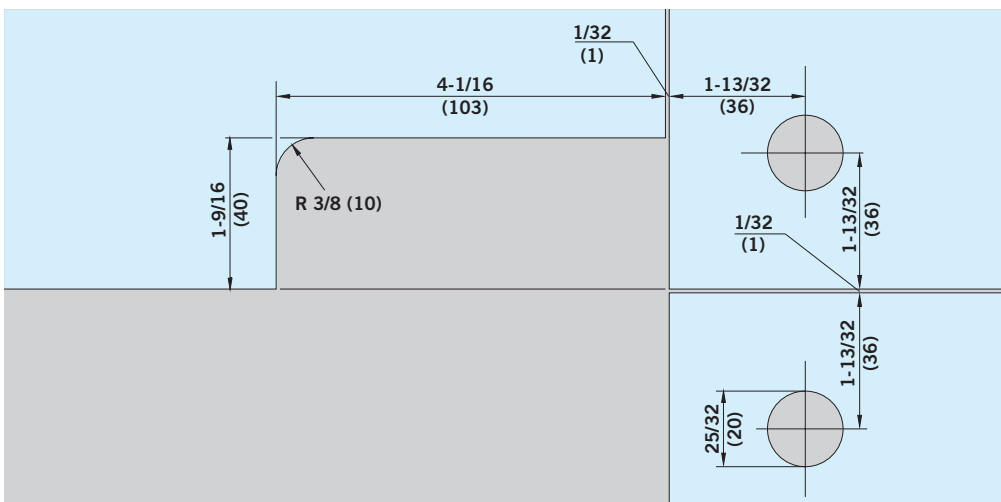


## Overhead patches

Ref. No:  
left hand  
**902.120**

right hand  
**902.121**

Scale 1 : 2



## Patches for transom and sidelite

Ref. No:  
left hand  
**902.140**

right hand  
**902.141**

Scale 1 : 2

# ACCESSORIES

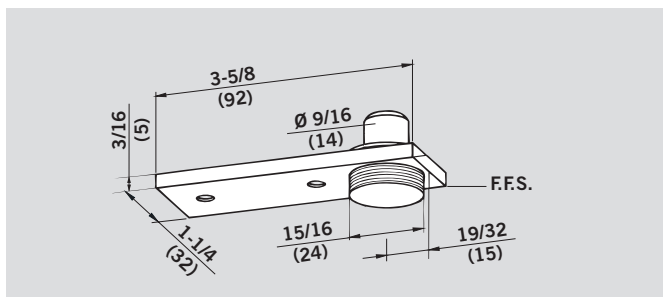
Accessories for patch fittings ... perfection in detail



DORMA offers a wide range of original patch fitting accessories to optimize the technical excellence and cost effectiveness of tempered glass systems of all types. As well as functional components, such as special

floor pivots, DORMA offers security-relevant options that enhance the exceptional functional efficiency, reliability, and long service life expected of DORMA glass systems and solutions.

## Floor bearings & floor socket

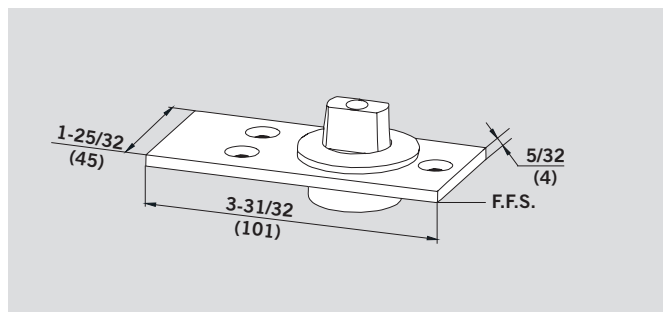


**Floor pivot bearing (355.6)**  
with round pivot  $\varnothing 9/16"$  (14), and cover plate; height adjustable by  $3/16"$  (5)

**max. door weight**  
220 lb (100 kg)  
**Ref. No. 901.106**

**Weight in lb (kg)**  
Aluminum 0.341 (0.155)  
Brass 0.374 (0.170)  
Stainless steel 0.372 (0.169)

**F.F.S.= Finished Floor Surface**



**Floor bearing (355.5)**  
with DORMA profile spindle (longer spindle on request)

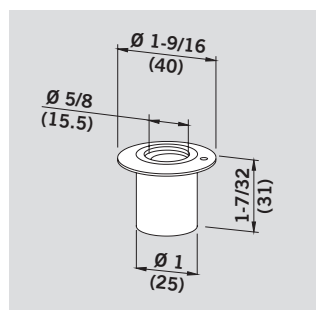
**max. door weight**  
440 lb (200 kg)  
**Ref. No. 904.602**

**Weight in lb (kg)**  
0.559 (0.254)

**Stainless Steel**  
**max. door weight**  
440 lb (200 kg)  
**Ref. No. 904.603**

**Weight in lb (kg)**  
0.563 (0.256)

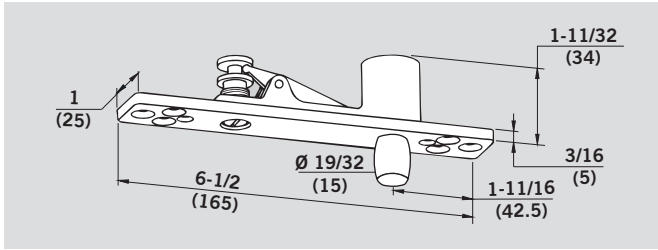
**F.F.S.= Finished Floor Surface**



**Floor socket**  
eccentric, zinc coated brass, with adjustable plastic socket insert  
**Ref. No. 805.194**

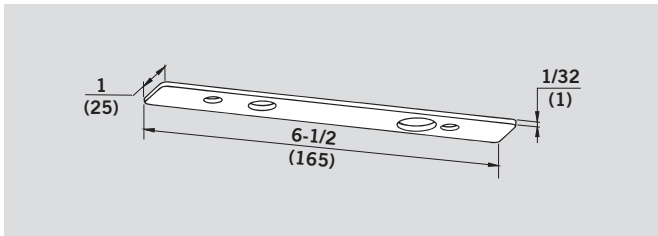
**Weight in lb (kg)**  
0.044 (0.020)

Pivots

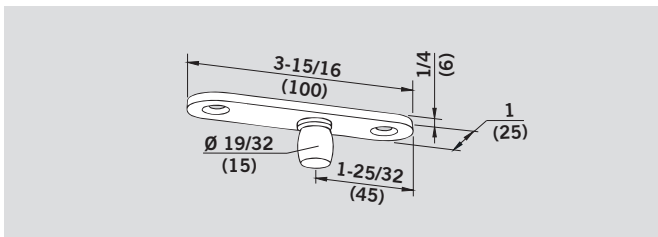


**PT 21 frame hung portion**  
top center hung with  
removable pin Ø 19/32" (15)  
**Ref. No. 901.117**

**Weight in lb (kg)**  
0.737 (0.335)

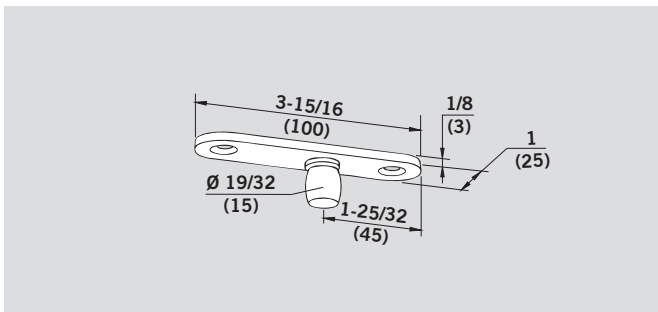


**PT 21 cover plate**  
Ø 19/32 (15)  
**Ref. No. 227.004**



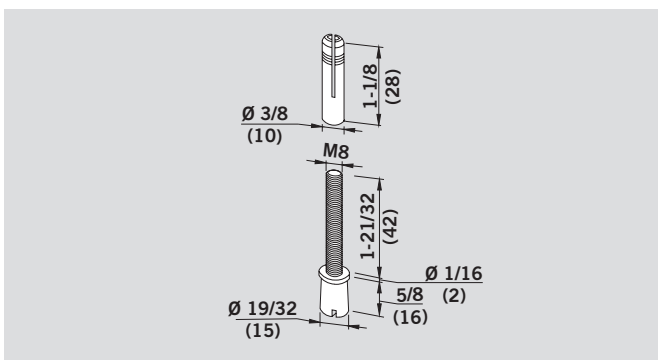
**PT 24 pivot (325. 6-6)**  
Ø 19/32 (15) with mounting plate,  
material thickness 1/4" (6 mm)  
**countersink base plate in ceiling**  
**Ref. No. 901.116**

**Weight in lb (kg)**  
Aluminum 0.128 (0.058)



**PT 24 pivot (325.6-3)**  
Ø 19/32 (15), with mounting  
plate, material thickness 1/8" (3)  
mm, to screw **on the ceiling**  
**Ref. No. 901.923**

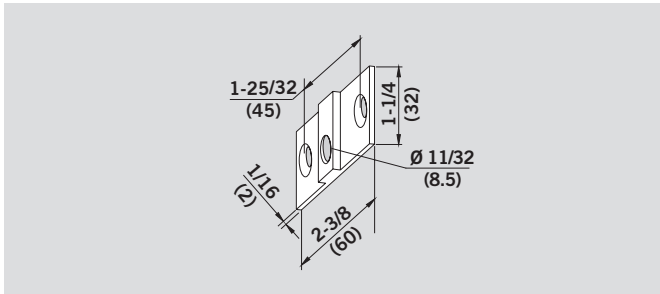
**Weight in lb (kg)**  
Aluminum 0.092 (0.042)  
Brass 0.171 (0.078)  
Stainless steel 0.163 (0.074)



**PT 25 pivot (325.3)**  
Ø 19/32 (15), with plug  
**Ref. No. 901.115**

**Weight in lb (kg)**  
0.097 (0.044)

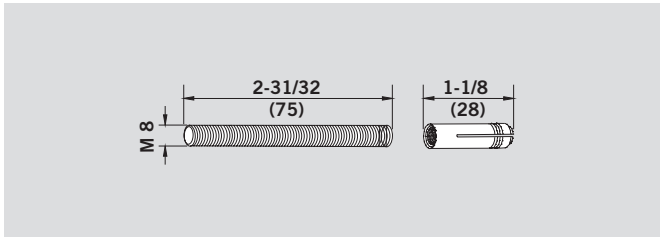
## Fixing Plate, Threaded Rod & Cylinder



**Mounting plate**  
for transom patch PT 30  
**Ref. No.903.128**

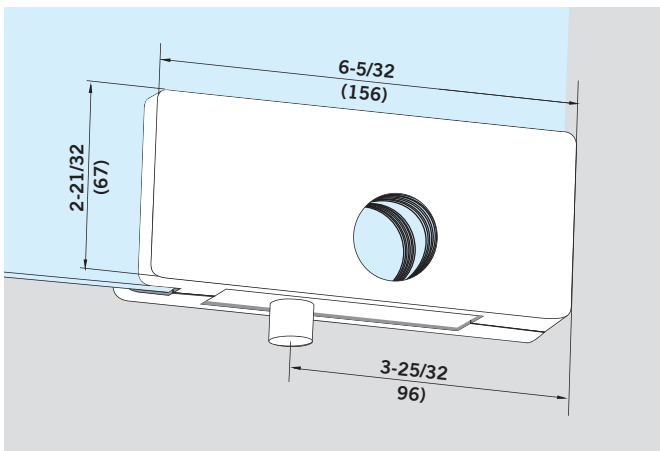
**Weight in lb (kg)**  
Aluminum 0.035 (0.016)  
Brass 0.083 (0.038)

Stainless steel not available,  
satin chrome on brass supplied.



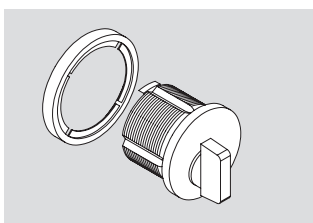
**Threaded rod**  
M 8 with plug for transom patch  
**Ref. No. 901.134**

**Weight in lb (kg)**  
0.070 (0.032)

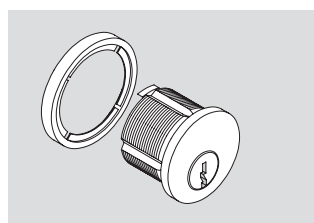


**Patch Lock – AR20**

- 3/8" (10) glass  
**Ref. No. 801.124**
- 1/2" (12) glass  
**Ref. No. 801.122**
- 5/8" (15) glass  
**Ref. No. 801.126**
- 3/4" (19) glass  
**Ref. No. 801.125**

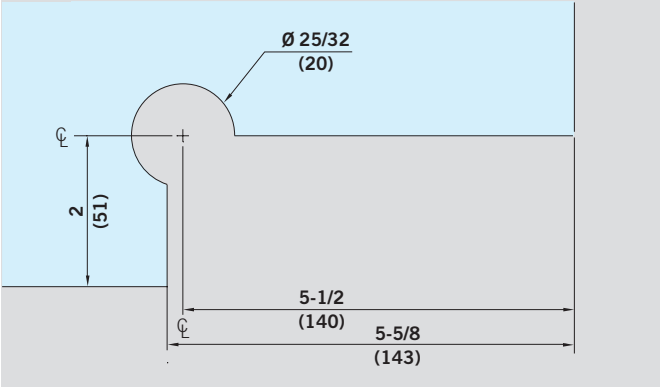


**Thumbturn with  
blocking ring**  
**Ref. No. 225.996**

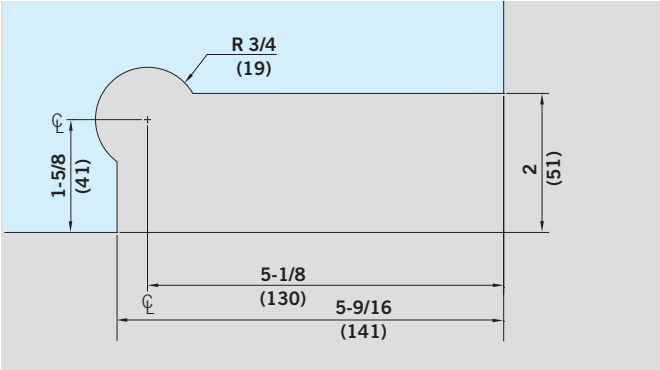


**Key Cylinder with  
blocking ring**  
**Ref. No. 225.997**

### Glass Preparation—Patch Lock

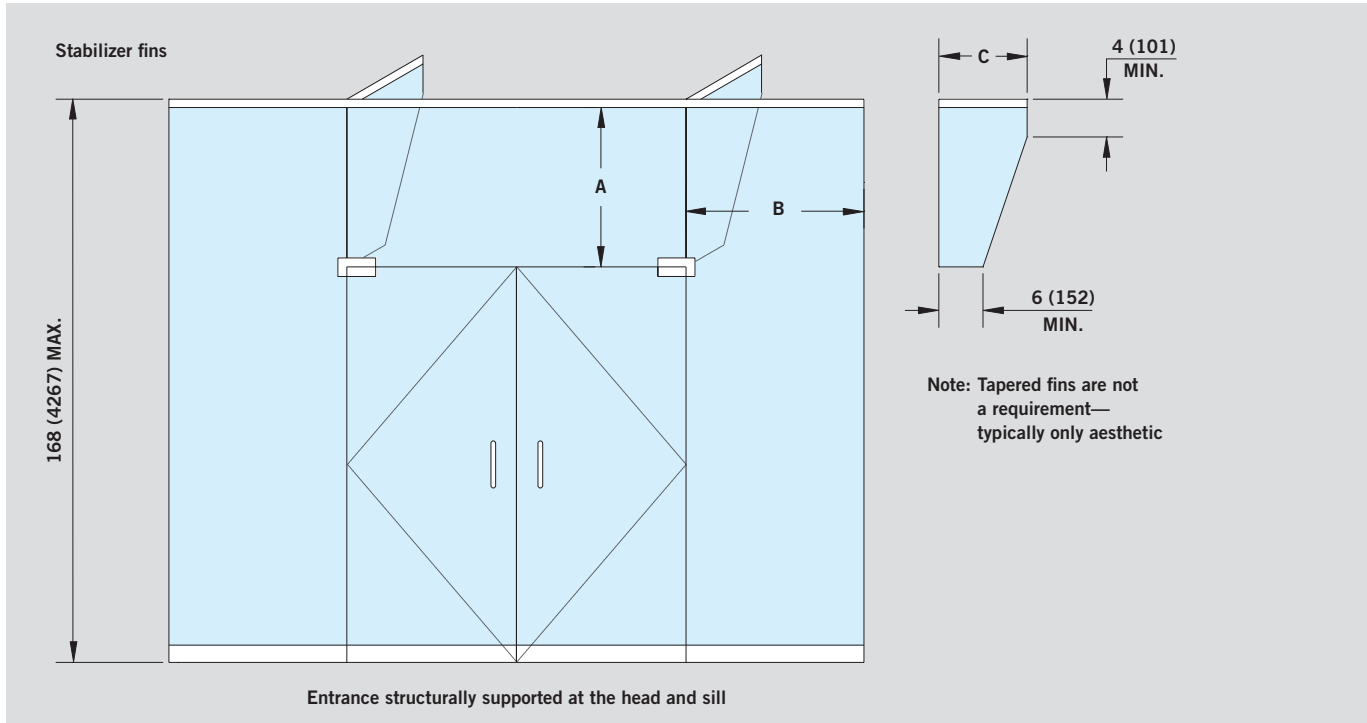


- 3/8" (10) glass  
**Ref. No. 801.124**
- 1/2" (12) glass  
**Ref. No. 801.122**



- 5/8" (15) glass  
**Ref. No. 801.126**
- 3/4" (19) glass  
**Ref. No. 801.125**

# Fin Usage & Assembly



Risk of excessive deflection increases as the distance from the door's upper pivot to structure increases. To reduce deflection, glass fins mounted perpendicular to the glass wall should be employed. Refer to the graph below for fin usage recommendations.

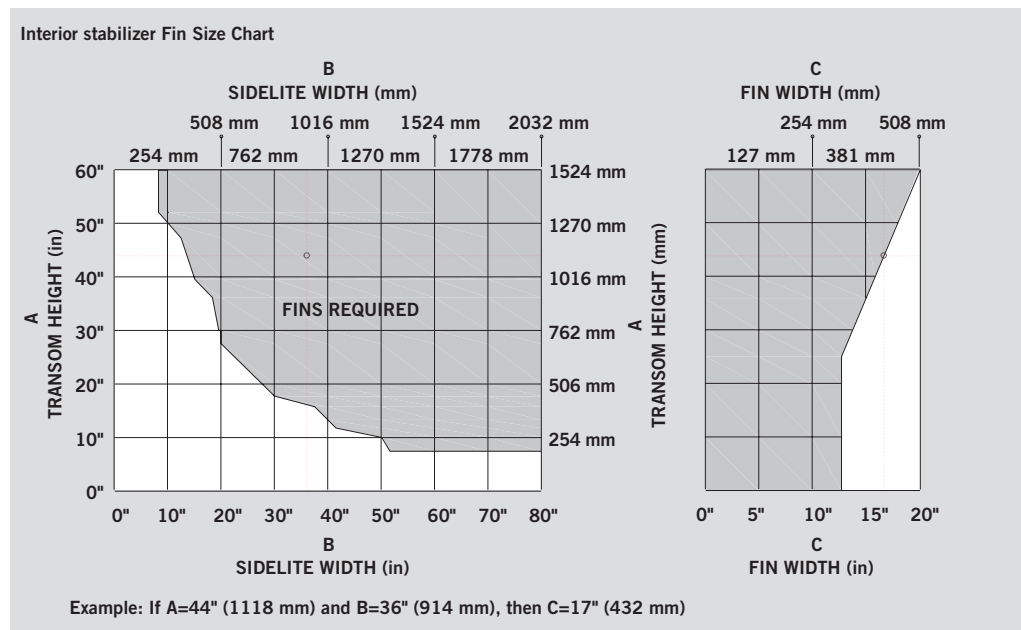
**NOTE:** When fins are used, they must be mechanically fastened to adequate support. If transom weight exceeds 99 lbs (45 kg), it should also be mechanically fastened to structure above to provide additional support. This graph constitutes general recommendations only. Individual situations and site conditions may require additional support to adequately reduce deflection. Exterior applications up to 13' (4 m) should have job-specific calculations processed.

Exterior applications over 13' (4 m) require a set of full engineering specifications.

To use the graph, determine the height of the transom (dimension A) as well as the width of the sidelite (dimension B as shown in the elevation—or a total width to nearest support point in the

case of multiple sidelites).

Locate the intersecting point of these two grids on the graph. If this intersecting point falls within the shaded area of the graph, fins are required. Next, determine fin top width (dimension C) on the fin width scale by matching transom height (dimension A).



**Mechanical channel**

Consists of base section with bore holes every 11-13/16" (300), including clamping parts with screws and gasket strips.

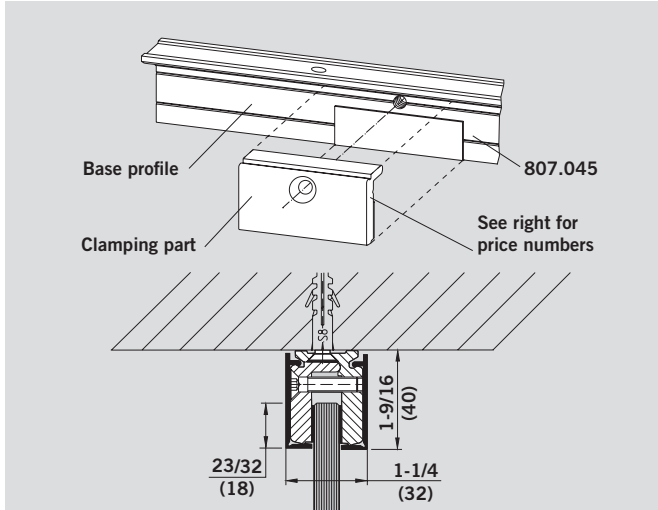
**Application**

All around frame system for tempered glass assemblies, with fittings on sides and ceiling.

The **safety type** prevents free hanging glass panels from falling down by mounting the clamping fitting through glass holes.

33 lb (15 kg) load for each clamping part, torque for fixing screws 7.5 lb-ft / 10 Nm (M 6 = hex key size 4).

**Standard type**



**Base profile standard type**

157" (4000) stock length

**Weight in lb/ft (kg/m)**

Aluminum 0.037 (0.055)

**Weight in lb/ft (kg/m)**

Aluminum .805 (1.200)

for 3/8" (10) through 3/4" (19) glass thickness

**Ref. No. 807.045**

- 3/8" (10) glass

**Ref. No. 807.004**

- 1/2" (12) glass

**Ref. No. 807.085**

- 5/8" (15) glass

**Ref. No. 807.087**

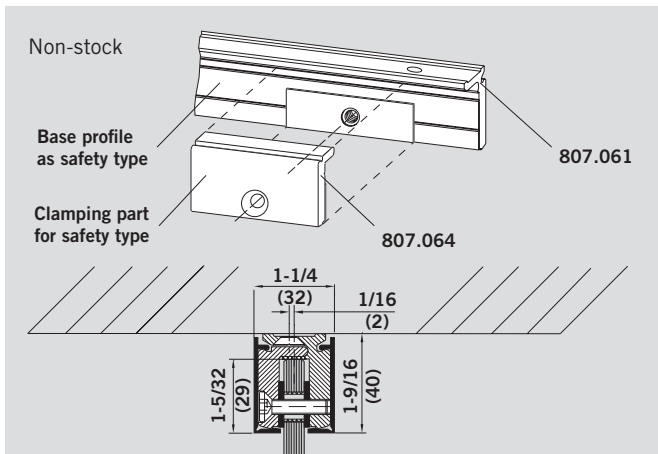
- 3/4" (19) glass

**Ref. No. 807.089**

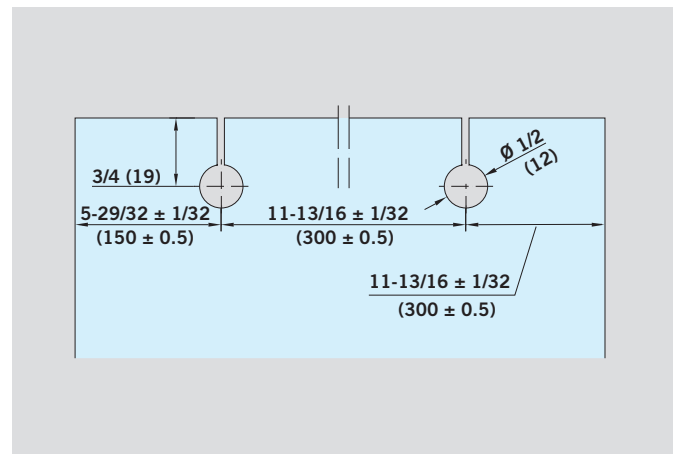
**Clamping part standard type**

2-3/8" (60) long with screw and gasket

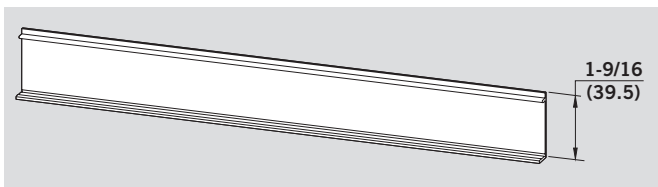
**Tempered monolithic 3/8" (10) glass only**



**Glass preparation for safety type mechanical channel**



**Clip on cover, end caps & filler block**



**Clip on cover profile**

157" (4000) stock length, brass, stainless steel, satin and stainless steel polished available

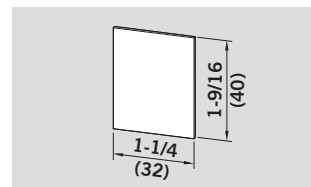
**Ref. No. 807.003**

**Weight in lb/ft (kg/m)**

Aluminum 0.137 (0.203)

Brass 0.252 (0.373)

Stainless Steel 0.252 (0.373)



**End cap for 3/8" (10) and 1/2" (12) glass thickness**

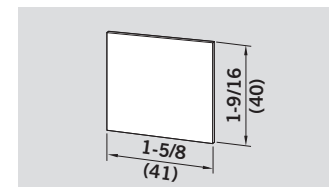
**Ref. No. 807.007**

**Weight in lb (kg)**

Aluminum 0.484 (0.220)

Brass 1.383 (0.629)

Stainless Steel 1.348 (0.613)



**End cap for 5/8" (15) and 3/4" (19) glass thickness**

**Ref. No. 807.065**



[www.dorma.com](http://www.dorma.com)



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