



Roller Shutter System  
Notes on Use and Installation

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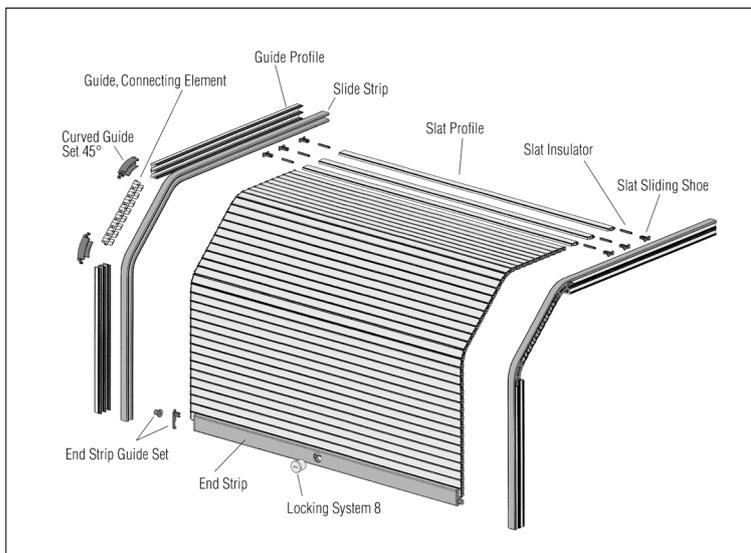
## Application

The RS System is suitable for constructing manually-operated vertical and horizontal roller shutters on frames built from Line 8 profiles.

The system consists of the **RS Guide** and the **Roller Shutter** itself, both of which are of modular design. The Roller Shutter is available in aluminium or plastic.

## Technical Data/Scope of Supply

RS Systems should be designed so that the width-to-height ratio of the Roller Shutter is less than 2. Roller Shutters should not be made wider than 1000 mm in order to ensure they maintain stability.

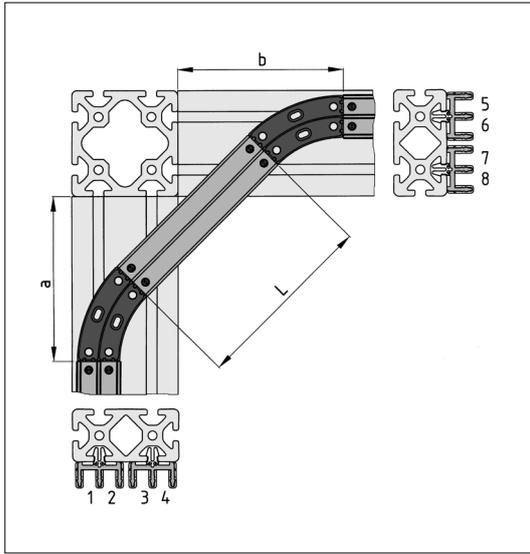


The components shown are elements of a building kit system which are used for customizing Roller Shutters.

item's partners will be pleased to advise you on the particular configuration you require and to provide you with a complete solution on request.

## Assembly of the Roller Shutter Guide

The RS Guide is of modular design and consists of an RS Guide Profile and RS Curved Guides 45°. The RS Slide Strip is mounted onto the guide elements in order to ensure that the Roller Shutter glides smoothly and securely. The process of assembling the guide begins with defining the position of all the guide elements of the existing frame. The total length of the guide must allow the Roller Shutter to be moved to each terminal position. The lengths required for the RS Guide Profiles are shown in the following table.



Guide routing options

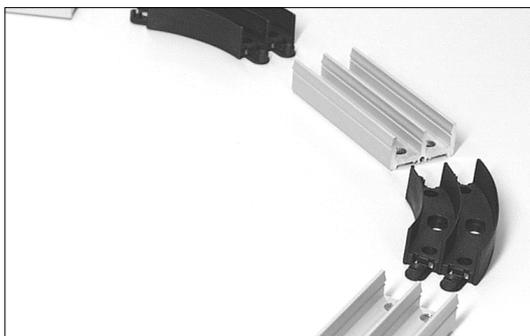
| Groove | 5                                 | 6                                 | 7                               | 8                               |
|--------|-----------------------------------|-----------------------------------|---------------------------------|---------------------------------|
| 1      | L = 140<br>a = 125<br>b = 125     | L = 120<br>a = 125,5<br>b = 110,5 | L = 80<br>a = 122,5<br>b = 82,5 | L = 60<br>a = 123,5<br>b = 68   |
| 2      | L = 120<br>a = 110,5<br>b = 125,5 | L = 140<br>a = 125<br>b = 125     | L = 100<br>a = 121,5<br>b = 95  | L = 80<br>a = 122,5<br>b = 82,5 |
| 3      | L = 80<br>a = 82,5<br>b = 122,5   | L = 60<br>a = 83,5<br>b = 108     | L = 20<br>a = 80<br>b = 80      | L = 0<br>a = 80,5<br>b = 65,5   |
| 4      | L = 60<br>a = 68<br>b = 123,5     | L = 80<br>a = 82,5<br>b = 122,5   | L = 0<br>a = 65,5<br>b = 80,5   | L = 20<br>a = 80<br>b = 80      |

Lengths a and b are used for measuring the lengths of the RS Guide Profiles, while L designates the required length of the Guide Profile between the Curved Guides.

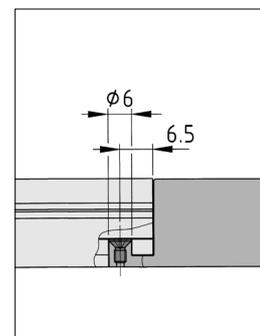
Example:

Guide for Roller Shutter from groove 1 into groove 5

L = 140 mm  
a = 125 mm  
b = 125 mm



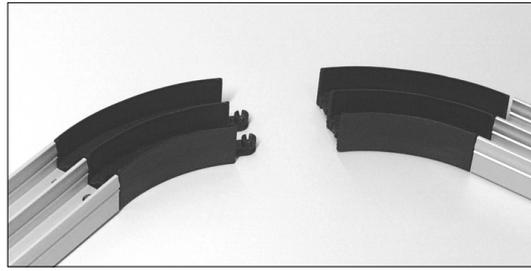
Connection of the RS Guide Profiles with the Curved Guides 45°.



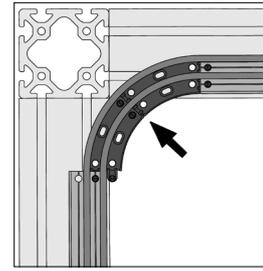
A hole must be drilled into the RS Guide Profile in order to be able to engage the RS Curved Guide 45°.



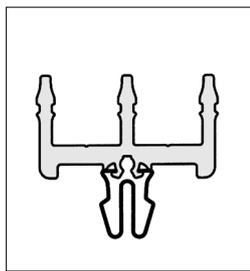
The connections are secured by screwing in Countersunk Screws DIN 965 M2.5x5.



Routing the guide around 90° using two RS Curved Guides 45°. If both Curved Guides are directly connected, a connecting link will need to be removed from one of the curved guides (by simply breaking it off).



Clips 8 are pushed onto the RS Guide Profile. Recommended: 5 clips per metre.



Assembly of the RS Guide.



The guide is fitted onto the supporting profile structure.



The RS Curved Guide or the Connecting Element can be screw-connected to the supporting profile using Button-Head Screws M4x12 if required.



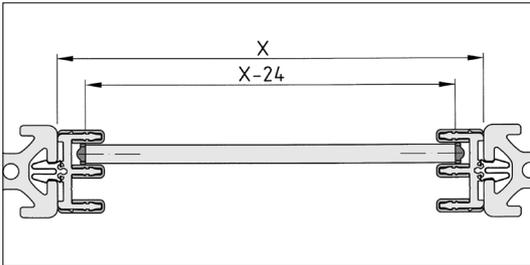
Mounting the RS Slide Strip over the entire length of the guide.



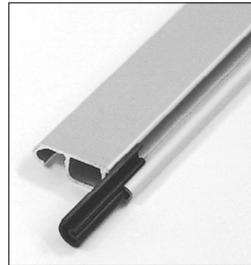
The longer leg of the Slide Strip must be cut away to enable it to be mounted on the central rib.



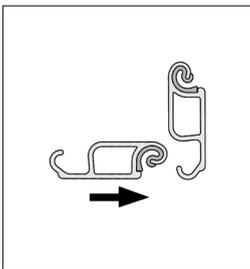
### Assembling the Aluminium Roller Shutter



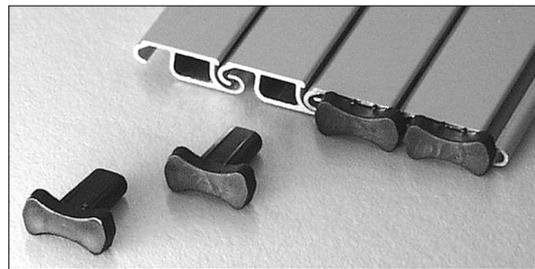
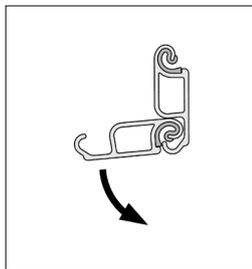
Determine the length of RS slats:  
 $L = X - 24 \text{ mm}$



The RS Slat Insulators are fitted into the slats (recommended spacing 200 mm).

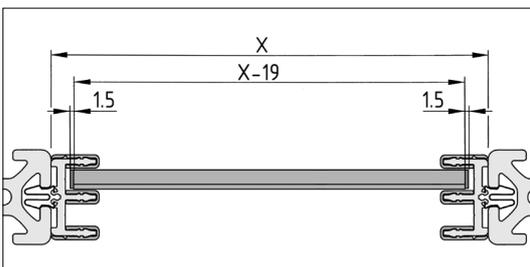


Assembly of slats.

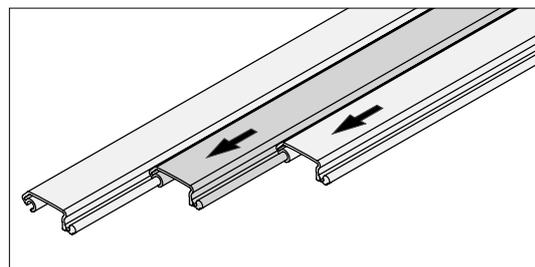


The Sliding Shoe is used to secure the slats to prevent them moving or working loose. They are fitted into the end face of the slats.

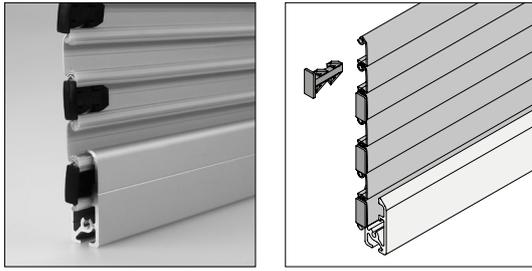
### Assembling the Plastic Roller Shutter



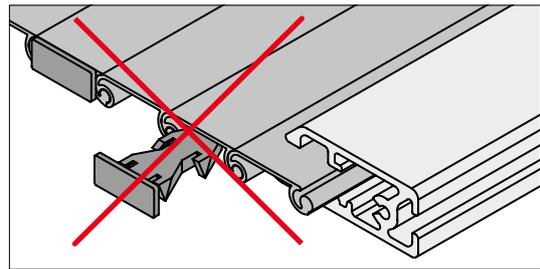
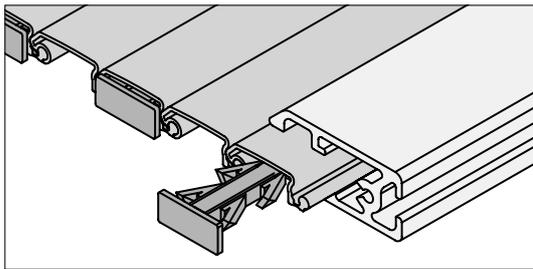
Determine the length of the RS slats:  
 $L = X - 19 \text{ mm}$



Assembly of slats by sliding in.

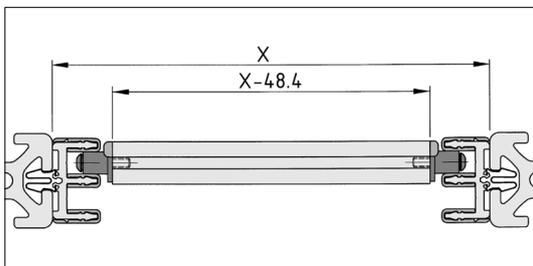


The Plastic Roller Shutter does require Slat Sliding Shoes K/Al. In each second RS slat, on both sides a Slat Sliding Shoe K/Al is mounted.

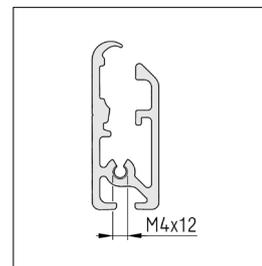


The asymmetric Slat Sliding Shoe K/Al must be inserted in specific position.  
 The first Slat Sliding Shoe K/Al is mounted in the first RS slat K/Al, clamped in the RS End Strip.  
 The even surface of the Slat Sliding Shoe points inwards.

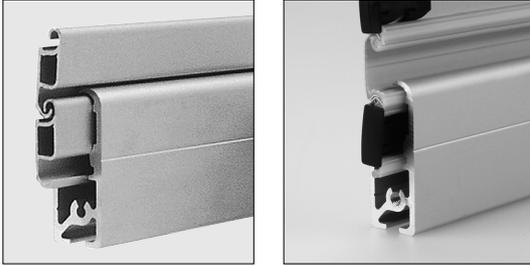
## Finishing the Roller Shutter



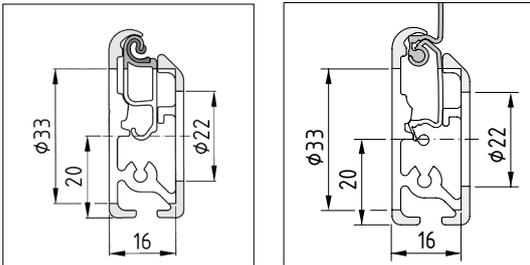
Finishing the Roller Shutter with the RS End Strip.  
 Determine the length of RS End Strip:  
 $L = X - 48.4 \text{ mm}$



M4x12 threads are tapped into the end face of the RS End Strip for securing the RS End Strip Guide Sets.



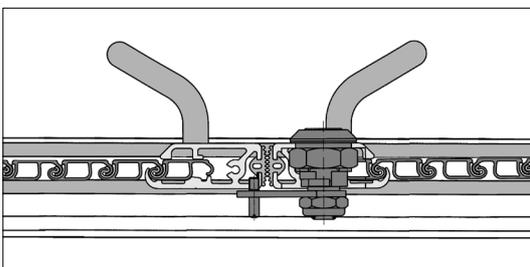
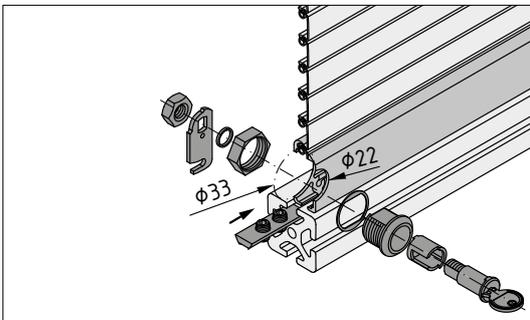
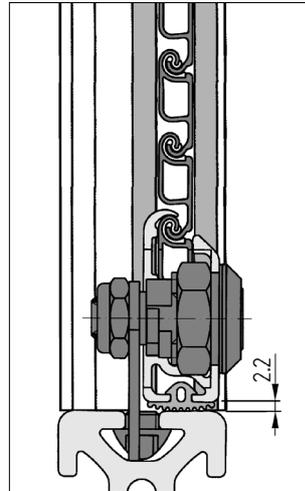
The marking groove on the rear of the RS End Strip shows the recommended position for the through holes when handles or grip systems need to be screw-connected.



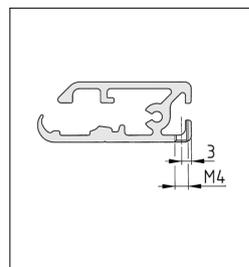
Holes are drilled in the RS End Strip and countersinks provided for holding the RS Locking System.

Notches must be provided at appropriate points in the first slat inserted into the RS End Strip.

The position of the RS Locking System is matched with the use of Cover Profile 5 16x3 (NBR) in the groove of the RS End Strip.



If two End Strips are to interlock (two Roller Shutters meeting), one of the End Strips must be fitted with the headless screw in order to engage the locking bar.



Drilling of a M4 threaded hole into the RS End Strip in order to hold the headless screw.



Fitting the Roller Shutter into the prepared guide.



Completing the frame structure and fitting a nab in the groove of the frame profile where required.

## Product development and documentation

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