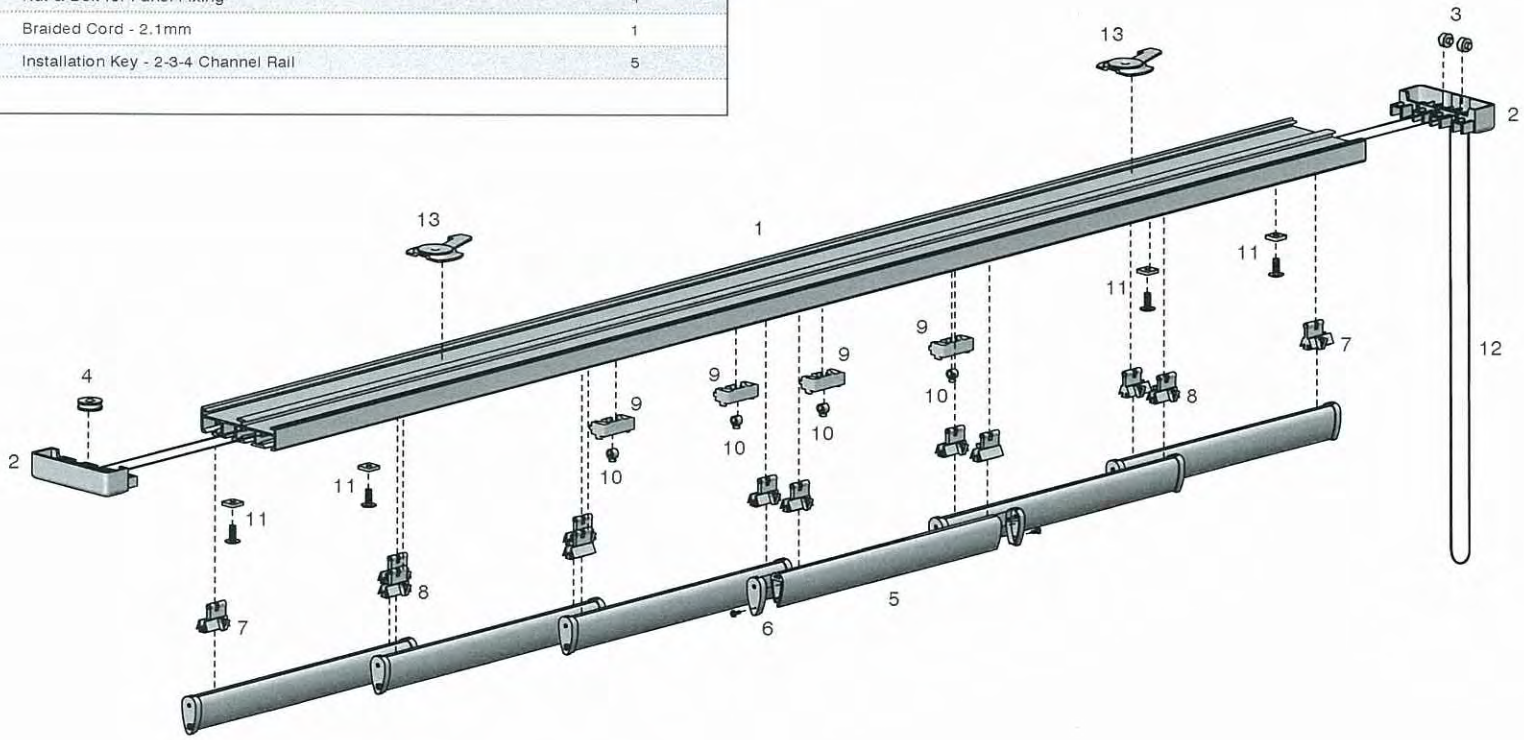
CU41 SCHEMATIC - CORD DRAWN - 4 CHANNEL - CENTRE OPENING

ITEM NO.	DESCRIPTION	QUANTITY
1	Aluminium Profile - 4 Channel	1
2	End Cap Operation	2
3	End Cap Operation - Small Cord Wheel - Control End	2
4	End Cap Operation - Large Cord Wheel - Idle End	1
5	Panel Baserail	6
6	Panel Baserail End Caps	12
7	Roller Car - One Side	10
8	Roller Car - Two Side	2
9	Towing Sledge	4
10	Locking Ring for Towing Sledge	4
11	Nut & Bolt for Panel Fixing	4
12	Braided Cord - 2.1mm	1
13	Installation Key - 2-3-4 Channel Rail	5

CU41 MANUFACTURING MANUAL - CONTENTS

SECTION	DESCRIPTION	PAGE NO.
PART A	CUTTING SPECIFICATIONS	2-3
PART B	ASSEMBLY	4-11
PART C	INSTALLATION	12
PART D	CENTRE OPENING - CONFIGURATIONS	13



© Acmeda 1990-2008 All Rights Reserved

Acmeda

INSTRUCTIONAL GUIDELINES

FOR INSTRUCTIONAL PURPOSES THE FOLLOWING OPTIONS HAVE BEEN SPECIFIED

- Aluminium Profile - 4 Channel
- Control Type - Cord Drawn
- Control Side - Right Hand
- Stacking Side - Right + Left Hand
- Operation Type - Centre Opening
- Blind Width - 2200mm
- Blind Drop - 2700mm
- Panel Overlap - 70mm **Note: Minimum Panel Size which can be Manufactured is 70mm**
- 2 Fixed Panels on either Side of Track

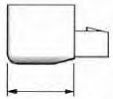
Note: It is recommended that panel widths fall between 500 - 800mm. This factor and also the surface area available for installation will dictate the Aluminium Rail and the number of panels chosen for each installation.

STEP 1 - CUTTING OF ALUMINIUM PROFILE

- Once the finished Blind Width has been established (2200mm) the Aluminium Profile may be cut

BLIND WIDTH - 2200mm

- Allowances for End Caps must be taken into account when cutting the Aluminium Profile



END CAP - 20mm

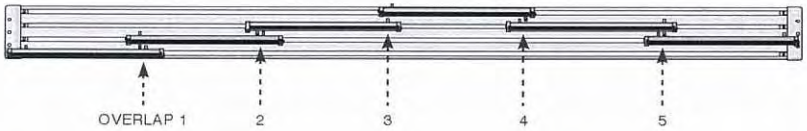
- Therefore the following applies:

Blind Width	2200mm
Subtract 2 End Caps	40mm
Equals Alum Profile Size	**2160mm**

ALUMINIUM PROFILE WIDTH - 2160mm

STEP 2 - ESTABLISHING PANEL WIDTH

- Taking into account the finished Blind Width (2200mm) & the specified Panel Overlaps (70mm) the Panel Baserail widths can be established with the following formula:
- Blind Width + Number of Panel Baserail Overlaps = Panel Baserail Widths
- In a 4 Channel Profile with 6 Panel Baserails there are 5 Overlaps as shown below

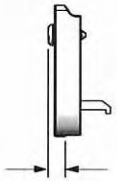


- Therefore the following applies:

Blind Width	2200mm
Add No. of overlaps (5 x 70mm)	350mm
Divided by No. of Panels	6
Equals Panel Width	**425mm**

STEP 3 - CUTTING OF PANEL BASERAIL

- Before the Panel Baserails are cut to size, deductions must be taken into account for the Baserail End Caps. They are as follows:



End Cap & Screw - 4mm
2 End Caps per Panel - 8mm

- Therefore the following applies:

Panel Width	425mm
Subtract 2 Caps & 2 Screws	8mm
Equals Baserail Size	**417mm**

BASERAIL WIDTH - 417mm

Note: The Panel Baserails may also be used as the Bottomrail therefore for this example twice the amount of Baserails are required.

© Acmeda 1990-2008 All Rights Reserved

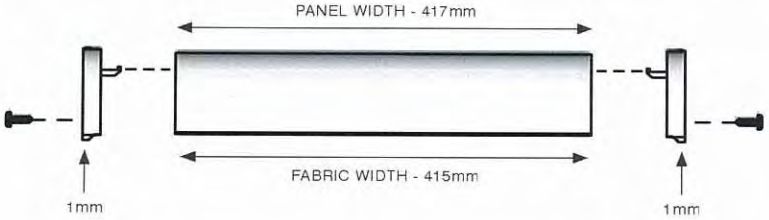
Acmeda

STEP 4 - CUTTING OF FABRIC

- Once all Panel Baserails have been cut to size the Fabric may be prepared for each of the Panels.

FABRIC WIDTH

- The fabric width will be determined by the Panel Baserail width which has already been established in Step 3 of the Cutting Specifications.
- In this example a Panel Baserail width of 417mm was specified. A further 2mm must be deducted from this Baserail width so as to arrive at your fabric width. This 2mm deduction is due to each End Cap on the Baserail intruding either end of the Rail by 1mm.



STEP 4 (CONT) - CUTTING OF FABRIC

FABRIC DROP

When calculating the fabric drop 3 factors must be taken account.

- Firstly the allowance for the Aluminium Profile & Installation Keys:

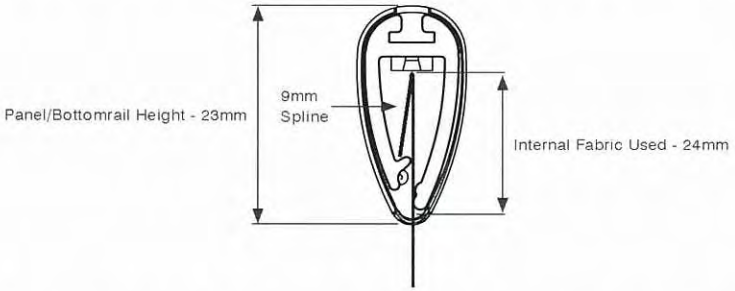
Recess Fit Installations - 24mm **Face Fit Installations - 26mm**

ALLOWANCE FOR ASSEMBLED PROFILE - 24mm / 27mm

Note: Measurement is taken from the top of the Installation Key to the top of the Panel Baserail.

- Secondly the allowance for the Panel Baserail & Bottomrail and also the allowance for the fabric which is attached to the spline inside the Panel Baserail & Bottomrail

Note: The Panel Baserail & Bottomrail uses a 9mm Flat Spline when inserting the fabric into both rails. For this example we are using the Panel Baserail as the Bottomrail also.



- Finally the allowance made for the bottom of the blind to the floor which can vary from anywhere between 5-15mm. **For this example we will deduct 10mm.**

Therefore: **Fabric Drop =**

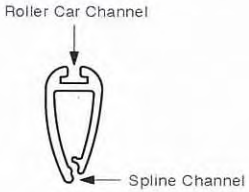
Blind Drop	2700mm
Subtract Profile Allowance	24mm
Subtract Panel Height	23mm
Subtract Bottomrail Height	23mm
Subtract Floor Allowance	10mm
Add Panel Internal Fabric	24mm
Add Bottomrail Internal Fabric	24mm
Equals FABRIC DROP	**2668mm**

© Acmeda 1990-2008 All Rights Reserved

STEP 1 - PANEL BASERAIL ASSEMBLY

- The first step in assembling the Panel Baserails is to drill the insert holes on each end of the Baserail so the Baserail End Caps prongs may lock in.

- Have the Roller Car Channel of the Panel Baserail facing upwards & fixed in either a vice or holding block so the drill holes can be made.



- Using a 3.0mm drill bit, drill a hole 8mm (to centre) in from each end of the Panel Baserail.

- Once all the Baserails are complete with drill holes do not fix the Panel Baserail End Caps on them as the Roller Cars need to be installed on the extrusion first.

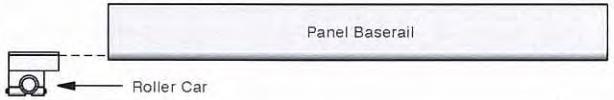
STEP 2 - PANEL BASERAIL ASSEMBLY

- Once all drill holes have been prepared on the Panel Baserails placement of the Roller Cars may commence.
- There are two types of Roller Cars, One Side & Two Side versions as shown below:

Rolling Car - One Side

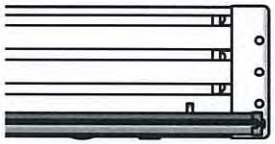
Rolling Car - Two Side

- The Roller Cars are installed on the Panel Baserail extrusion by sliding them through the Roller Car Channel as shown below:

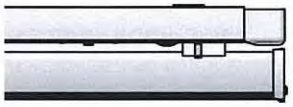


NOTE: As this is a Centre Opening the front and back Panels which stack to either side of the track will use One Sided Roller Cars. The middle Panel on each side of the track use both a One Sided & Two Sided Roller Car.

- The first Baserail to install the Roller Cars on will be on the one which acts as the fixed Panel on the Control side of the Aluminium Profile.
- The Fixed Panel when eventually installed in the Channel must finish flush with the Aluminium Profile End Cap as shown below:



Bottom View

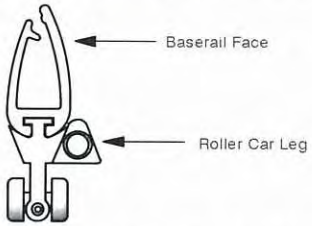


Front View

© Acmeda 1990-2008 All Rights Reserved

STEP 2 (CONT) - PANEL BASERAIL ASSEMBLY

- As stated previously only One Sided Roller Cars are installed on the fixed panels. Therefore ensure the Roller Car leg is on the face side of the Baserail which will face the front of the blind.

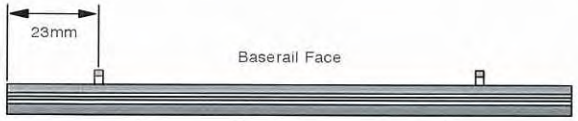


NOTE: As this is a Centre Opening Track we will begin with the Panels which are installed on the Control side of the Aluminium Profile being the Right Hand Side.

PANEL 1 - RH Side of Aluminium Profile

- The first Panel to assemble will be the fixed panel. Slide the Roller Car 36mm in from the Right Hand End of the Baserail extrusion using the centre of the Roller Car leg as your marking point. Then fix the Roller Car into position with a phillips head screwdriver. It is set at 36mm so that the Roller Car does not interfere with the End Cap, whilst still ensuring the panel finishes flush on the end.

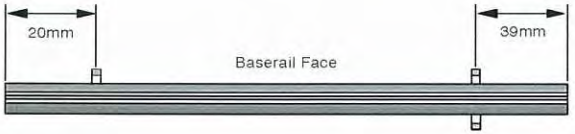
- For this example as we are using an 70mm Panel overlap the Second One Sided Roller Car is required to be fixed 23mm in from the opposite end on the Panel Baserail as this will create the desired overlap.



STEP 2 (CONT) - PANEL BASERAIL ASSEMBLY

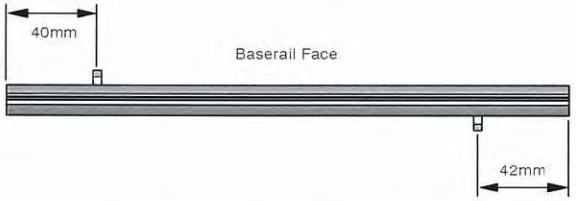
PANEL 2 - RH Side of Aluminium Profile

- The second Panel will use a One Sided Roller Car and a Two Sided one. First fix the Two Sided Roller Car into position 39mm in from the Right Hand end of the Baserail. Then on the opposite side fix the One Sided Roller Car 26mm in.



PANEL 3 - RH Side

- The leading panel (front panel) will only use One Sided Roller Cars. The first Roller Car is to be fixed 42mm in from the Right Hand end of the Baserail. The leg must be facing the back face of the Panel Baserail. Then on the opposite side fix the other One Sided Roller Car 40mm from the end. This leg must be facing the front face of the Panel Baserail so it does not interfere with the other Roller Car legs. This leg can either be cut off or used to hook a wand on when a Wand Control is being manufactured.



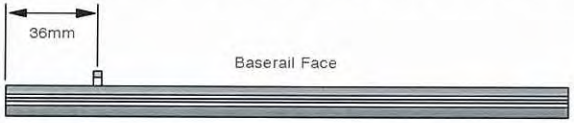
Once the Right Hand Side Panels are complete, begin installing the Roller Cars onto the Panels which will stack on the Left Hand side of the Aluminium Rail.

© Acmeda 1990-2008 All Rights Reserved

STEP 2 (CONT) - PANEL BASERAIL ASSEMBLY

PANEL 1 - LH Side of Aluminium Profile

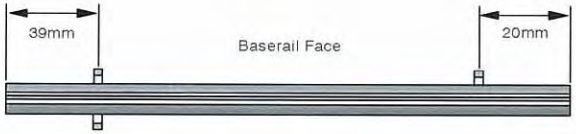
- Once again starting with the fixed panel slide the Roller Car 36mm in from the Left Hand End of the Baserail extrusion using the centre of the Roller Car leg as your marking point.



- For this example as we are using an 70mm Panel overlap the Second One Sided Roller Car is required to be fixed 23mm in from the opposite end on the Panel Baserail as this will create the desired overlap.

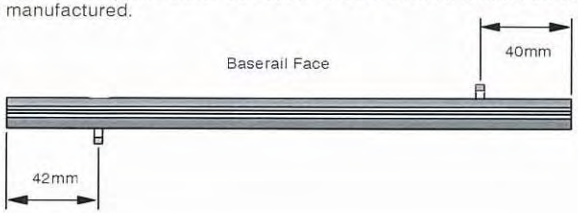
PANEL 2 - LH Side of Aluminium Profile

- The second Panel will use a One Sided Roller Car and a Two Sided one. First fix the Two Sided Roller Car into position 39mm in from the Left Hand end of the Baserail. Then on the opposite side fix the One Sided Roller Car 20mm in.



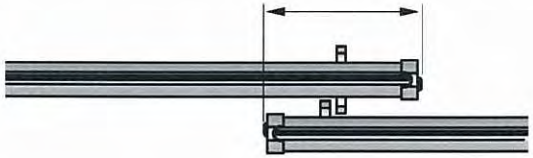
PANEL 3 - LH Side of Aluminium Profile

- The leading panel (front panel) will only use One Sided Roller Cars. The first Roller Car is to be fixed 42mm in from the Left Hand end of the Baserail. The leg must be facing the back face of the Panel Baserail. Then on the opposite side fix the other One Sided Roller Car 40mm from the end. This leg must be facing the front face of the Panel Baserail so it does not interfere with the other Roller Car legs. This leg can either be cut off or used to hook a wand on when a Wand Control is being manufactured.

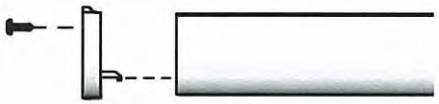


STEP 2 (CONT) - PANEL BASERAIL ASSEMBLY

Note: The Panel Overlap is taken from End Cap Screw to End Cap Screw as detailed below.



- Once all the Panel Baserails have the Roller Cars fixed into position the End Caps may be installed. Please note there are both LH and RH caps which are determined by the position of the fixing screw hole. Ensure that the End Cap prong engages the drill hole.



NOTE: It is recommended to align Panel Baserails into extrusion to ensure all overlaps have been accurately measured before proceeding to the next step.

© Acmeda 1990-2008 All Rights Reserved

ROLLER CAR INSTALLATION - 70mm Overlap

4 CHANNEL / 6 PANEL CENTRE OPENING - LH + RH STACK	PANEL 1 - RH SIDE OF PROFILE	PANEL 2 - RH SIDE OF PROFILE	PANEL 3 - RH SIDE OF PROFILE	PANEL 1 - LH SIDE OF PROFILE	PANEL 2 - LH SIDE OF PROFILE	PANEL 3 - LH SIDE OF PROFILE		
LH SIDE OF PANEL	23	20	40	36	39	42		
RH SIDE OF PANEL	36	39	42	23	20	40		
5 CHANNEL / 8 PANEL CENTRE OPENING - LH + RH STACK	**PANEL 1 - RH SIDE OF PROFILE**	**PANEL 2 - RH SIDE OF PROFILE**	**PANEL 3 - RH SIDE OF PROFILE**	**PANEL 4 - RH SIDE OF PROFILE**	**PANEL 1 - LH SIDE OF PROFILE**	**PANEL 2 - LH SIDE OF PROFILE**	**PANEL 3 - LH SIDE OF PROFILE**	**PANEL 4 - LH SIDE OF PROFILE**
LH SIDE OF PANEL	23	20	17	40	36	39	42	45
RH SIDE OF PANEL	36	39	42	45	23	20	17	40

ROLLER CAR INSTALLATION - 80mm Overlap

4 CHANNEL / 6 PANEL CENTRE OPENING - LH + RH STACK	PANEL 1 - RH SIDE OF PROFILE	PANEL 2 - RH SIDE OF PROFILE	PANEL 3 - RH SIDE OF PROFILE	PANEL 1 - LH SIDE OF PROFILE	PANEL 2 - LH SIDE OF PROFILE	PANEL 3 - LH SIDE OF PROFILE		
LH SIDE OF PANEL	33	30	40	36	39	42		
RH SIDE OF PANEL	36	39	42	33	30	40		
5 CHANNEL / 8 PANEL CENTRE OPENING - LH + RH STACK	**PANEL 1 - RH SIDE OF PROFILE**	**PANEL 2 - RH SIDE OF PROFILE**	**PANEL 3 - RH SIDE OF PROFILE**	**PANEL 4 - RH SIDE OF PROFILE**	**PANEL 1 - LH SIDE OF PROFILE**	**PANEL 2 - LH SIDE OF PROFILE**	**PANEL 3 - LH SIDE OF PROFILE**	**PANEL 4 - LH SIDE OF PROFILE**
LH SIDE OF PANEL	33	30	27	40	36	39	42	45
RH SIDE OF PANEL	36	39	42	45	33	30	27	40

ROLLER CAR INSTALLATION - 90mm Overlap

4 CHANNEL / 6 PANEL CENTRE OPENING - LH + RH STACK	PANEL 1 - RH SIDE OF PROFILE	PANEL 2 - RH SIDE OF PROFILE	PANEL 3 - RH SIDE OF PROFILE	PANEL 1 - LH SIDE OF PROFILE	PANEL 2 - LH SIDE OF PROFILE	PANEL 3 - LH SIDE OF PROFILE		
LH SIDE OF PANEL	43	40	40	36	39	42		
RH SIDE OF PANEL	36	39	42	33	30	40		
5 CHANNEL / 8 PANEL CENTRE OPENING - LH + RH STACK	**PANEL 1 - RH SIDE OF PROFILE**	**PANEL 2 - RH SIDE OF PROFILE**	**PANEL 3 - RH SIDE OF PROFILE**	**PANEL 4 - RH SIDE OF PROFILE**	**PANEL 1 - LH SIDE OF PROFILE**	**PANEL 2 - LH SIDE OF PROFILE**	**PANEL 3 - LH SIDE OF PROFILE**	**PANEL 4 - LH SIDE OF PROFILE**
LH SIDE OF PANEL	43	40	37	40	36	39	42	45
RH SIDE OF PANEL	36	39	42	45	43	40	37	40

© Acmeda 1990-2008 All Rights Reserved

STEP 3 - END CAP OPERATION ASSEMBLY

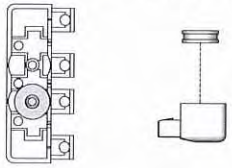
- The next stage of assembly is to prepare the Aluminium Profile End Caps. Each End Cap is fixed with either Small or Large Cord Loop Wheels as shown below

Large Cord Loop Wheel

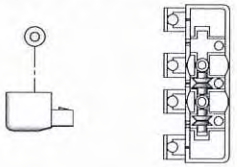
Small Cord Loop Wheel

- The End Cap which will act as the control side will always use 2 Small Cord Loop Wheels. The End Cap on the Opposite side the Idle End Side will use always use 1 Large Cord Loop Wheel. For this example due to the leading Panels being at the front of the Blind both Small & Large wheels need to be installed in the front sections of each End Cap as Shown below.

Idle End Side - Large Cord Wheel



Control Side - Small Cord Wheels



STEP 4 - CONTROL CORD ASSEMBLY

- It is recommended that a 2.1mm Cord with a core is used on this system.

- To determine the length of the cord required the following formula is used.

Cord Length = 2 x Blind Width + 2 x Control Height

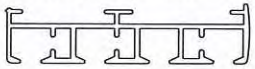
STEP 4 (CONT) - CONTROL CORD ASSEMBLY

- Once the Control Cord is cut to size the next step is to feed the cord through the appropriate channels on the Aluminium Profile keeping in mind that this is a Right Hand Control & Centre Opening Blind.

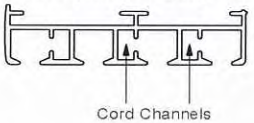
- For this example the leading Panels from the Right Hand & Left Hand sides will be at the front of the Blind and in the front 2 Channels. Therefore the front two Channels are where the cord must be fed through.

- This configuration will mean that the Aluminium Profile will have to be turned around so that the front face of the Aluminium Profile will now be at the back as detailed below.

Standard Configuration



Centre Opening - Leading Panels at the front

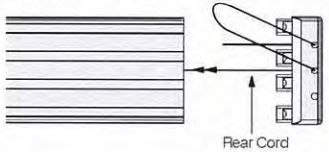


- **IMPORTANT NOTE: The reason for changing the track around is that the front two channels must be used for feeding the cord through and only when the track is reversed can this be achieved as shown above.**

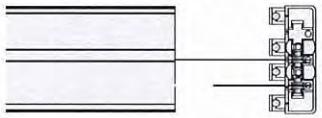
STEP 4 (CONT) - CONTROL CORD ASSEMBLY

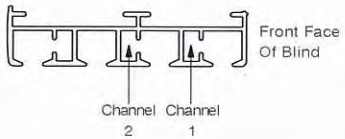
- Before passing the Cord through the Channels on the Aluminium Profile ensure the cord is fed through the front hole on the Control Side End Cap and back through whilst passing each small cord wheel in the process. This loop pertruding out of the End Cap will now now form the Control Cord. Then pass the end of the rear cord through Channel 2 on the Aluminium Profile to the opposite side. Do not feed the front Cord into Channel 1 of the Aluminium Profile as yet.

BOTTOM VIEW - CONTROL SIDE



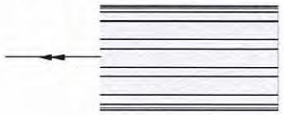
TOP VIEW - CONTROL SIDE





- At the opposite end of the Aluminium Profile, the other end of the Cord should be sitting outside the Profile.

BOTTOM VIEW - IDLE END SIDE

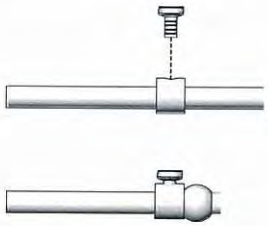


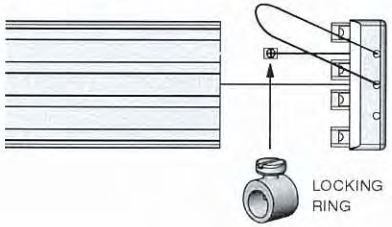
© Acmeda 1990-2008 All Rights Reserved

Acmeda

STEP 5 - TOWING SLEDGE ASSEMBLY

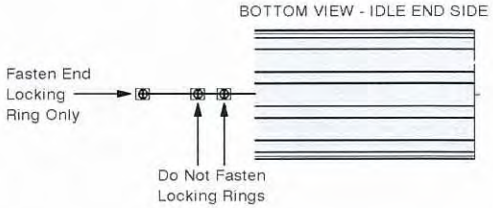
- With the cord now located in the channel of the Aluminium Rail, assembly of the cord into the Towing Sledges may commence.
- Firstly at the end of the cord on the Control Side attach the Towing Sledge Locking Ring by passing the cord through the ring as shown. Then tie a single knot at the end of the cord and fasten the Locking Ring with the screw provided to ensure the cord cannot slip through the Ring.



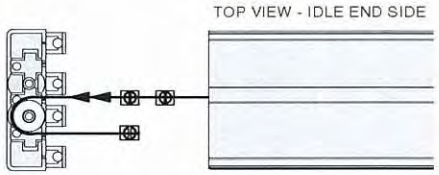


STEP 5 (CONT) - TOWING SLEDGE ASSEMBLY

- Now at the opposite end of the Aluminium Rail pass 3 Locking Rings through the end of the cord which exits Channel 2 with ONLY the End Locking Ring being fastened into place.

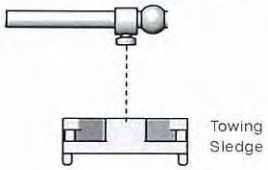


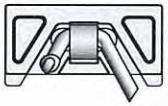
- The end of the cord with the fastened Locking Ring can now be looped over the Large Cord Wheel in the Idle End Cap.

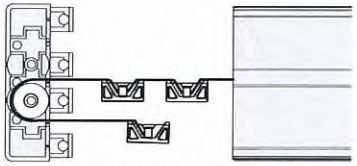


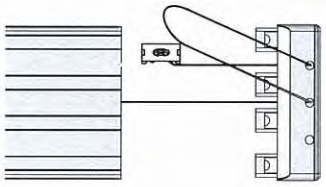
STEP 5 (CONT) - TOWING SLEDGE ASSEMBLY

- Once all the Locking Rings are in place the Towing Sledges may be added.
- Ensure that when the Cord & Locking Ring is placed into the Towing Sledge that the screw head is facing the correct way so it will not interfere with the operation along the Channel of the Aluminium Rail.





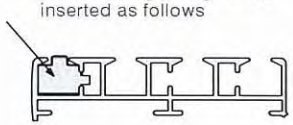


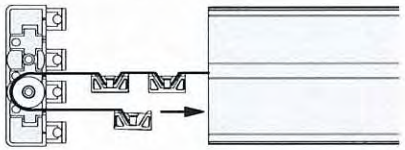


STEP 5 (CONT) - TOWING SLEDGE ASSEMBLY

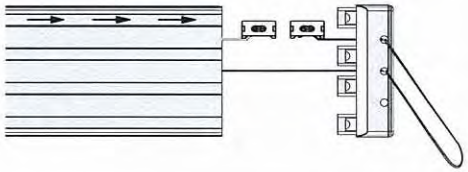
- Once the Towing Sledges have been attached to the Locking Rings the next step is to place the Towing Sledges into their correct positions so they may be fed into the Aluminium Rail at the same time as the Panel Baserails.
- The Fixed Towing Sledge on the Idle End Side must be passed through Channel 1 of the Aluminium Rail all the way through so that it exits the Rail on the Control Side

Note: Towing Sledge to be inserted as follows





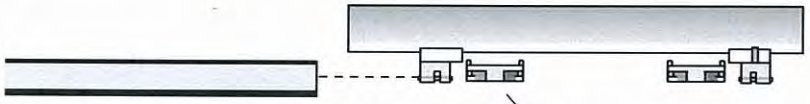
- Once the Towing Sledge has been passed through to the opposite end of the Aluminium Rail the Track is now ready for the Panel Baserails to be inserted.



© Acmeda 1990-2008 All Rights Reserved

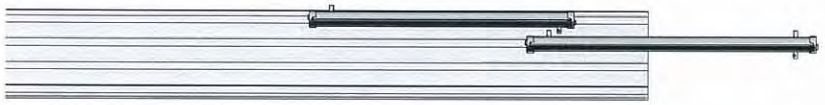
STEP 6 - ALUMINIUM PROFILE ASSEMBLY

- The Aluminium Profile is now ready for the Panel Baserails to be inserted into the channels.
- The 2 leading Panels on the Control Side & Idle End Sides will each have 2 Towing Sledges placed in between the 2 Roller Cars on each panel.
- Beginning on the Control Side feed the Leading Panel through Channel 1 of the Aluminium Profile. When Sliding this Panel through ensure the the 2 Towing Sledges are placed between the Roller Cars and fed through at the same time.



- The Towing Sledge must be inserted into the Aluminium Profile as follows:

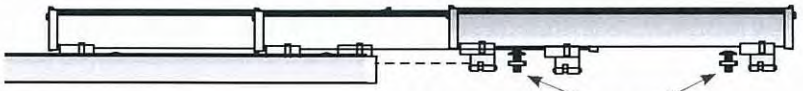
- When sliding in the first Panel only engage the first Roller Car and both Towing Sledges. Before the Second Roller Car on the first Panel is inserted into the rail engage the second Panel as shown below:



- For the third and final Panel on the Control Side continue the above process. Before the second Roller Car on the Second Panel is inserted into the Aluminium Profile engage the third Panel as shown below.

STEP 6 (CONT) - ALUMINIUM PROFILE ASSEMBLY

- When sliding through the third Panel on the Control Side ensure that you also slide through the Nuts & Bolts at the same time. These 2 sets of Nuts & Bolts are installed on the inside of each Roller Car, and when fastened will fix the third Panel into place.

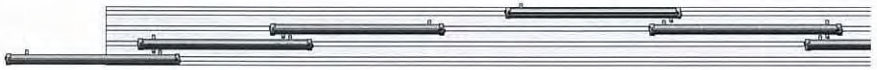


- The Nut & Bolt must be inserted in the Channel with the Nut Head facing the outside of the Aluminium Profile.

- Once all 3 Panels are engaged in the Control Side of the Aluminium Profile you may commence with sliding all the Panels for the Idle End Side.
- Begin sliding the Leading Panel on the Idle End Side into Channel 2 of the Aluminium Profile. When Sliding this Panel through ensure the the 2 Towing Sledges are placed between the Roller Cars and fed through at the same time as was completed with the Leading Panel on the Control Side of the Rail.

- Before the Second Roller Car on the first Panel is inserted into the profile engage the second Panel as shown below:

- For the third and final Panel on the Idle End Side continue with the above process. Before the second Roller Car on the Second Panel is inserted into the Aluminium Profile engage the third Panel as shown below.



- The third panel will also require 2 sets of Nuts & Bolts so when sliding through the third Panel on the Idle End Side ensure that you also slide through the Nuts & Bolts in the same manner completed previously on the Control Side.

© Acmeda 1990-2008 All Rights Reserved

STEP 6 (CONT) - ALUMINIUM PROFILE ASSEMBLY

- Once all the Panel Baserails are located in the Aluminium Profile the End Caps may be fixed in.

- With the Panel Baserails & End Caps engaged in the Aluminium Profile the Fixing Nuts & Bolts can be tightened in place. When doing this ensure that both Panel Baserails finish flush with the End Caps.

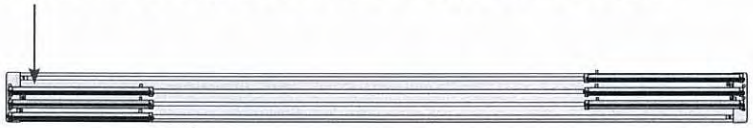
NOTE: It is recommended that a Flat Head Screwdriver with a 3mm Wide Head is used to tighten the Nuts & Bolts. This should be done from the back face of the Panel Baserail so that any scratches caused when tightening are not visible.

STEP 6 (CONT) - ALUMINIUM PROFILE ASSEMBLY

- The final step in assembly is to fix the 2 Towing Sledges which have not as yet been fastened, these being the ones located in the Leading Panel on the Idle End Side.

  NOTE: The 2 Towing Sledges in the Leading Panel on the Control Side were previously fastened during assembly (See Step 5 - Towing Sledge Assembly)

- First pull the cord on the Control Side so as to draw the Panels to both sides. Then Fasten only the Towing Sledge on the far Left in the Panel baserail using a Flat Head Screwdriver

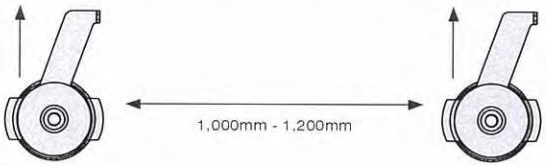


- Then pull the cord so as to bring the Panels to the Closed position as shown. The last Towing Sledge is now ready to be fastened.

© Acmeda 1990-2008 All Rights Reserved

STEP 1 - FIXING INSTALLATION KEYS

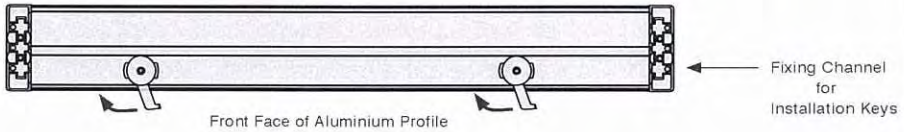
- Once the type of installation has been established being either Face or Recess Fix, the Installation Clips may be installed onto the wall or ceiling.
- **Please note it is recommended that every 1000mmm to 1,200mm an installation clip is required.**
- For this example we have used a Recess Fix application and 2-3-4 Channel Installation Keys



- As detailed above ensure that the arms of each Installation Keys are facing the same direction and towards the back of the Assembled Track.

STEP 2 - INSTALLING TRACK

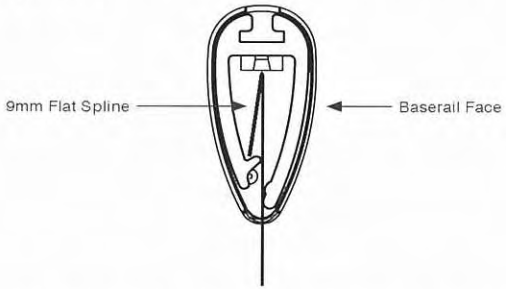
- Once the Installation Clips are positioned correctly the Assembled Track may be installed.
- The Installation Keys must be engaged in the Fixing Channel section of the Aluminium Profile which is located on the back section of the Rail.



- Once located in the Fixing Channel rotate each of the Installation Keys in the direction detailed above until each arm locks against the lip of the Aluminium Profile shown below.

STEP 3 - INSERTING FABRIC INTO PANEL

- With the track now installed into position the final assembly of the fabric may be completed.
- First remove one end cap from each of the Panel Baserails.
- Insert the faric as detailed below using a 9mm Flat Spline attached to the Fabric and slide along Panel Baserail into position.



- Once the Fabric has been inserted into position replace the end cap and fasten the end cap screw.

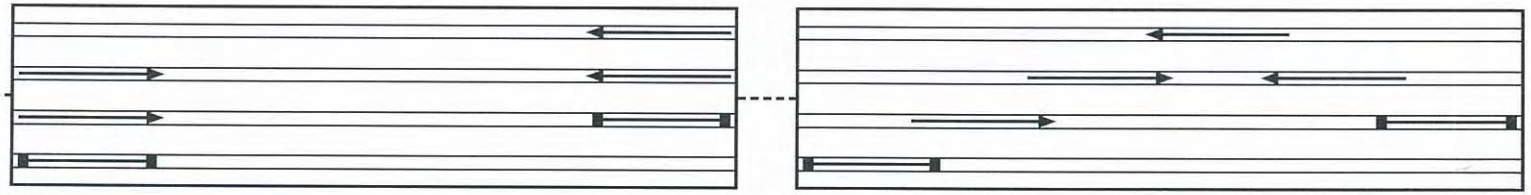
© Acmeda 1990-2008 All Rights Reserved

CENTRE OPENING - CONFIGURATIONS

NOTE: Depending on the number of channels, each Aluminium Profile will have a different configuration as to where the Cord and Towing Sledges can be located. Due to this when manufacturing Center Opening Tracks only the 4 Channel & 5 Channel Aluminium Profiles are configured so as to achieve this. Below we have listed the only 4 Options available for Centre Opening Tracks.

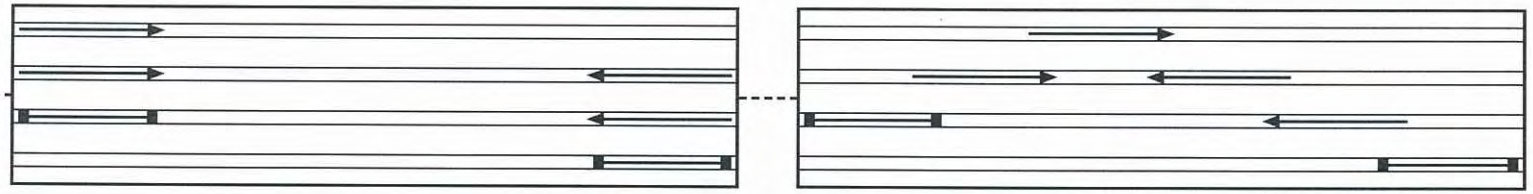
OPTION 1:

- 4 CHANNEL
- 6 PANELS - 2 FIXED
- CENTRE OPENING
- LH OR RH HAND CONTROL



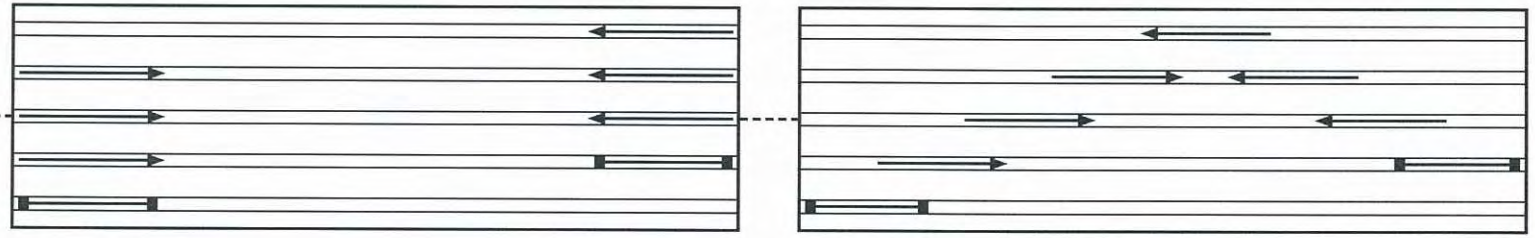
OPTION 2:

- 4 CHANNEL
- 6 PANELS - 2 FIXED
- CENTRE OPENING
- LH OR RH HAND CONTROL



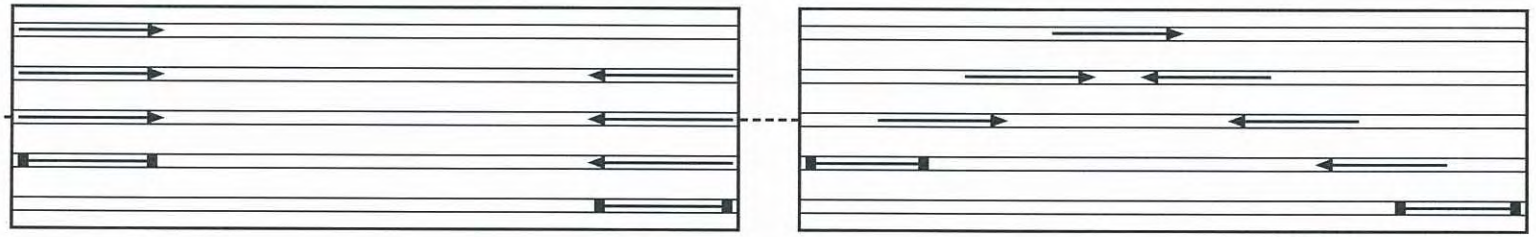
OPTION 3:

- 5 CHANNEL
- 8 PANELS - 2 FIXED
- CENTRE OPENING
- CONTROL - LH or RH



OPTION 4:

- 5 CHANNEL
- 8 PANELS - 2 FIXED
- CENTRE OPENING
- CONTROL - LH or RH



KEY:	
	Fixed Panel
	Moving Panel

© Acmeda 1990-2008 All Rights Reserved