Construction
Automotive
Industry

REHAU®
Unlimited Polymer Solutions

TAMBOUR DOOR SYSTEMS

TRAINING MANUAL AND ASSEMBLY INSTRUCTIONS

DISTRIBUTED BY: Richelieu The Specialist in furniture, woodworking and kitchen cabinet hardware!

SITE: WWW.RICHELIEU.COM

Feb. 2010

APPLICATION PICTURES:

APPLICATION PICTURES (CONTINUED)

APPLICATION PICTURES (CONTINUED)

APPLICATION PICTURES (CONTINUED):

APPLICATION PICTURES (CONTINUED):

OTHER APPLICATION IDEAS:

- STORE FIXTURES
- SERVICE CENTERS
- WALK-IN CLOSETS
- VESTIBULES
- GARAGE
- BATHROOMS
- BEDROOM FURNITURE

TABLE OF CONTENTS page (s)

Application Pictures 2

Advantages of Including Tambour Doors into your Design 8

Understanding the System 9

System Components 10

Application Possibilities 14

REHAU Tambour Door Fabrication Instructions (Book A) 15

REHAU C3 Counter Balance Assembly Instructions (Book B) 21

REHAU C6 Counter Balance Assembly Instructions (Book C) 29

REHAU Caddy Break Assembly Instructions (Book D) 33

REHAU C3 Extensions Assembly Instructions (Book E) 34

REHAU Flexible Track Assembly Instructions (Book F) 35

REHAU Metallic Line Tambour Kits Assembly Instructions (Book G) 38

ADVANTAGES OF INCLUDING TAMBOUR DOORS IN YOUR DESIGN

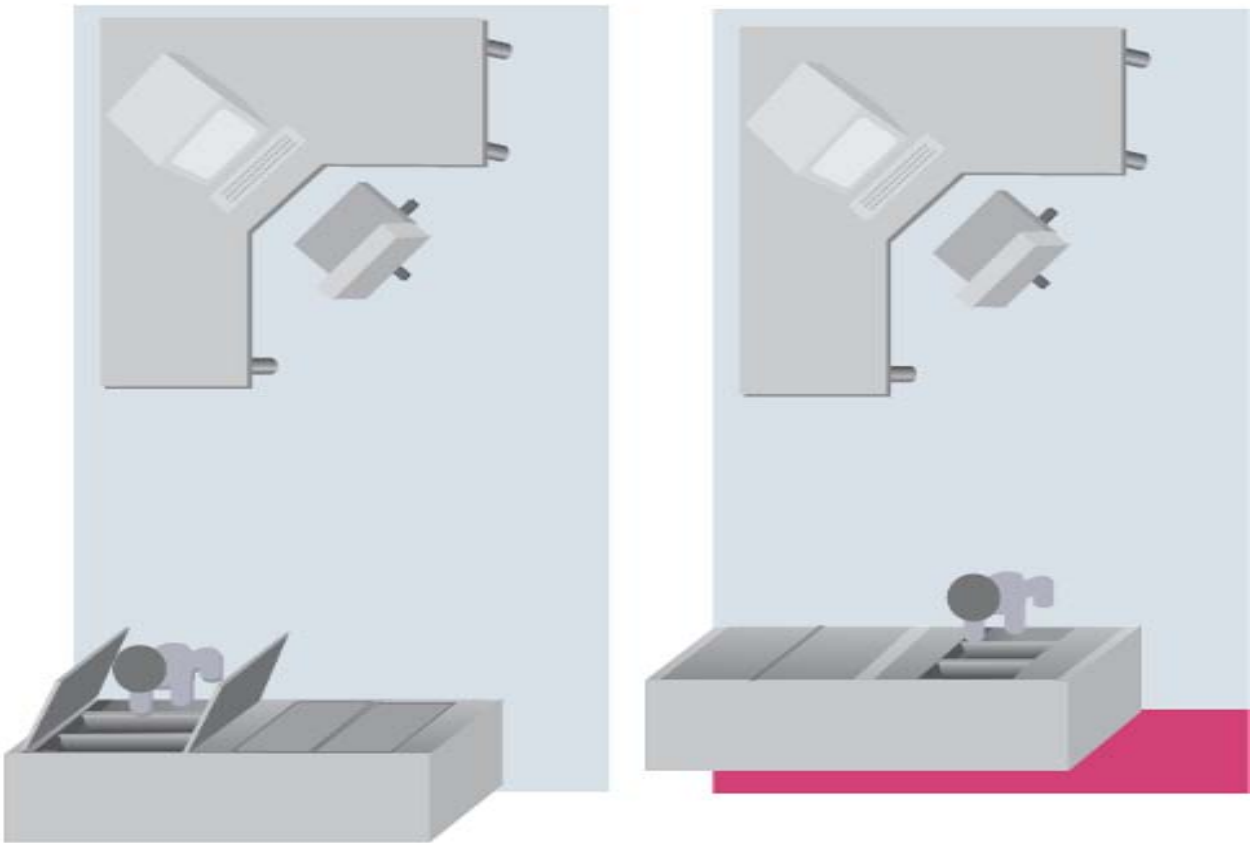
- Better use of space
  - Room is gained according to DIN 4543 (see fig. 1)
  - Useable space is gained by not requiring the additional room to open swinging doors
  - Gives full access to cabinet contents

- Polymer Material – with or without metal finish
  - Does not swell nor stick with humidity
  - High quality finish
  - Maximum functionality with a smooth and quiet operation due to REHAU patented hinge technology

- Aesthetic Properties
  - Adds a contemporary design element
  - Matches stainless steel and aluminum finishes

- Versatile
  - Maximum design flexibility - unlimited application possibilities
  - Suitable for new and retrofit applications

Fig 1. Room Gain DIN 4543

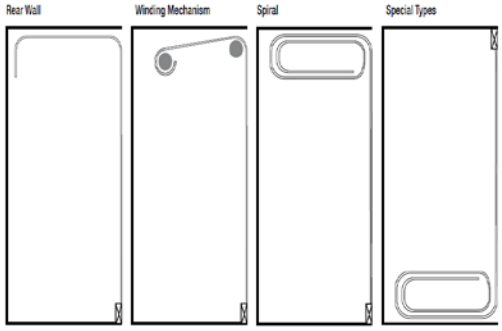


UNDERSTANDING THE SYSTEM

The REHAU tambour door system permits for endless design possibilities. These applications can be either for vertical opening doors as well as horizontal opening doors.

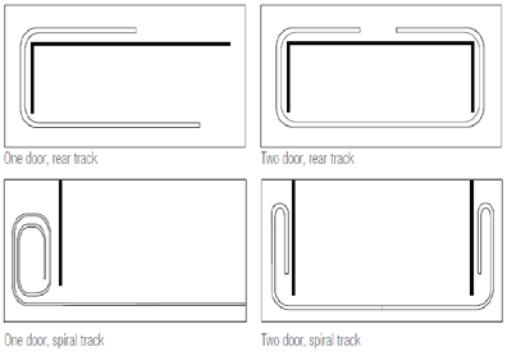
VERTICAL APPLICATION

The cabinet will open from the bottom to the top or from top to bottom. The carpet will be collected at the top / bottom / back of the cabinet or with the use of winding system or spiral track.



HORIZONTAL APPLICATION

The cabinet will have 1 or 2 doors and will open from left to right or right to left. The carpet will be collected in the back or side or the cabinet or a spiral track will be used to collect the carpet at 1 or both sides of the cabinet.



Carpet Design Ranges (sample chains available):

- Metallic Line (Aluminum, Stainless Steel)
- Creative Line (Translucent White)
- Printed Line (PVC Aluminum Finish)
- Solid Line (Gray, White and Black)

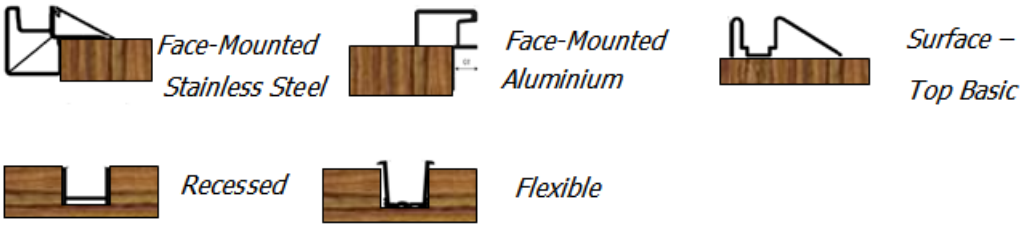
System Components

In order to be able to obtain the proper application for a given design it will be important to understand the system components and how these must be used for a given application.

The system includes the following components:

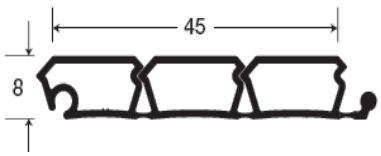
1. Tracks
2. Carpet Slats
3. Opening and Closing mechanisms
4. Handle Profiles and Gliders
5. Cover Profiles
6. Accessories

1. The Tracks:

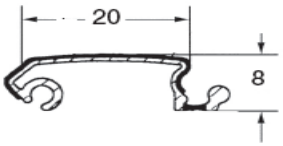


2. The Carpet Slats:

PVC slat (45 mm width, 2.5 meters long)

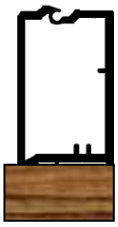


Metallic Line (20 mm width, 2.5 meters long)

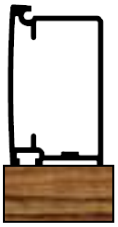


3. Opening and Closing Mechanisms (Vertical Applications Only):

4. Handle Profiles:



Locking Handle
PVC



Locking Handle
Metallic

Non- Locking
Handle Metallic

5. Cover Profiles:

PVC

L- Shape Metallic

Face - Mounted

6. Accessories:

Locks

Stoppers

Tape

Seal

Center Stops for
Horizontal applications

Handles

Midgrip (Metallic)

Midgrip (PVC)

End Caps Face-
Mounted track

Handle Glider
(Locking PVC)

Gliders
(Non-Locking PVC)

Carpet Slat Gliders
for Horizontal Applications

HOW TO USE THE SYSTEM:

1. Determine if the best application will be a vertical door opening or a horizontal opening. The factors influencing this decision are numerous however it is important that the application which is chosen results in a product of optimal DESIGN, FUNCTIONALITY and QUALITY. These factors include: direction of the carpet lines for the desired room design, best use of cabinet space, best use of working area in a room, easy and smooth opening of the door, best solution for interior shelving, project budget.

2. Determine which type of track will be used, will it be the recessed track, the surface track or the face-mounted track. Each project presents different elements which need to be considered when determining the type of track that will be used. If you are looking to apply these tambour doors to an existing piece of furniture it may be easiest to use the surface mounted track. For furniture which is in its conception stage the recessed track may be the best solution. For a complete framed finished look the face-mounted track is required.

3. Choose the mechanism which will be used to open and close the door as well as collect the carpet. Vertical opening doors will require either a C3 Counterbalance mechanism, the C6 Counterbalance - slowing elastic system, a vertical break or a spiral track. Each of these will be reviewed in detail in the next few pages.

APPLICATION POSSIBILITIES (See Assembly Instructions Booklet A - G):

1. VERTICAL – C3 Counter balance mechanism with face mounted track (framed finish look) - Assembly Instructions Book A

2. VERTICAL – C6 Counter balance - slowing elastic system with recessed track – Assembly Instructions Book B

3. VERTICAL – C6 Counter balance - slowing elastic system with the surface track (Top Basic) – Assembly Instructions Book C

4. VERTICAL – Top to Bottom opening with a recessed track and Caddy Break System – Assembly Instructions Book D

5. HORIZONTAL - Recessed Track / Spiral Track – Assembly Instructions Book A

6. HORIZONTAL - Flexible Track – Assembly Instructions Book F

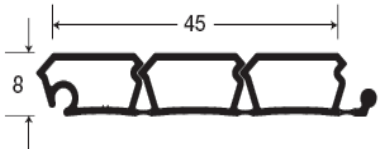
7. HORIZONTAL – Surface Mounted Track – Assembly Instructions Book A

8. PRE-FABRICATED KITS – See Instructions Book G

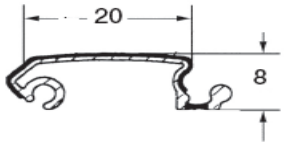
	Horizontal		Vertical				PVC				Metallic	
	Spiral Track	Rear Track	C3	C6	CB	VB	Black	White	Gray	Print ALU	ALU	SS
Face-Mounted Stainless Steel			X								X	X
Face-Mounted Aluminium												
Surface – Top Basic		X		X		X	X			Silver Thru	X	
Recessed	X	X	X	X	X	X	X	X	X	X	X	
Flexible		X		X		X	X	X	X	X	X	

Tambour Slat Profiles

Profile Dimensions



E23 (PVC)



Metallic Line

Recommended Limits for Cabinet Size

Horizontal applications (opens left to right)

E23 (PVC)
Height Up to 1000 mm
Width Up to 1600 mm (single door)

Metallic Line
Height Up to 1100 mm
Width Up to 1200 mm (single door)

Vertical applications (Bottom to top or top to bottom)

Refer to the specific counter balance assembly instructions for the recommended limit tables.

Required Number of Tambour Slats Per Cabinet

Horizontal Applications: # Slats = internal width / slat width *

Vertical Applications: # Slats = internal height / slat width*

* Slat width: E23: 45 mm Metallic Line: 20 mm

Tambour Slat Cut Length

Suggested Radial Arm Saw Blade: 10" diameter, 40 Tooth, 5/8" Arbor, Smooth Combination.
Note: Heights and Widths: inside measurements

Horizontal Applications

Track	Recessed	Surface Mounted
E23	Height + 15 mm	Height – 9 mm
Metallic Line*	Height + 13.5 mm	Height – 10.5 mm

* Only recommended when using REHAU pre-assembled carpets with slats heat-welded together. Metallic Line Carpet Gliders required in bottom of every other slat.

Vertical Applications

Track	Recessed	Surface Mounted
E23	Width + 15 mm	Width – 9 mm
Metallic Line	Width + 15 mm	Width – 9 mm

Tambour Carpet Assembly

- Slide individual tambour slats together to construct the tambour carpet.
- Place tambour carpet face down on flat, clean surface.
- Apply tambour tape to back of carpet. Distance from cut edges of carpet to the tape should be at least 50 mm.

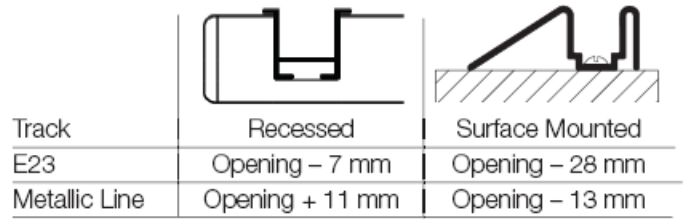
Pieces of Tape	Slate Length (mm)
1	< 300
2	Between 300 and 700
3	> 700

Handle Profile Fabrication

1. Cut Length:

Suggested Radial Arm Saw Blade: 10” diameter, 40 Tooth, 5/8” Arbor, Smooth Combination.
Note: Heights and Widths: inside measurements

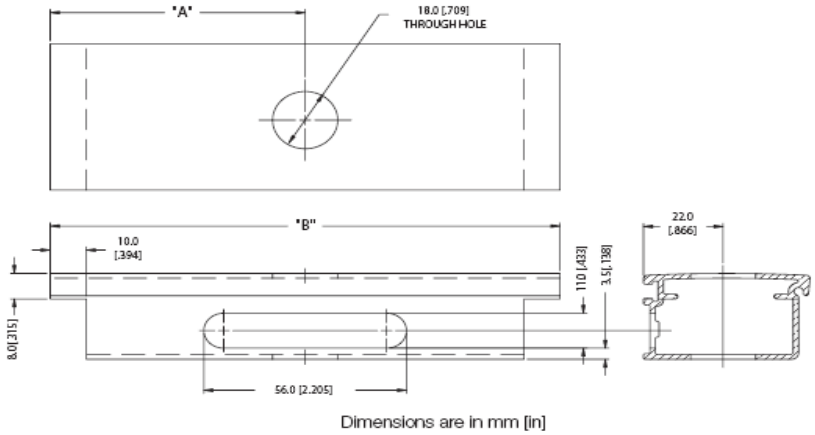
Horizontal and Vertical Applications:



Track	Recessed	Surface Mounted
E23	Opening – 7 mm	Opening – 28 mm
Metallic Line	Opening + 11 mm	Opening – 13 mm

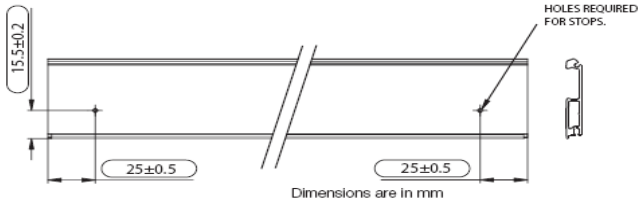
2. Metallic Line Handle Profile: Notching and Lock Fabrication

“A” - to be determined by customer
“B” – Overall cut length



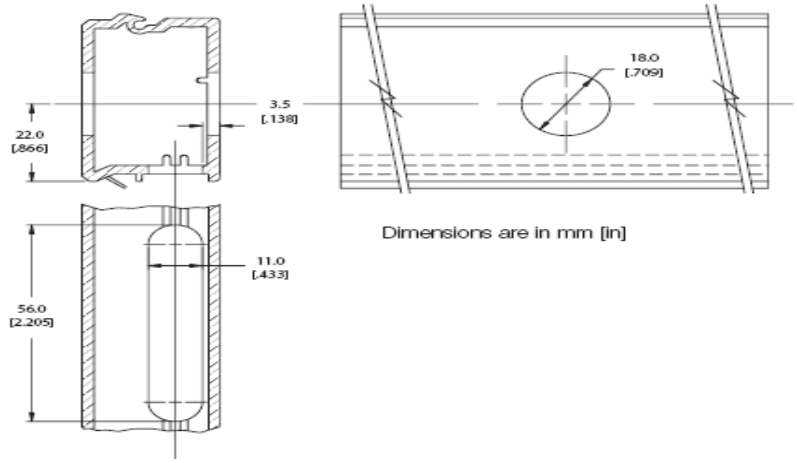
Dimensions are in mm [in]

3. Metallic Line Grip Handle Profile: Fabrication for stops 2 required.



Dimensions are in mm

4. Handle Profile Lock Fabrication:



5. Bow Handle Fabrication: Bow handle depends on customer preference. 2 through holes, 3 cm diameter each, must be drilled into the handle profile. The distance between depends on the bow handle selected.

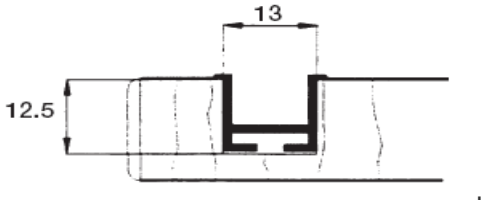
Note: Once fabrication is complete, insert the handle profile gliders into each end of the handle profile.

Cover Profile Cut Length

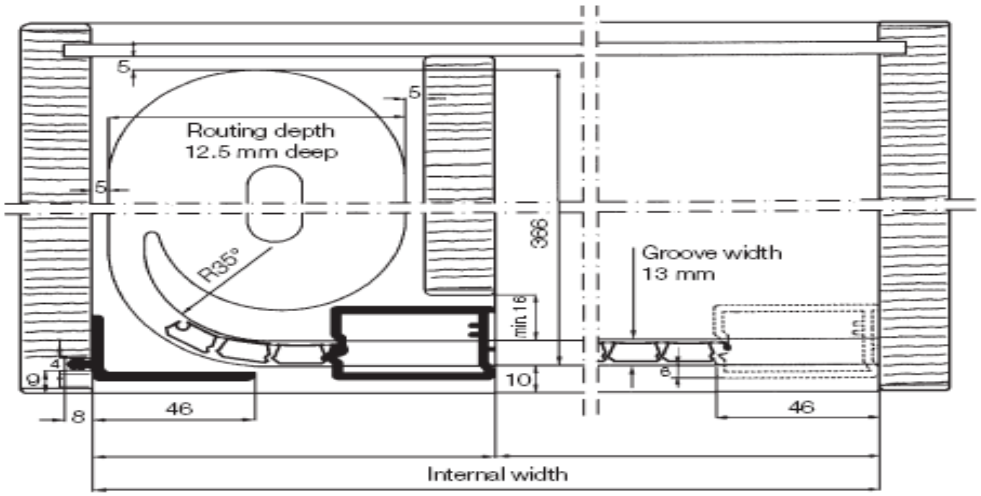
Horizontal Applications: Cut Length = Internal Height
Vertical Applications Cut Length = Internal Width

Running Track Installation

Recessed Straight Track: Routing for the recessed track. It is recommended that the running tracks be glued into the groove.



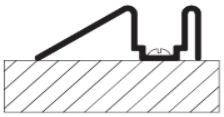
Recessed Spiral Track:



Dimensions are in mm. Board thickness 19 mm.

2- way Spiral Track Carpet Capacity: up to 670 mm
4- way Spiral Track Carpet Capacity: up to 1280 mm
5- way Spiral Track Carpet Capacity: up to 1590 mm

Surface – Mounted:



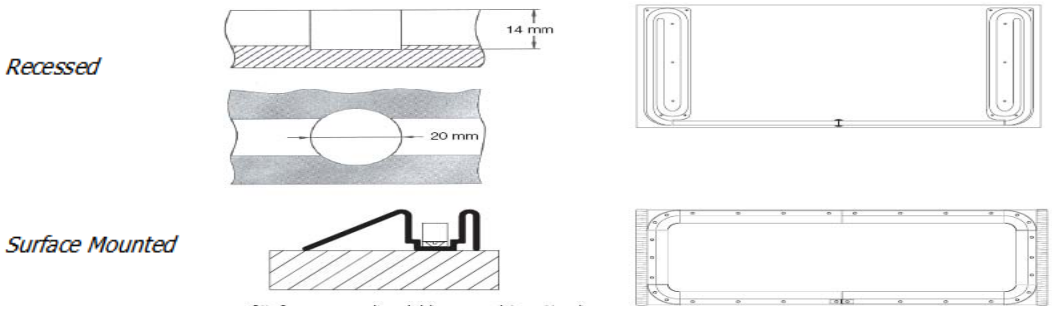
3 mm (#4) screws should be used to attach the surface mounted track.

General: A spray lubricant should be applied in the spiral or 90° corner tracks during cabinet installation. Silicone spray is recommended. Other types of spray lubricant can be specified upon request if required.

Tracks should be checked periodically for dirt and if running properties are affected re-sprayed with lubricant.

Center Stops

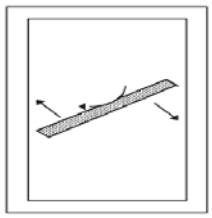
Center stops are used in horizontal double door cabinets. They are required for both the top and bottom tracks.



3 mm (#4) screws showed be used to attach the surface mounted center stop.

Tambour Carpet Installation

These are several ways to install the tambour carpet in the cabinet depending on the cabinet design. On some designs the bottom panel can be removed for carpet installation. In some cases it is necessary to "expand" the cabinet. This is done at the center of the cabinet perpendicular to the closing direction, using a piece of wood as an aid. The piece of wood should be approximately 10 mm longer than the internal width or height of the cabinet, depending on its orientation. The diagram shows this concept for a vertical application.



Painting

Custom color matches are available for both solid colors and printed wood grains / patterns. If a color match is not requested, the solid color PVC profiles from standard stock can be painted. Acrylic or polyurethane-based paint should be used. The suitability of the paint and any required pre-treatment must be checked with the respective manufacturer.

The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

REHAU Incorporated 2004

REHAU C3 COUNTER BALANCE ASSEMBLY INSTRUCTIONS (BOOK B)

System Components

1 - C3 Counter Balance Mechanism
- *Spring Loaded Roller*
- *Guide Roller*
- *End Brackets*

2 - Tambour Carpet

3 – Handle Profile

4- Mid-Grip Profile with Adapter Profile (Optional)

5 - Running Track

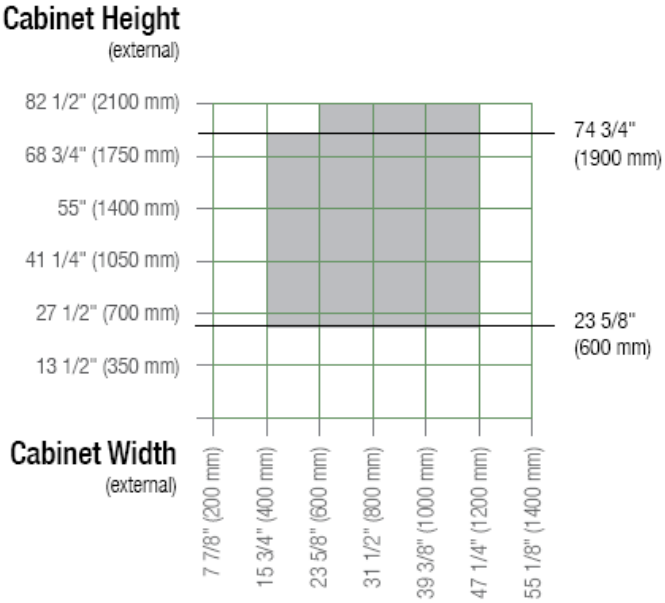
6 – Cover Profile

7 - Accessories
- *End Caps for running track*
- *Handle profile Gliders*
- *Grip Handle Stops*
- *Sealing Profile*

Fig. 1

Recommended Limits for Cabinet size:

Fig. 2



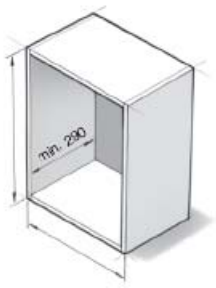


Fig. 3 An internal cabinet depth of at least 290 mm is required for installation.

Required Number of Slats per cabinet

Slats = (Internal Height / Slat width*) + starter slats **

* slat width = PVC 45 mm, Metallic Line = 20 mm

** Starter Slats = 7 PVC Slats

Tambour Slat Cut Length

Cut Slat Length = Internal Width – 11 mm

Tambour Carpet Assembly

Tambour carpet orientation is important. Starter slats are at the top of the carpet. The open door tambour door connection should be at the top of the carpet (Fig. 4)

- Slide individual tambour slats together to construct the tambour carpet.
- Place tambour carpet face down on flat, clean surface.
- Apply tambour tape to back of carpet. Distance from cut edges of carpet to the tape should be at least 50 mm.

Pieces of Tape	Slate Length (mm)
1	< 300
2	Between 300 and 700
3	> 700

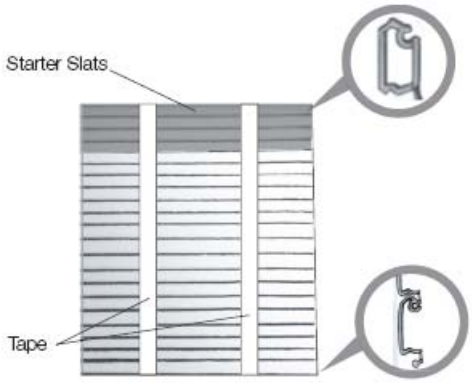


Fig. 4

Attaching the C3 Counter Balance

After applying the tambour door tape, slide the spring-loaded roller with the connector rings over the top tambour profile. Carpet Orientation as shown in Fig 5.

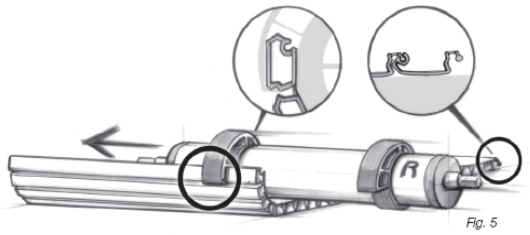


Fig. 5

CAUTION! Do not pre-load the spring-loaded roller mechanism before it is installed into the cabinet.

Line up the spring – loaded roller and position it until the distance between the right edge of the tambour carpet and the right edge of the tambour carpet and the right edge of the spring – loaded roller (marked with an "R") is 9 mm. Fig. 6.

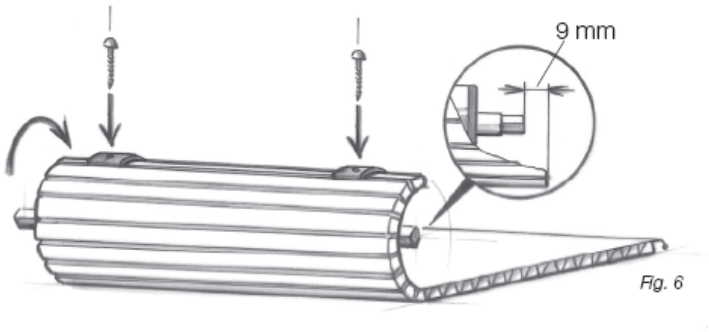


Fig. 6

- Secure tambour to each ring connector with a screw 3 x 13 mm.
- Roll the carpet around the spring loaded roller.
- Temporarily tape the rolled up carpet for installation. Adhesive tape should be approximately 120 mm in length.
- Lay the tambour on the table with the adhesive tape at the front.
- Push the brackets onto the guide roller and spring-loaded roller. Fig. 7
- The unit is ready for installation.

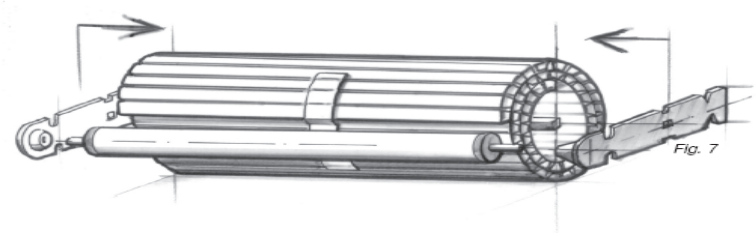


Fig. 7

Cover Profile Fabrication

Cut the cover profile to size. Cut Length = Internal Cabinet Width – 25 mm.

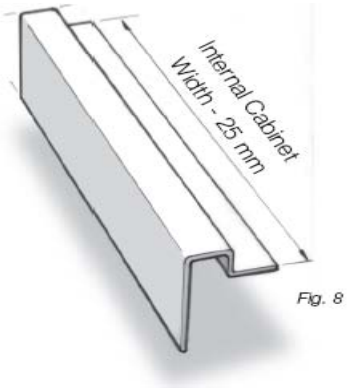


Fig. 8

Handle Profile Fabrication

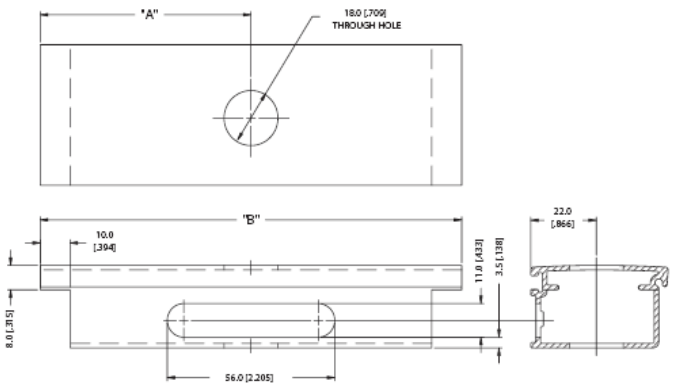
1. Cut Length: Suggested Radial Arm Saw Blade: 10” diameter, 40 Tooth, 5/8” Arbor, Smooth Combination.

PVC: Internal Cabinet Width – 32 mm

Metallic Line: Internal Cabinet Width – 14 mm

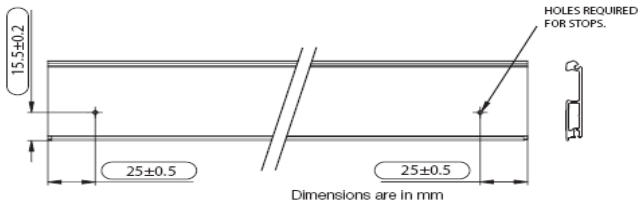
2. Metallic Line Handle Profile: Notching and Lock Fabrication

“A” - to be determined by customer
“B” – Overall cut length

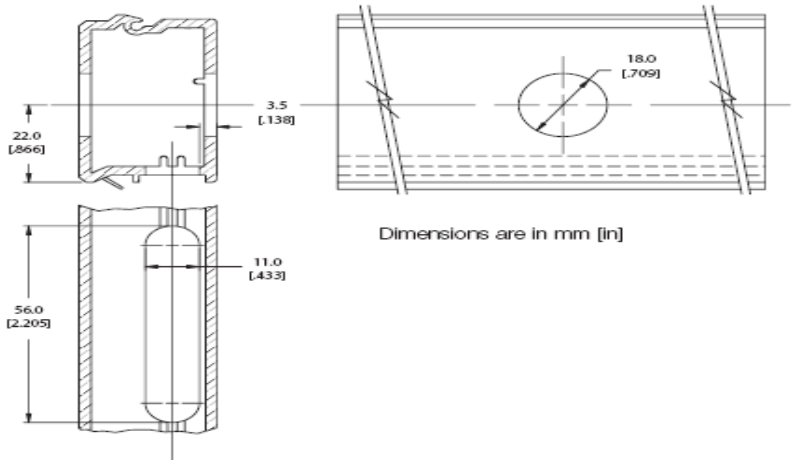


Dimensions are in mm [in]

3. Metallic Line Grip Handle Profile: Fabrication for stops 2 required.



4. Handle Profile Lock Fabrication:



5. Bow Handle Fabrication: Bow handle depends on customer preference. 2 through holes, 3 cm diameter each, must be drilled into the handle profile. The distance between depends on the bow handle selected.

Note: Once fabrication is complete, insert the handle profile gliders into each end of the handle profile.

Preparing for Assembly

Preparing the Cabinet: Both sides of the cabinet are prepared as follows.

Mark the position of the guide roller and pre-drill a hole 8 mm in diameter. Fit the positioning dowel. Fig.9

Mark the position of the back fixing hole. Pre-drill a hole 2.5 mm in diameter using the end bracket as a template. Make sure the end bracket is pushed against the front dowel. Fig. 10

Note: There should be a minimum gap of 10 mm between the rolled up carpet and the top of the cabinet.

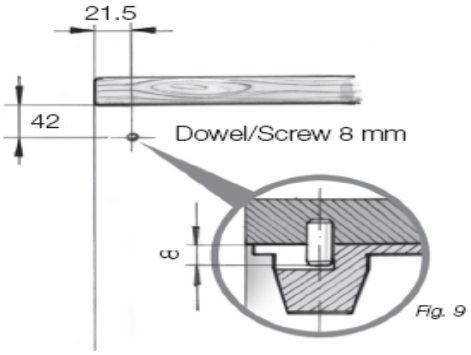


Fig. 9

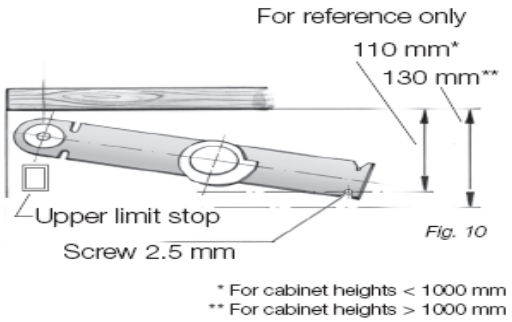


Fig. 10

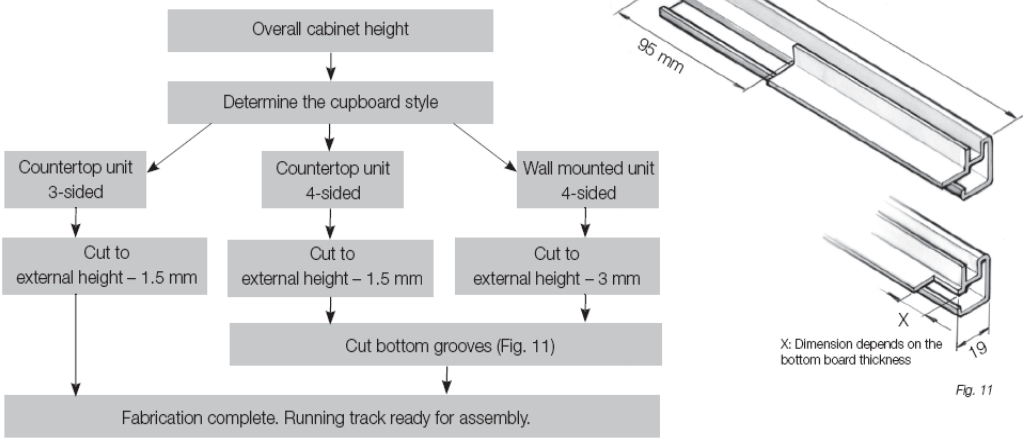
* For cabinet heights < 1000 mm
** For cabinet heights > 1000 mm

A wood or metal cross member should be positioned underneath the front end of the end brackets as an upper limit stop for the door (Fig. 10). Another solution is a shelf directly below the C3 system to hide the system. Clearance between the bottom of the rolled up carpet and the shelf must be 10 mm.

Track Fabrication

Fitting the running track: fabrication of the lower running track depends on whether it is a 3 or 4 sided cabinet, and the height of the cabinet.

To determine the length of the running track use the following diagram:



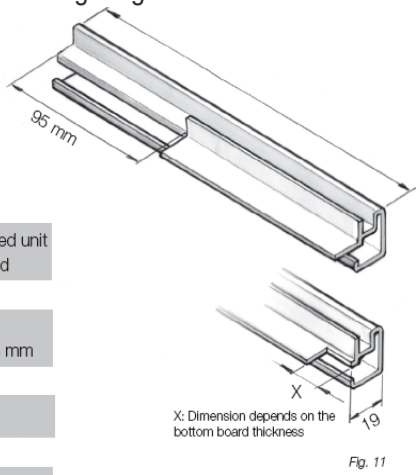


Fig. 11

Installation

Installing the Running Tracks: Screw the running tracks onto the cabinet.

Gap on wall mounted unit should be 1.5 mm from the bottom of the cabinet.

Gap on the countertop unit should be .5 mm from the bottom of the cabinet. (Fig.12)

Installation of the Cover Profile: Position the cover profile between the running tracks, and screw in place.

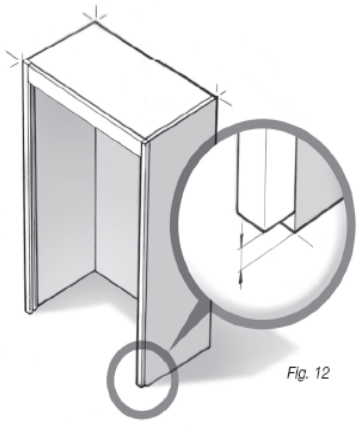


Fig. 12

3-Sided countertop unit (no bottom board) shown.

Assembly of the Tambour Unit: When installing the tambour system make sure that the end marked with "R" is on the right side of the cabinet. Do not pre-tension the tambour unit at this time.

Place the tambour unit onto the positioning dowels with the guide roller at the front of the cabinet, and screw the bracket into the pre-drilled fixing holes on both sides. (Fig. 13)

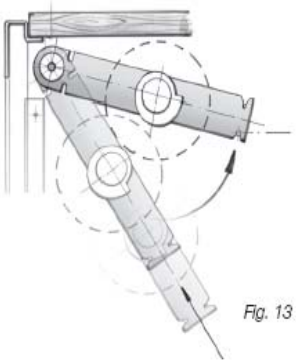


Fig. 13

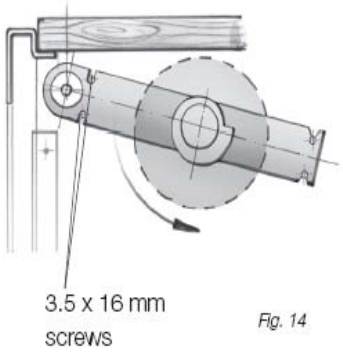


Fig. 14

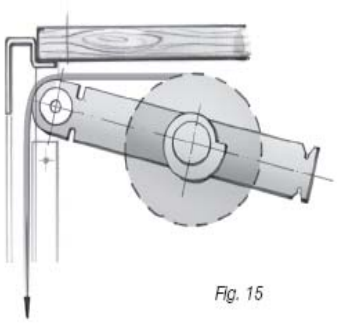


Fig. 15

Secure the end bracket with 2 or more screws. Pre-tension the rolled up tambour carpet in a counter-clockwise direction. (Fig.14)

Pre-tension Settings (Reference Only) Note: Pre-tension figures in # of turns. Tolerance +/- 1 turn. Values are approximate. Customer should test the cabinet.

Cabinet Width (mm)	Cabinet Height (2300 mm max.)			
	1000-1200	1400-1600	1700-1900	2000-2200
600	3	4	5	6
800	4	5	6	7
1000	5	7	9	11
1200	4	5	6	8

Remove the temporary adhesive tape. Hold the tambour carpet and pull it over the guide roller into the running tracks. (Fig. 15)

Warning! The carpet must be held during this process; otherwise the pre-tension will cause spinning.

Assembly of the handle Profile:

Pull the carpet cut beyond the bottom of the cabinet. Insert the handle profile. (Fig. 16)

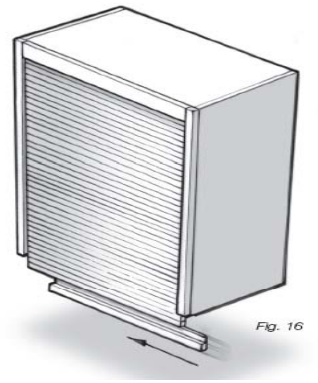


Fig. 16

Push the carpet with the handle profile attached back into the running track.

Note: If using Metallic Line Grip Handle Profile, travel stops are required. With door partially open, crew stops into the rear of the handle profile.

Final Assembly:

Push the end caps onto the running tracks. Countertop units require 2 end caps for the tops of the tracks. Wall mounted units require 4 end caps.

The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

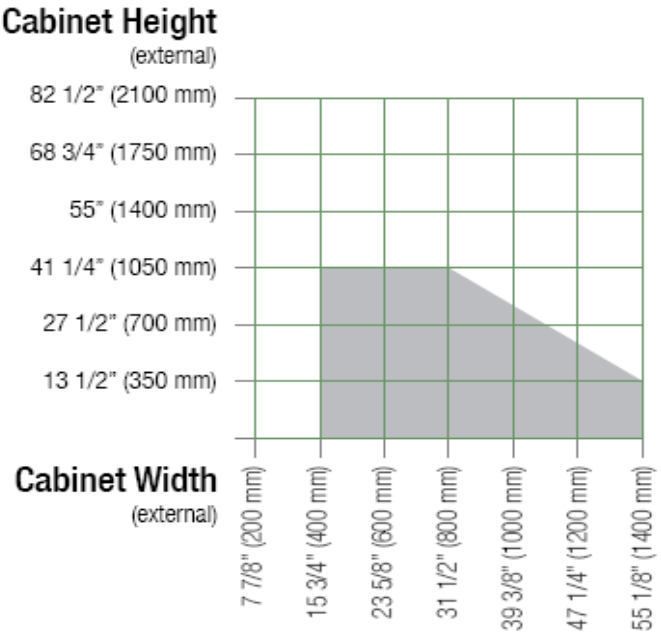
REHAU Incorporated 2004

REHAU C6 COUNTER BALANCE ASSEMBLY INSTRUCTIONS (BOOK C)
(Slowing Elastic System)

System Components

- *1 Hook*
- *5 Screws*
- *2 Wooden Strips (PVC slats)*
- *2 Plastic Strips (Metallic slats)*
- *1 Rubber cord with 2 eyelets (1 m long)*

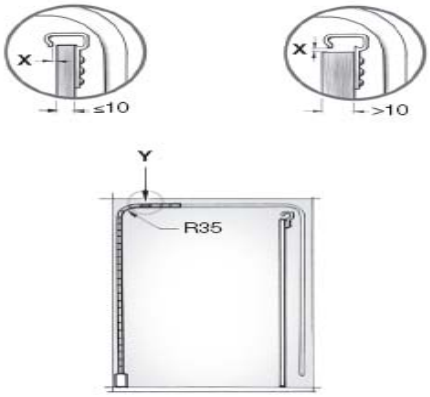
Recommended Limits for Cabinet Size



Fabrication

Step 1:

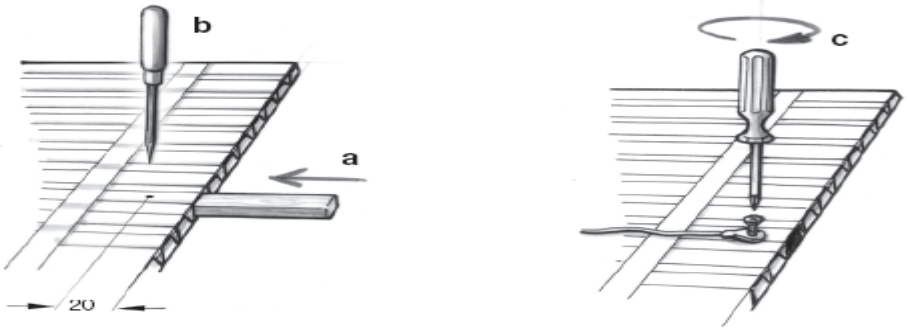
- Attach the hook to the middle of the back wall with 3 of the screws.
- Distance X should be approx. 3 mm so that the rubber cord can be attached easily.
- Prepare the tambour door carpet (see REHAU C3 Counter Balance Assembly Instructions)
- Number of tambour slats = (Internal Cabinet Height + approx. 120 mm) / slat width)
- Determine which tambour slat (Y) to attach the rubber cord to –first slat outside the 90° corner track piece.
- For tambour slat cut length, carpet assembly and handle profile fabrication, refer to REHAU C3 Counter Balance Assembly Instructions.



Step 2:

PVC slat Profile

- Push wooden strips (a) completely into the tambour door slat (Y) selected in Step 1.
- Create screw lead holes on the back of tambour door approx. 20 mm from each outer edge (B)
- Screw the pre-crimped eyelet on the rubber cord into one of the wood strips (c).

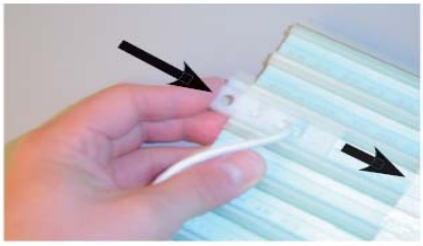


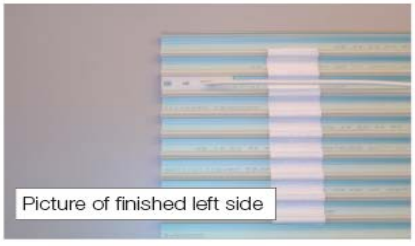
Metallic Line Tambour Slat Profile:

- Cut off screw hole of pre-crimped eyelet

- Prepare the left piece with the pre – crimped eyelet as shown. Pay attention to the exact shape of the plastic piece.

- Install left side





Step 3:

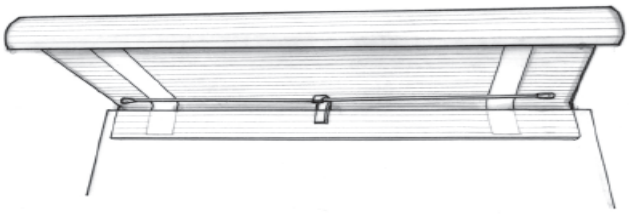
- Testing is required to determine the best tension (Z) for the rubber cord.
- (Z) should be a minimum of 30 mm.
- Do not crimp the eyelet immediately when determining the best position. Temporarily secure the eyelet with a knot (PVC) or lightly crimp the cord (Metallic Line)
- Test the tambour door in fully open and fully closed positions.
- For cabinets that are over 700 mm tall, additional slats can be added to the back end of the tambour carpet to improve weight distribution.
- Mark final position of the eyelet on the rubber cord.
- Crimp the eyelet and cut off any excess cord.

PVC Slat Profile: Screw the second eyelet in the wood strip at the E23 position marked in Step3.

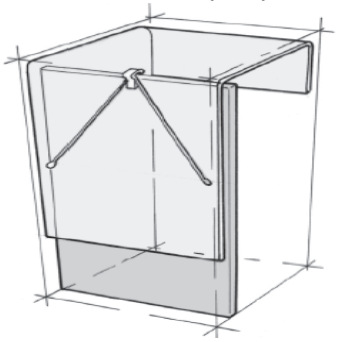
Metallic Line Slat Profile: Cut off screw hole of just- crimped eyelet. Install right side plastic piece. Reference left side installation shown in Step 2.

Step 4:

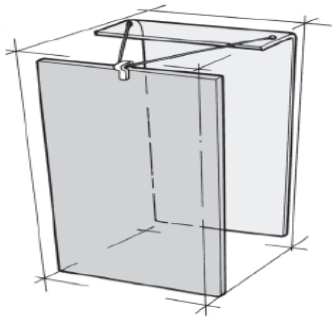
- Push tambour door into the running track. With the door half open attach the rubber cord to the hook.



Cabinet in open position



Cabinet in closed position



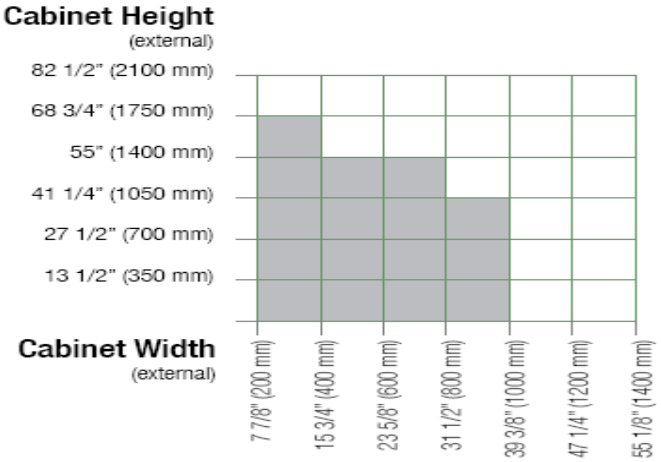
The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

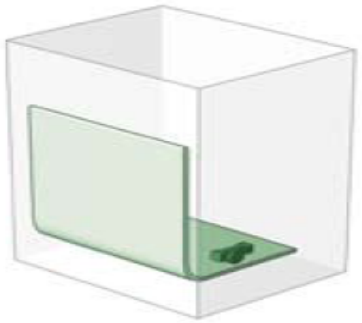
The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. *REHAU Incorporated 2004*

Installation Requirements

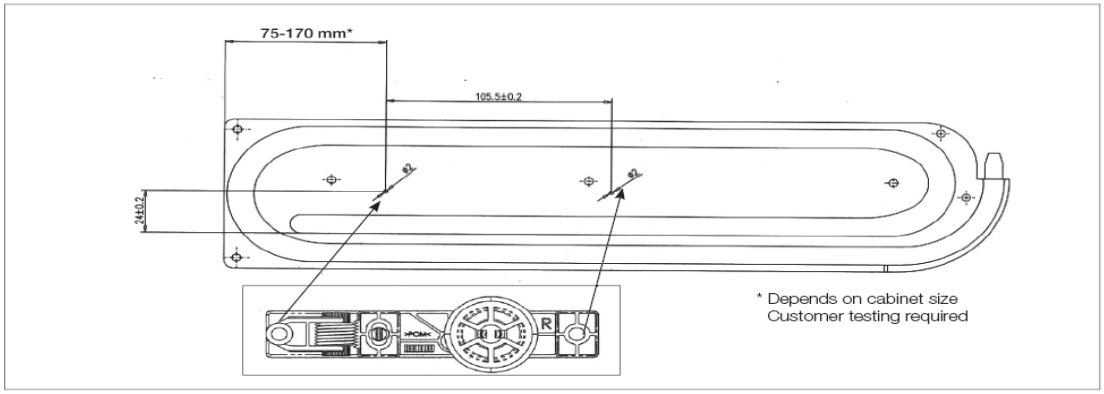
- Use only with chambered smooth backed tambour slats E23 (PVC)
- Use with spiral tracks or 90° corners
- Lock is required to keep door closed
- Can be adjusted after installation using an adjustable screw. This requires a small hole in the cabinet floor lined up.

Recommended Limits for Cabinet Size



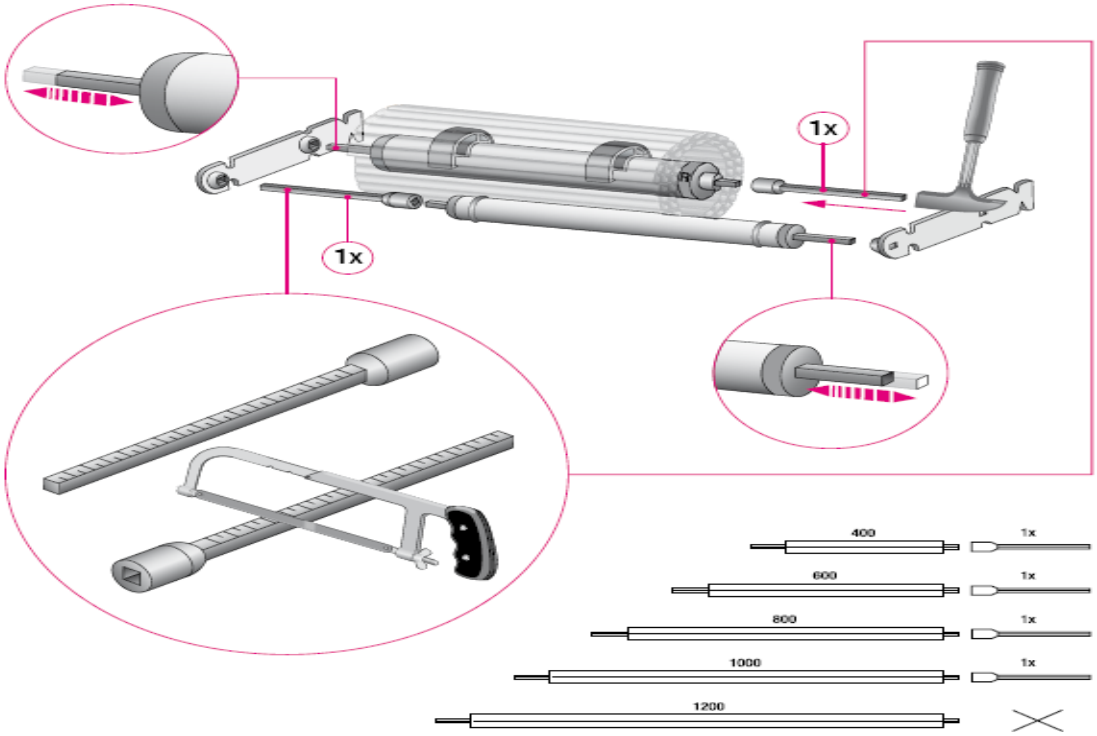


Right side spiral track application shown. Left side is mirror image.



The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. REHAU Incorporated 2004



The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

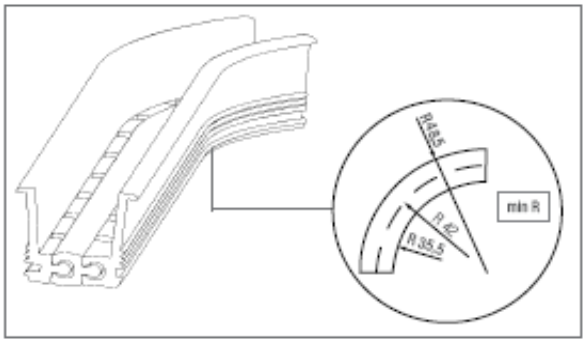
REHAU Incorporated 2004

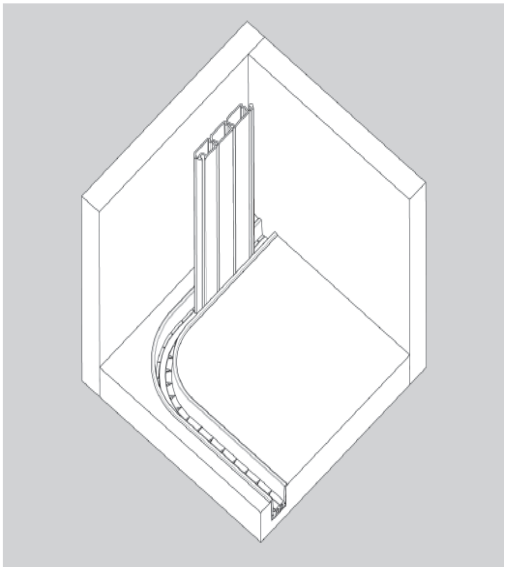
REHAU FLEXIBLE TRACK ASSEMBLY INSTRUCTIONS (BOOK F)

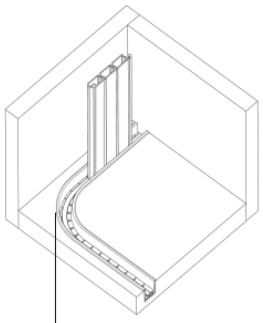
Tambour cabinets no longer have to be square. Creative, curved cabinet designs are possible with REHAU Flexible Track System. This unique running track achieves multiple angles, making the optimal choice for curved cabinet configurations. This track can be used with any REHAU tambour door profile.

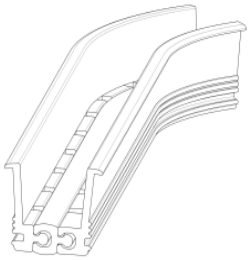
The perfect solution for easy fabrication of tambour door applications and designs, the flexible track has the following features:

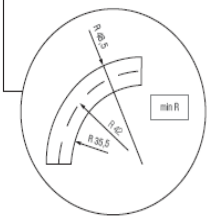
- Three-piece polypropylene recessed track allows for sophisticated tambour door applications and designs
- Minimum outside radius of 48.5 mm (1.9”)
- Large continuous radii possible
- Easily bendable without heat
- Compatible with REHAU E23 Polymer Line stats and Metallic Line stats

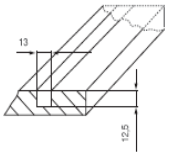


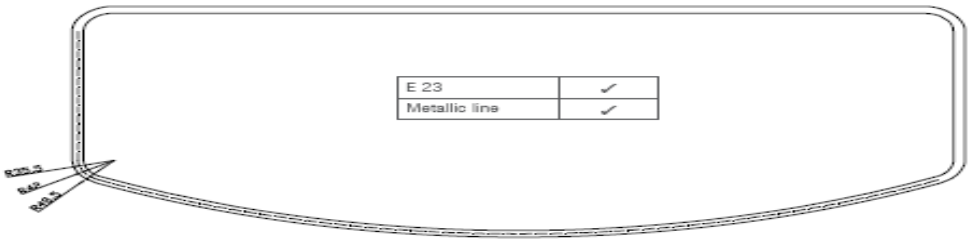




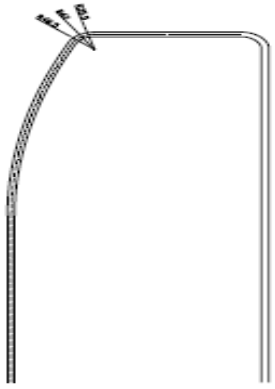




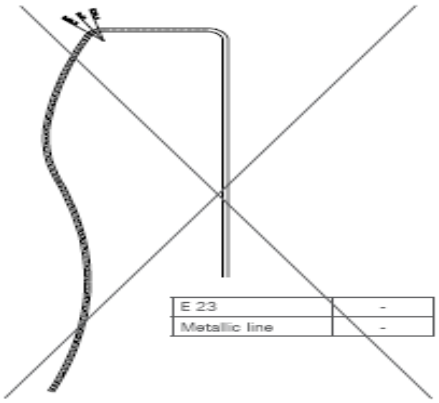




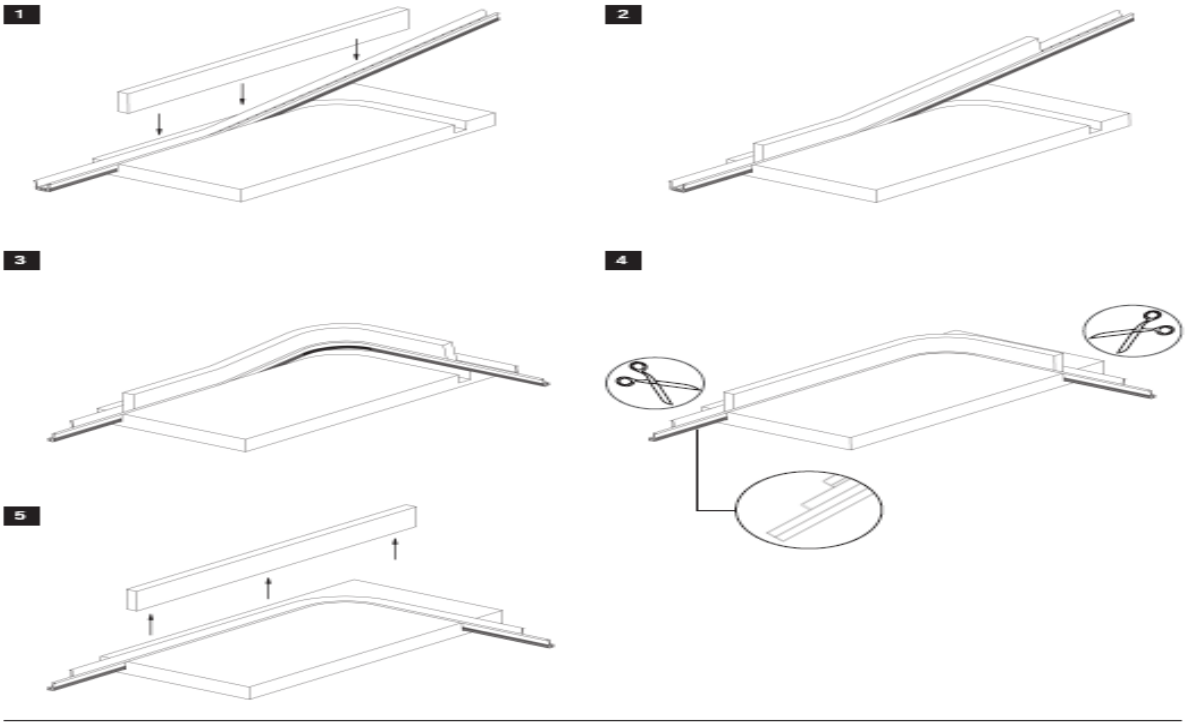
E 23	✓
Metallic line	✓



E 23	✓
Metallic line	✓



E 23	-
Metallic line	-



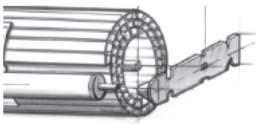
The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

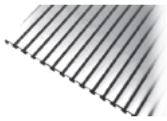
REHAU Incorporated 2004

REHAU METALLIC LINE TAMBOUR DOOR KITS ASSEMBLY INSTRUCTIONS (BOOK G)

The Metallic Line Tambour Door Kit includes all components (as shown in Fig.1) which are required for a vertical opening tambour door application. The 30" system should be used for cabinets with internal widths ranging from 550 - 754 mm (21 5/8 - 29 11/16"). The 39" system should be used for cabinets with internal widths ranging from 750 - 954 mm (29 1/2 - 37 9/16"). See Fig.2.



1 C3 Counterbalance Mechanism



2 Tambour Door Profile

3 C3 Extension (see note below)

4 Handle Profile (with Seal)

5 Handle Glider

6 Handle Stopper

7 Track

8 End Caps for Track

9 Cover Profile

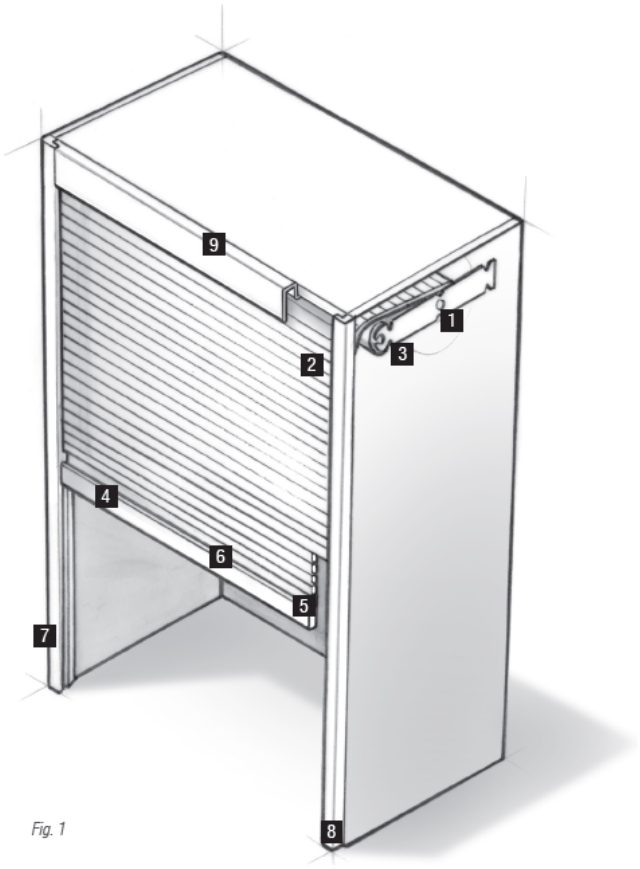


Fig. 1

NOTE:
The 2 C3 extensions are used to obtain the maximum cabinet width (see Fig. 2 for Recommended Limits for Cabinet sizes). Should a smaller cabinet width be required, all of the following components need to be cut to their correct dimensions: C3 extensions, tambour door profile, handle profile and cover profile.

WARNING!
Consult a saw blade specialist to determine the required sawing equipment to cut both plastic and metal components. C3 extensions should be cut with a hand saw only.

An internal cabinet depth of at least 290 mm (11 7/16") is required for installation.

Recommended Limits for Cabinet Size

System	Cabinet Width		Cabinet Height
	Internal	Internal w/ Extensions	External
30"	550 - 584 mm (21 5/8 - 23")	570 - 754 mm (22 7/16 - 29 11/16")	600 - 1,000 mm (23 5/8 - 39 3/8")
39"	750 - 784 mm (29 1/2 - 30 7/8")	770 - 954 mm (30 5/16 - 37 9/16")	600 - 1,000 mm (23 5/8 - 39 3/8")

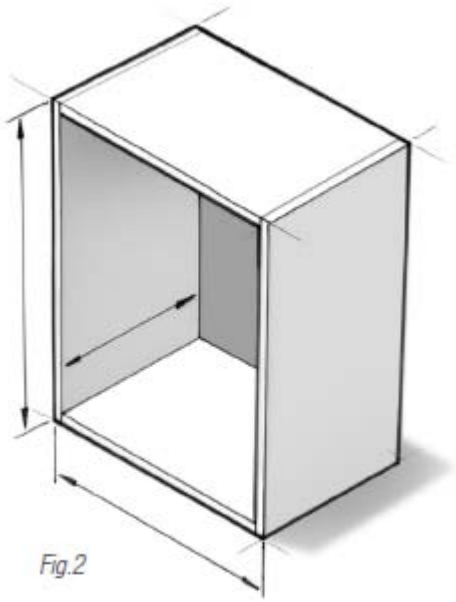


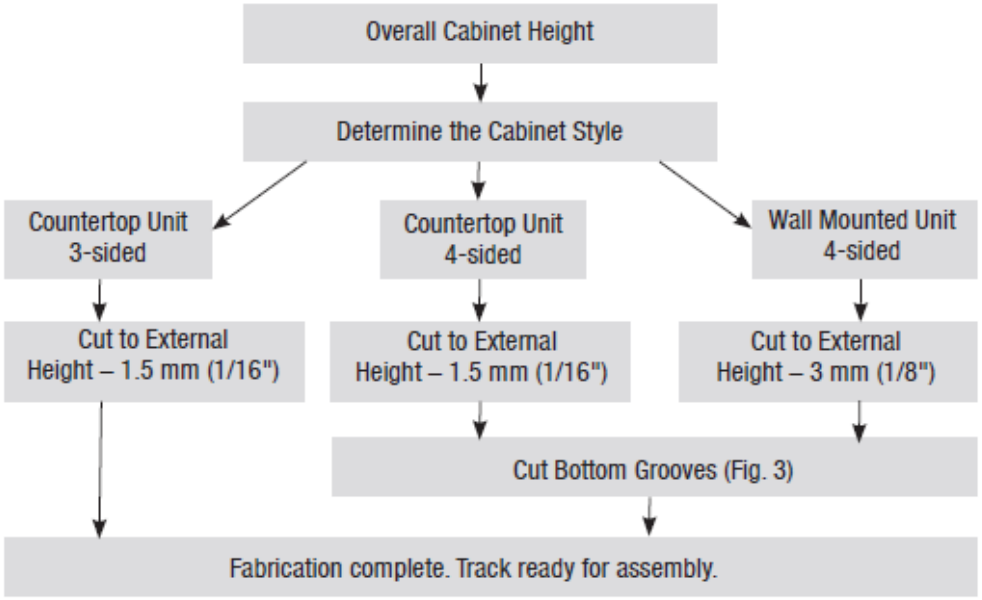
Fig.2

Note:
If the height of the cabinet is less than 1,000 mm (39 3/8"), metallic tambour door slats may be removed to obtain desired cabinet height.

Fitting the Track:

Fabrication of the bottom of the track depends on whether the cabinet is three-or four-sided and on the height of the cabinet. Three-sided cabinets have no bottom, whereas four-sided cabinets have a bottom. To determine the length of the track use the diagram below.

Note:
The track is prefabricated with a 95 mm (3 3/4") notch on the top of the profile (y in Fig. 3). The bottom of the profile (x in Fig. 3) can be cut to accommodate less than 1,000 mm (39 3/8") height cabinet applications. Remember to notch the bottom of the track 16 mm (5/8") if it is a four-sided cabinet.



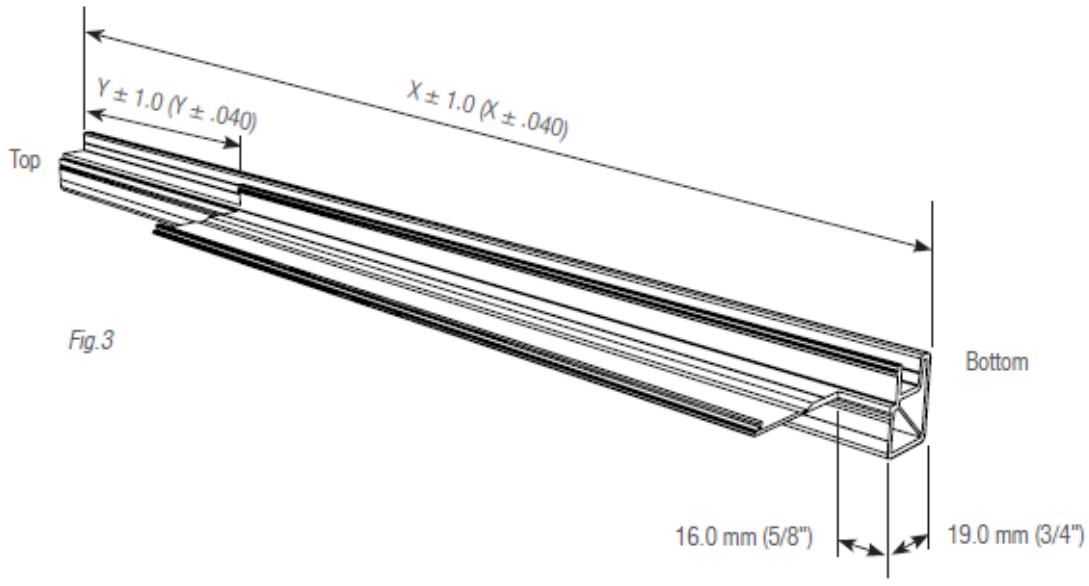
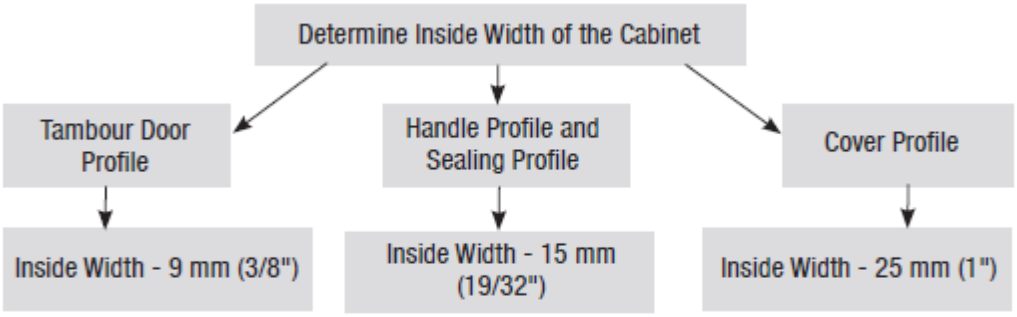


Fig.3

Fitting the Tambour Door Profile, Handle Profile and Cover Profile:

The component dimensions are determined by the inside width of the cabinet and the proper clearances. All parts are prefabricated for the maximum size. If the required cabinet width is less, then use the table below to determine the cut lengths of these parts.

WARNING!
Consult a blade specialist to determine the blade requirements for cutting both the plastic and metal components. The extensions should be cut with a hand saw only!



Calculating the required Number of Tambour Slats per Cabinet

Number of Slats = (internal height / slat width) + starter slat

The dimensions of one starter slat are shown in Fig. 4.

7 starter slats are required and included in the kit.

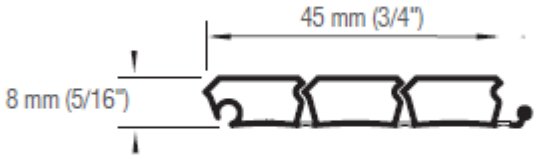


Fig. 4 1 Starter Slat

Attaching the C3 Counterbalance:

1. Apply the tambour tape if not already applied.
2. Slide the spring-loaded roller with the connector rings over the top tambour profile. Tambour door profile orientation should be as shown in Fig. 5.

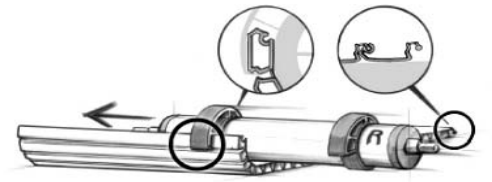


Fig. 5

WARNING! Do not pre-load the spring-loaded roller mechanism before it is fitted into the cabinet.

3. Line up the spring-loaded roller and position it until the distance between the right edge of the tambour door profile and the rigid edge of the spring-loaded roller marked with an "R" is 9 mm (3/8") as shown in Fig. 6.

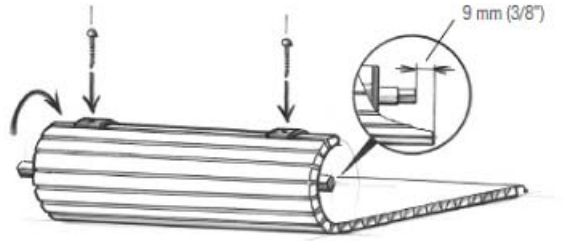


Fig. 6

4. Secure tambour to each ring connector with a 3 x 13 mm (1/8 x 1/2") screw (not included).
5. Roll the tambour door profile around the spring-loaded roller.
6. Temporarily tape the rolled up tambour door profile for installation. Adhesive tape should be approximately 120 mm (5") in length.
7. Lay the tambour on the table with the adhesive tape facing up.
8. Push the brackets onto the guide roller and spring-loaded roller as shown in Fig. 7.

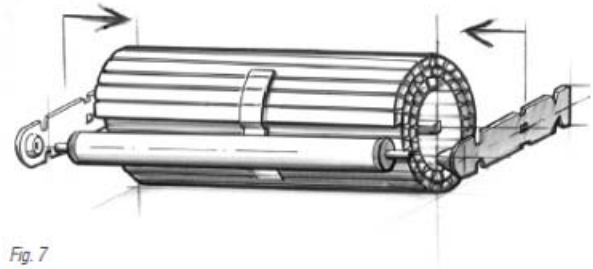


Fig. 7

The unit is ready for installation.

If the cabinet is larger than the counterbalance range, then the extensions (#3 in Fig. 1) will need to be applied to the ends (as shown in Fig. 8) of the counterbalance and guide rollers. Use the following diagram to determine the cut length of the extensions.

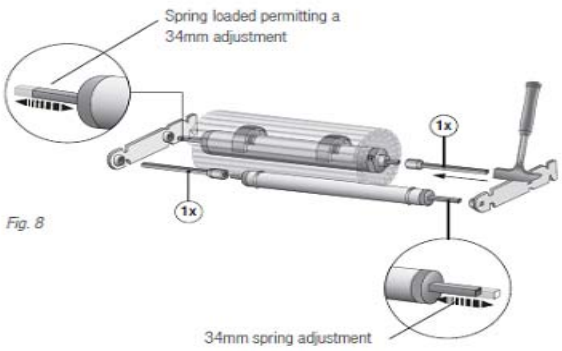
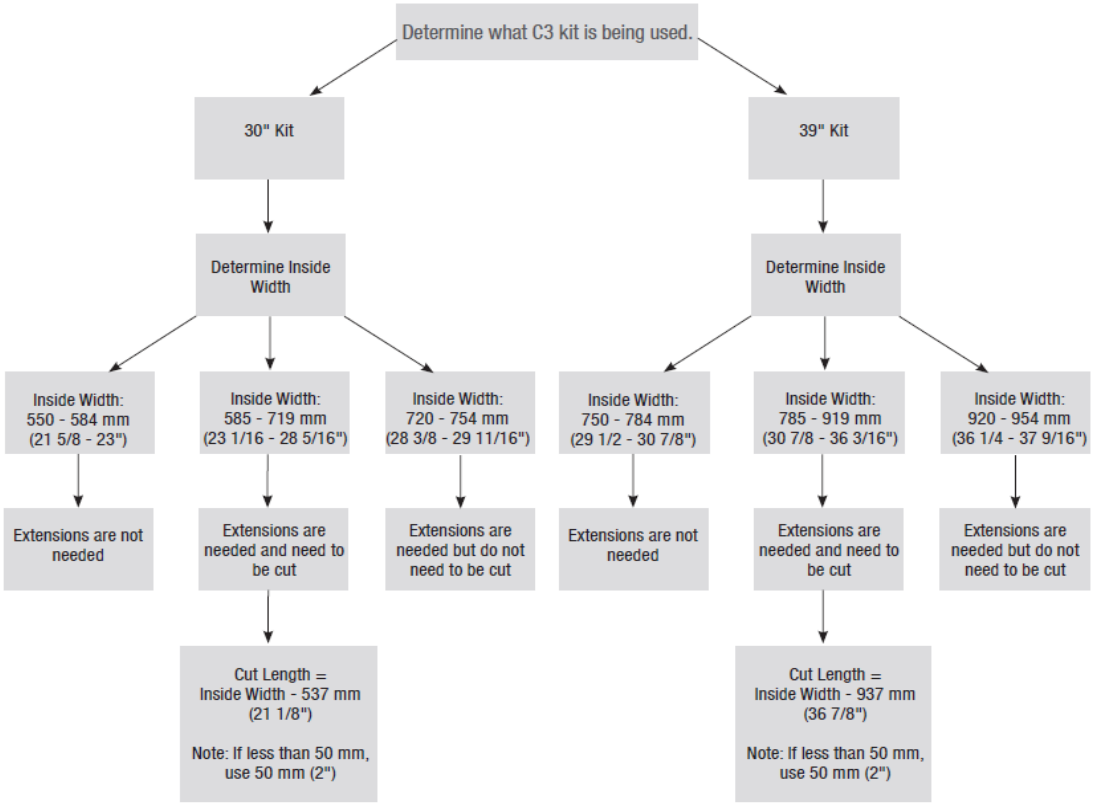
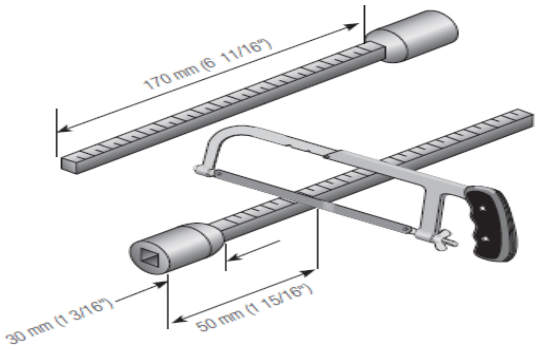


Fig. 8

Calculating the Length of the Counterbalance Extensions:





Note:
Minimum extension is 20 mm (3/4") and the maximum extension is 170 mm (6 11/16").

Preparing the Cabinet:

Prepare both sides of the cabinet as follows:

1. Mark the position of the guide roller and pre-drill a hole 8 mm (5/16") in diameter.
2. Insert the positioning dowel as shown in Fig. 9.
3. Mark the position of the back fixing hole.
4. Pre-drill a hole 2.5 mm (1/8") in diameter using the end bracket as a template.
5. Make sure the end bracket is pushed against the front dowel as shown in Fig. 9.

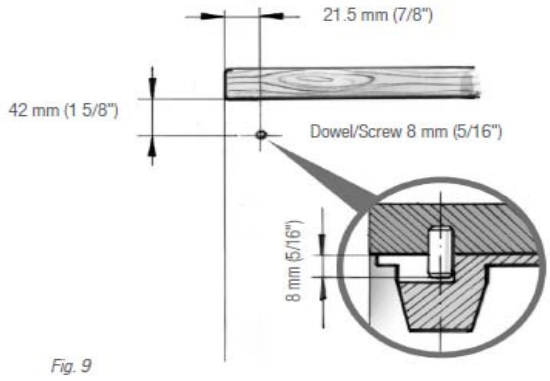


Fig. 9

Installing the Upper Limit Stop:

The installer must install an upper limit stop to prevent the door from rolling up. This can be a piece of wood. It will not be visible. The length of the piece of wood must equal the inside width of the cabinet.

A wood or metal cross member can be positioned underneath the end brackets as an upper limit stop for the door as shown in Fig. 10. Another solution is a shelf directly below the C3 system to hide the system. Clearance between the bottom of the rolled up carpet and the shelf must be 10 mm (3/8").

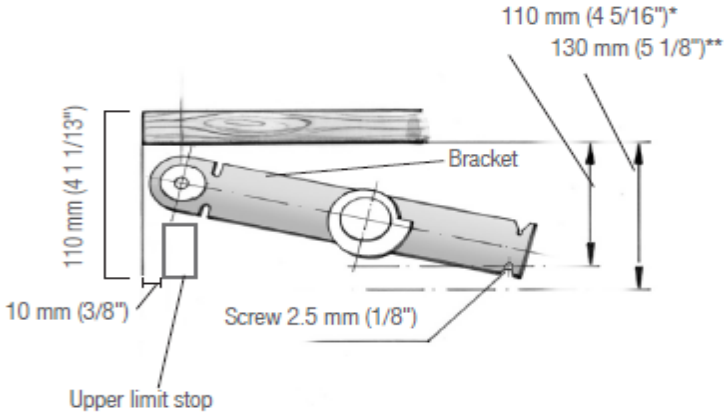


Fig. 10

* For cabinet heights < 1,000 mm (39 3/8")
** For cabinet heights > 1,000 mm (39 3/8")

Assembling the Tambour Unit:

1. When installing the tambour door unit, make sure the end of the tambour door profile marked "R" is on the right side of the cabinet. Do not pre-tension the tambour door profile at this time.
2. Place the tambour unit onto the positioning dowels with the guide roller at the front of the cabinet, and screw the bracket into the pre-drilled fixing holes on both sides as shown in Fig. 11.

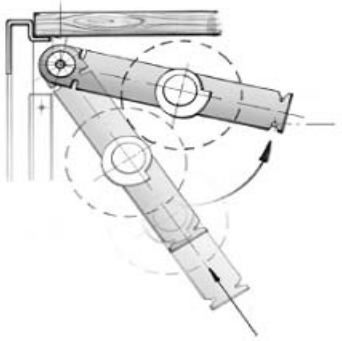


Fig.11

3. Secure the end bracket with two more screws as shown in Fig. 12. Use flathead 3 x 13 mm (1/8 x 1/2") screws (not included).

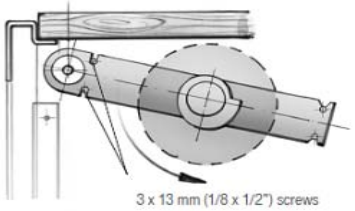


Fig. 12

4. Pre-tension the rolled up tambour door profile in a counter-clockwise direction as shown in Fig. 13.

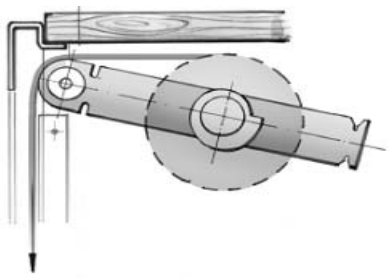


Fig 13

Pre-tension Recommendation:

Cabinet Height	Number of Required Turns
600 - 1000 mm (23 5/8-39 3/8")	4 turns

5. Remove the temporary adhesive tape. Hold the tambour door profile and pull it over the guide roller into the running tracks as shown in Fig. 12.

WARNING!
The tambour door profile must be held during this process; otherwise the pre-tension will cause spinning.

Installing the Tracks:

Screw the tracks onto the cabinet.

On units, the track should begin 1.5 mm (1/16”) from the bottom of the cabinet as shown in Fig.14.

Installing the Cover Profile:

Position the cover profile between the tracks and screw in place.

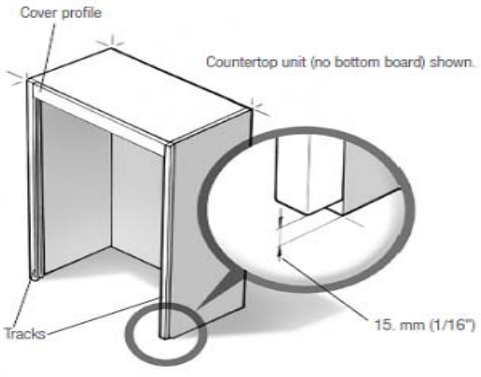


Fig. 14

Assembling of Handle Profile:

1. Pull the tambour door profile out below the bottom of the cabinet.
2. Apply gliders (#5 in Fig.1) to each end of the handle profile to allow for a smooth running handle and carpet profile.
3. Insert the handle profile to the carpet.
4. Push the carpet with the handle profile attached back into the track.
5. Handle stoppers (#6 in Fig. 1) are required. With door partially open, screw stops into the rear of the handle profile (as shown in Fig. 16).
6. Place the end caps on the tracks.

WARNING!
When fastening stopper profile to the back of the handle profile be careful not to penetrate the face of the handle. Screws are not included

Fig. 16

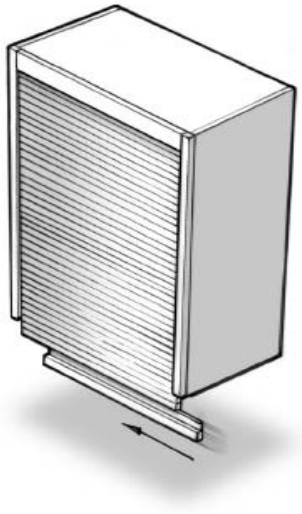


Fig. 15

.

The details for assembly and operation of the tambour door system provided in this document apply only to standard applications where REHAU system components are used. To ensure operating safety, it is recommended that you test your installed tambour door prior to use.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. Before using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith. To the extent permitted by law. REHAU EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES' INCLUDING BUT NOT LIMITED TO' ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

REHAU Incorporated 2004