STRIP DOORS PRODUCTION PROCESS & INSTALLATION MANUAL





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1 HOW TO DESIGN THE STRIP DOOR

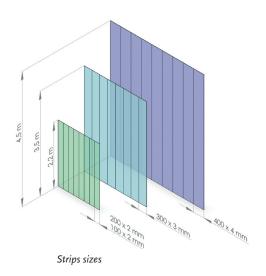
• Strip quality

Choose from a wide range of PVC strips the right strips according to your application:

For normal application	Standard clear
For cold rooms	Polar & Super polar
For tropical regions	Anti-insect yellow
For welding screen	Anti-UV strips
For identifying opening edges	Signal red
For heavy traffic	

• Strip sizes

Depending on your opening size, choose a suitable width and thickness of strip.



• Strip overlapping

In order to get a better performance from your doors, a certain percentages of strip overlapping is recommended depending on their use.

REQUIRED OVERLAPPING	STRIP WIDTH X THICKNESS (MM)		
Applications	200 X 2	300 x 3	400 X 4
Strong isolation / Outside opening	98%	91%	98%
Medium isolation / Inside opening	77%	63%	77%
Slight isolation / Inside opening without under or over pressure	36%	36%	57%

(See all the overlapping possibilities page 8)

• Hardware

- Use Heavy duty Hook-on-track with strips:
 400mm x 4 mm
 300mm x 3 mm for vehicle traffic
- Use standard Hook-on-track duty for all other applications.



Strips overlapping



Heavy duty Hook-on-track

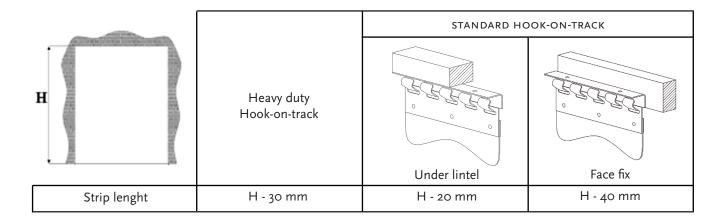


Standard Hook-on-track



2 HOW TO CUT

- Cut strips according to the opening height and the hook-on-track configuration as follow:



Note: The length of strips is cut to the height of the opening. It is recommended that you cut the strips in the workshop 10mm longer and trim them when fitted.

Note 2: It is recommended that the Standard Hook-on-track is face fixed as it is easier to install and is stronger.

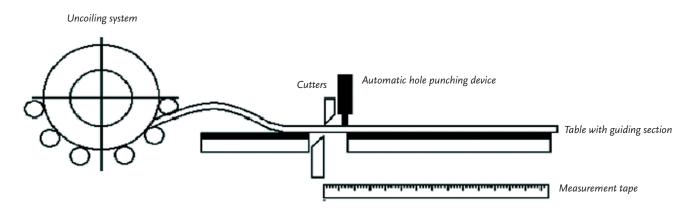
- When cutting use a work surface at least 4500x450mm that does not adhere to the PVC (cardboard, carpet)

Manually cutting

- Use a long square to determine the centerline of the strip when pressed against one of the edges.
- For thick strips, cut several times with the cutter without pressing too hard, maintaining the square pressed firmly on the working surface so that it does not slide.
- It is recommended that a steel glove is worn when cutting.



• Automatic or semi-automatic: cutting table (Recommended)***



^{**} Information about automatic machines are available on request



3 HOW TO CALCULATE THE NUMBER OF STRIPS REQUIRED

	STRIP WIDTH	OVERLAPPING (TOTAL)	OVERLAPPING ON EACH ADJACENT STRIP OV	GAP BETWEEN STRIPS ON THE SAME LINE
UNITS	mm	%	mm	mm
	100	36%	18	64
		36%	36	128
	200	77%	77	46
		98%	97,5	5
		9%	13	274
	DATA 300	36%	54	192
DATA		63%	95	110
		91%	136	28
		16%	31	338
		36%	72	256
	400	57%	113	174
		77%	154	92
		98%	195	10
SYMBOL	S	ОТ	OV	G

OW = Opening width (mm)

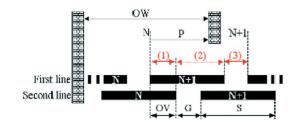
• To calculate the number of strips required proceed as follow:

- 1) Calculate first the theoretical number of strips on the first line **(TN)**: $TN = \frac{OW}{S + G}$
- 2) Take its lower integer (N): N = Lower integer (TN)
- 3) Then, check the position of the wall edge on the N+1 strip (P): $P = (TN N) \times (S+G)$ and refer to the following table to know the number of strip required.

IF	TOTAL NUMBER OF STRIPS	CUT SIZE ON THE LAST	LAST STRIP ON LINE	DRAW
OV> P	2 x N	STRIP*	2	(1)
S> P >OV	(2 x N) + 1	OV - P	1	(2)
P >S	(2 x N) + 2	S - P	2	(3)

S + G + OV - P

- * For header mount configuration, to have a perfect peripheral sealing, the last strip must be adjusted to match the end of the opening. To do that, cut the plate set according to the previous table.
- * For wall mount configuration, the curtain have to be larger than the opening to cover the gap between the door edge and wall in order to provide a better sealing. So the last strip doesn't need to be cut.



Last strip position

Calculation software is available on request.



• Example 1:

Opening width = 2000 mm = OW Strip width = 200 mm = S Overlapping 77% \rightarrow OV = 77 mm & G = 46 mm

1)
$$TN = \frac{OW}{S+G} = \frac{2000}{200 + 46} = 8.13$$

2) N = Lower integer (TN) = Lower integer (8.13) = 8

3)
$$P = (TN - N) \times (S+G) = (8.13 - 8) \times (200 + 46) = 32$$

- \rightarrow OV = 77 > P = 32 (Case 1)
- \rightarrow Total number of strips = 2 x N = 16 strips
- \rightarrow For header mount configuration: cut size on the last strip = OV P = 77 32 = 45mm
- Simplified method:

1) Calculate:
$$\frac{\text{Opening width x (1 + Overlapping)}}{\text{Strip width}} = \frac{\text{OW x (1 + OT)}}{\text{S}}$$

- 2) Take its upper integer to obtain the approximated total number of strip.
- Example 2:

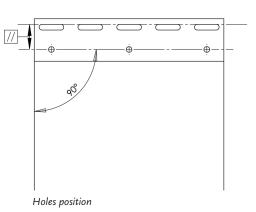
Opening width = 2000 mm = OW Strip width = 200 mm = S Overlapping = 77% = OT

1)
$$\frac{OW \times (1 + OT)}{S} = \frac{2000 \times (1 + 0.77)}{200} = 17.7$$

2) Total number of strips \approx Upper integer (17,7) \approx 18 strips

4 HOW TO FORM HOLES

- Manually using a punch
- Mark the positions of all holes accurately, precisely and horizontally (rule and square). The holes centerline must be absolutely perpendicular with the edge of the strip.
- Remove the center using a punch (Ø 5mm)
- Do not use cutting tools (drills, sharp objects) to avoid tears that will eventually result in the PVC ripping.
 - Automatic hole punching device

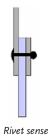




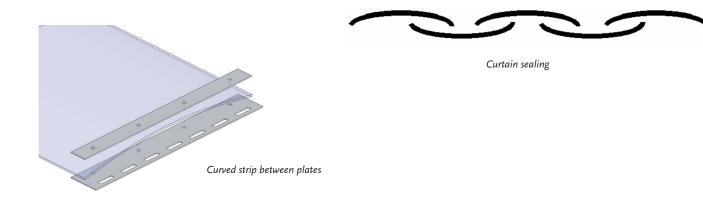
5 HOW TO ASSEMBLE

- Use blind rivet \emptyset 4.8mm to fix the strip between the front plate and the back plate.

Rivet length (mm)	8	10	12
Strip thickness (mm)	2	3	4

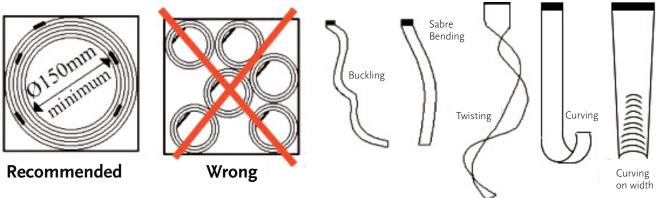


- Put the flat part of the rivet on the front plate side.
- PVC strips are designed to have a slight curve across the width in order to provide a good seal. The internal face of the strip must be placed face down to the front plate to provide a better sealing and aspect when the curtain is installed.



6 HOW TO PACK TO DELIVER TO THE JOB SITE

- Never roll the strips into small diameters. (ø 150 mm minimum)
- Pack the strips in the box using packing paper, foam or bubble wrap.



Packaging requirement



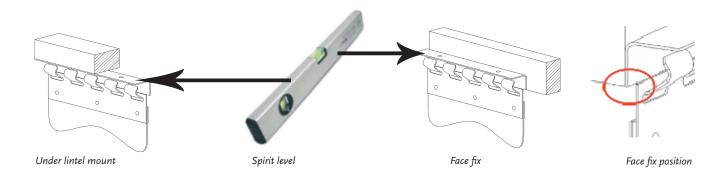
Defects caused by wrong packing

7 HOW TO INSTALL

- Make sure that support is in good condition.
- The hook-on-track must be secured firmly and in a level position:
- 1) Position the hook-on-track to the opening (face fix or under lintel)

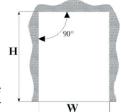
Note that for the face fix beginning of the hook needs to match the opening.

For under lintel mount configuration make sure that the edge of the end strips will be able to swing freely.



- 2) Fix the Hook-on-track with a first screw in its middle.
- 3) Use a spirit level to position and mark fixing holes. (For under lintel mount use wedges to correct the position)
- 4) Then install. (For the heavy-duty hook-on-track fixation process refer to the following page)
- For under lintel, the hook-on-track has to be cut to fit the opening and the strips width.

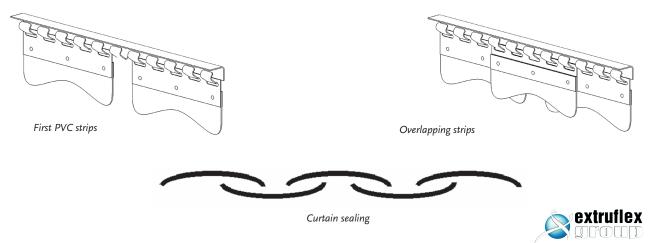
STRIP WIDTH (mm)	100	200	300	400
HOOK-ON-TRACK LENGHT (MM)	W-13	W	W-8	W-26



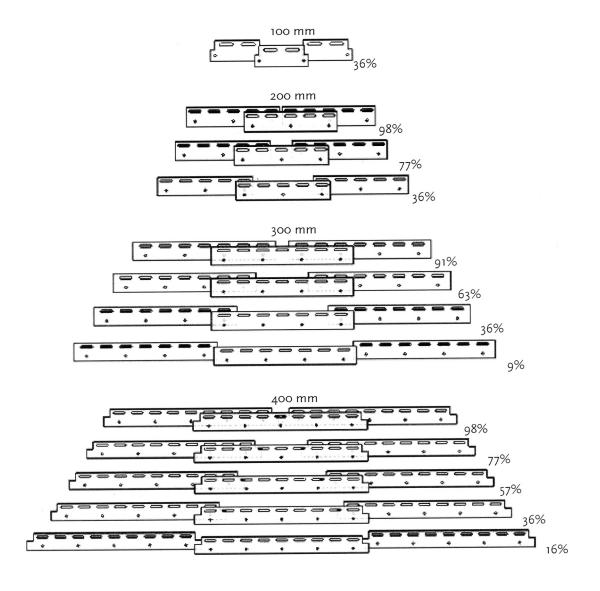
- For face fix, the curtains have to be wider than the opening to cover the gap between the door edge and the wall in order to provide a better sealing. Longer edges can be used to stock strips if the door is removed during hot periods.

necessary gap and to have the curved strip sides face to face.

- Place the first PVC strips on the hook-on-track with the required number of free hooks between the strips according to the overlap. Then place remaining strips.
- Front plates have to be placed in the middle of the curtain between the back plates to avoid any unnecessary gap and to have the curved strip sides face to face.



- For the heavy-duty system with cover, firstly fix the hook-on-track with the screws matching the big holes only (\emptyset 12mm) on the cover. The hook-on-track must be secured firmly and in a level position (Refer to the previous page)
- Place the first PVC strips on the hook-on-track with the required number of free hooks between the strips according to the overlap. Then place remaining strips.
- Front plates have to be placed in the middle of the curtain between the back plates to avoid gaps and to have curved strip sides face to face.
- Put the heavy-duty system cover on the hook-on-track and fix using all the remaining fixing holes.
 - Overlapping possibilities:





8 CLEANING AND MAINTENANCE

- Wash with soapy water or alcohol solution.
- Avoid any contact with solvents.
- No particular maintenance is required except for periodic checking (twice annually) to ensure the attachment systems are secure (strips/hooks, hook-on-track/lintel) and to replace any worn strips that no longer offer the necessary transparency.

 Remember: Strips are not costly don't hesitate to change them.





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