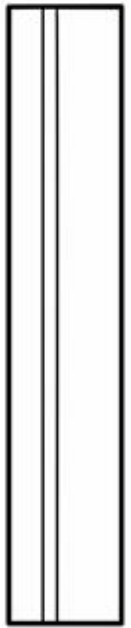
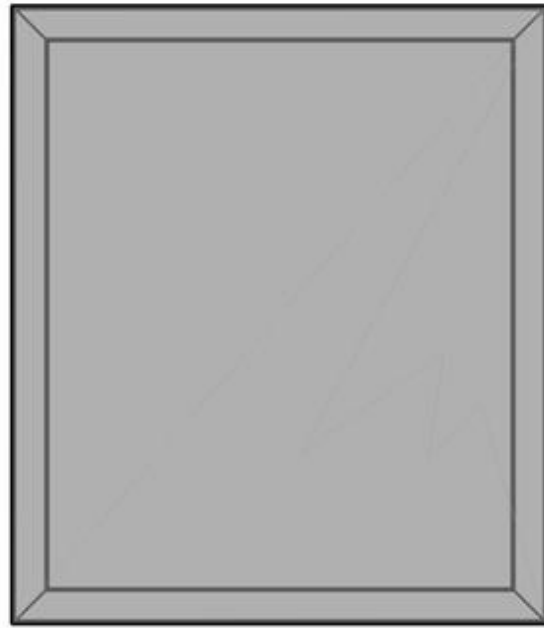
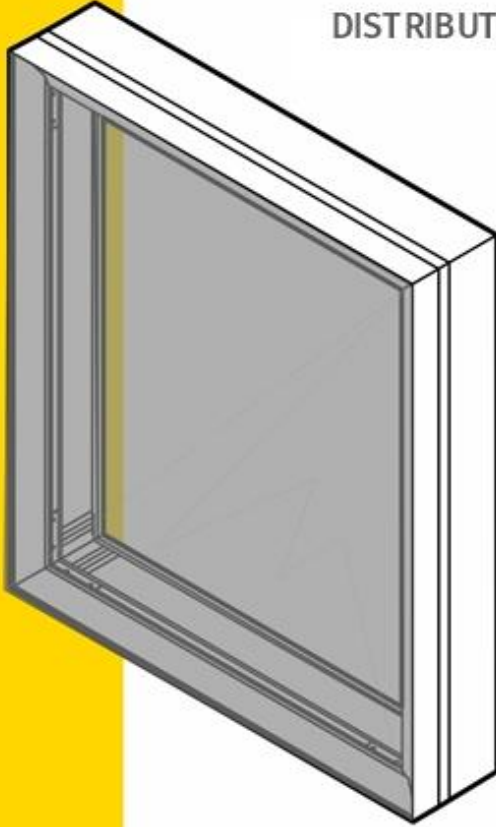




DISTRIBUTOR OF SIGNMAKING AND CONSTRUCTION MATERIALS



# ***FLEXFACE***

## ***SYSTEM***

**A SINGLE-SIDED PROFILE THAT IS USED IN CONJUNCTION WITH VINYL FILM TO CREATE LARGE-SCALE ADVERTISING.**

## CONSTRUCTION INSTRUCTIONS FOR LARGE FORMAT ADVERTISING

This manual has been created to provide general guidance on the construction of advertisements using the FLEXFACE system. This manual does not supersede any previous technical data or manuals already available that pertain to any FLEXFACE product line.

The assumption of this manual is that the user already has a working knowledge of the manufacture and installation of advertisements and of all required tools. Dencop assumes no responsibility for any loss of product in use while working with the materials contained herein.

The following tools are included:

A frame saw with a blade diameter of 35 cm or greater, equipped with a carbide blade of not less than 84 teeth

A smaller saw of similar size and blade

Electric power drill

Screwdriver

Blades for trimming sail

Other standard hand tools such as screwdrivers, hammers and wrenches

The tension lever can be purchased directly from us at Dencop Lighting Ltd.

## HINGED SINGLE-SIDED BOX CONSTRUCTION

### STEP 1

Contact your Dencop Lighting sales representative and ask for a complete quote on the size of your box.

### STEP 2

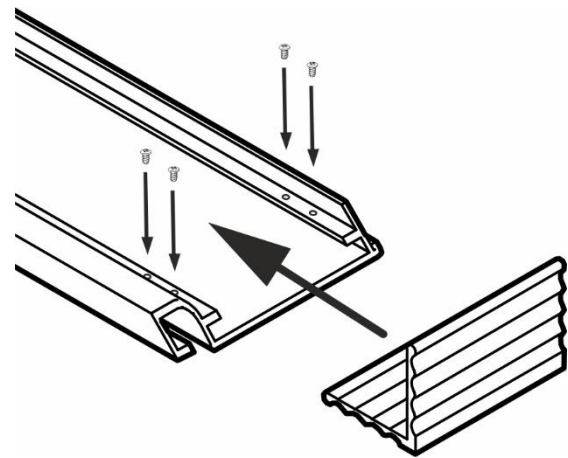
Before assembly, check all drawings and carefully measure and cut all parts. Cut the side panels at a 45° angle.

### KROK 3

Single corner brackets are installed by placing the bracket in the open section of the infill. The main guides are routed into the infill and corner brackets to ensure a seamless corner installation.

Drill a total of 4 3.5mm diameter holes through the filler flange and corner brackets. Take care to keep the corner brackets in the correct position.

Also take care not to drill through the profile. Follow this procedure when fitting all corners. For a box with a total depth of 200 mm use corner 65900 and for a box with a total depth of 250 mm use corner 65901. The designation of the correct screws is 65930.



**ATTENTION!** – Before screwing all corners together, insert the single-sided rear banner holder inside the side panels.

### STEP 4

Once all corners are ready, install the sheet metal backs into the bottom groove of the sidewall. To accomplish this, position the box so that the rear flange is facing you. With the slots in this position, the back sheet metal can be attached to the filler and secured to the cab back flange and slots. Subtract 9mm from the ad size to ensure proper attachment of the back plate. Fasten the back sheet with rivets.

### STEP 5

Cut the tension frame 65115. The frame cover 65113 should be cut at the same time as the tension frame to achieve good quality corners as well as a proper frame to sidewall fit. To protect the painted frame during test fitting, do not use screws but tape. Tape the covers firmly in place, approximately every 15 cm. Remove the tape again before final assembly.

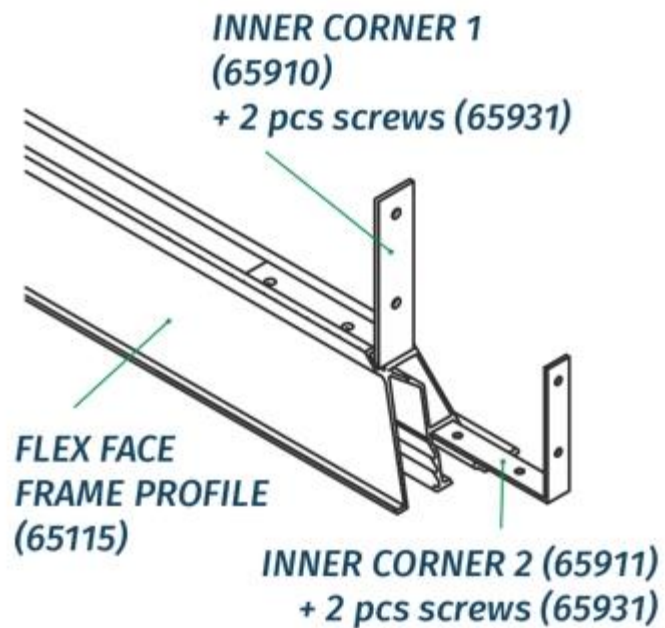
**STEP 6**

Next you have to screw down the 65115 profile.

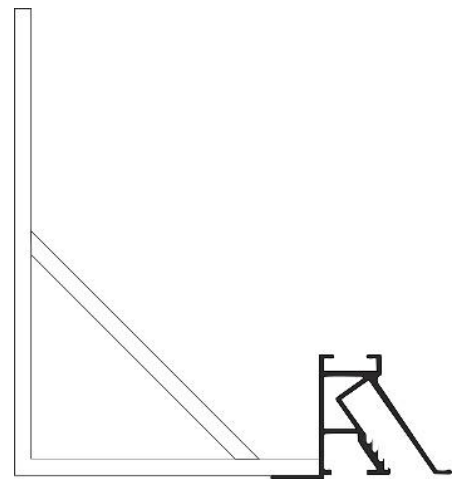
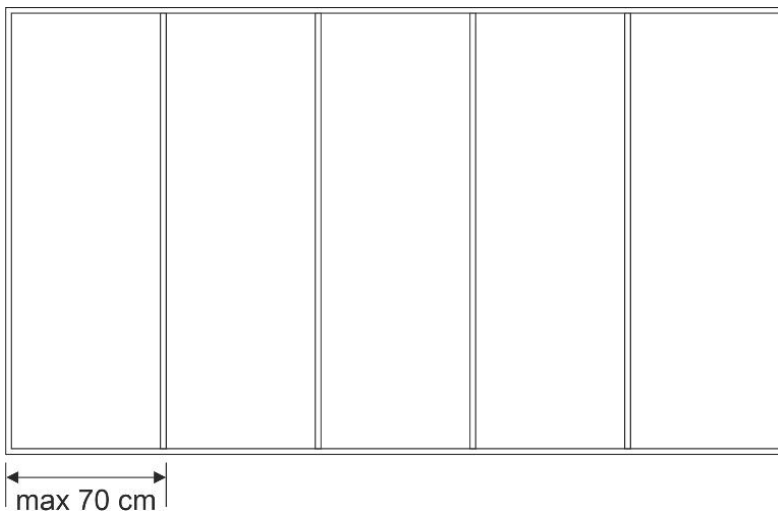
According to the picture, insert the inner corner 65910 into the groove and screw together 2 screws 65931 on each side.

Next, you insert the second corner 65911 inside and also screw it on each side with 2 screws 65931.

Repeat this process for the remaining corners.

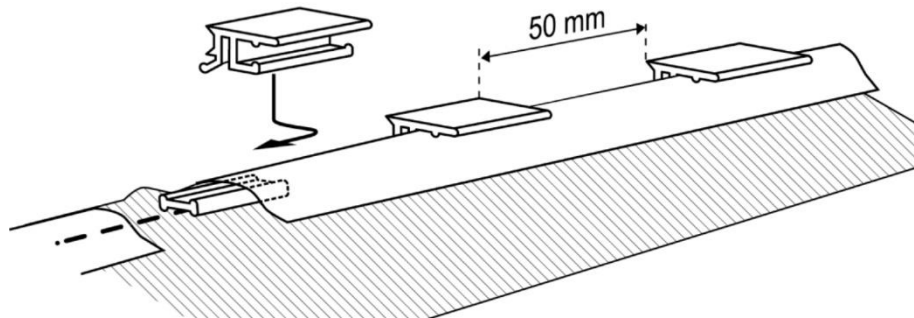
**STEP 7**

To reinforce larger boxes, we recommend creating a construction of square tubes inside the ad to reinforce the entire box. You will need 20x20 mm steel screws for the inner structure. The steels will be placed vertically in the box, with gaps of no more than 70 cm. It is also recommended to support the top and bottom sides with steel at a 45° degree angle.

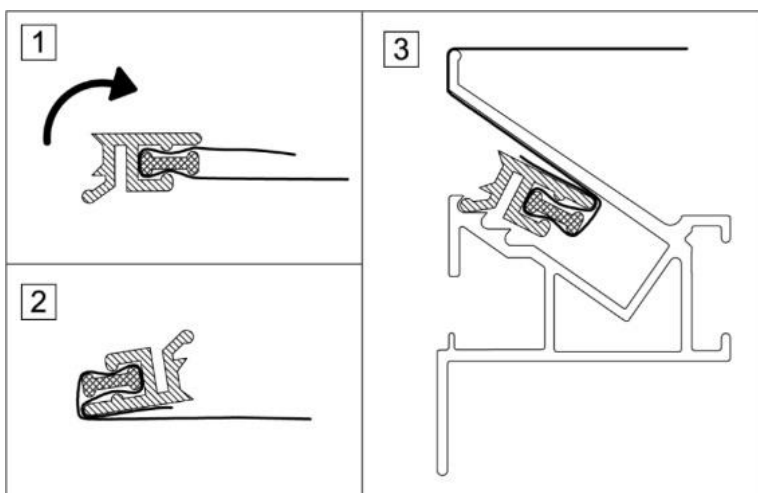


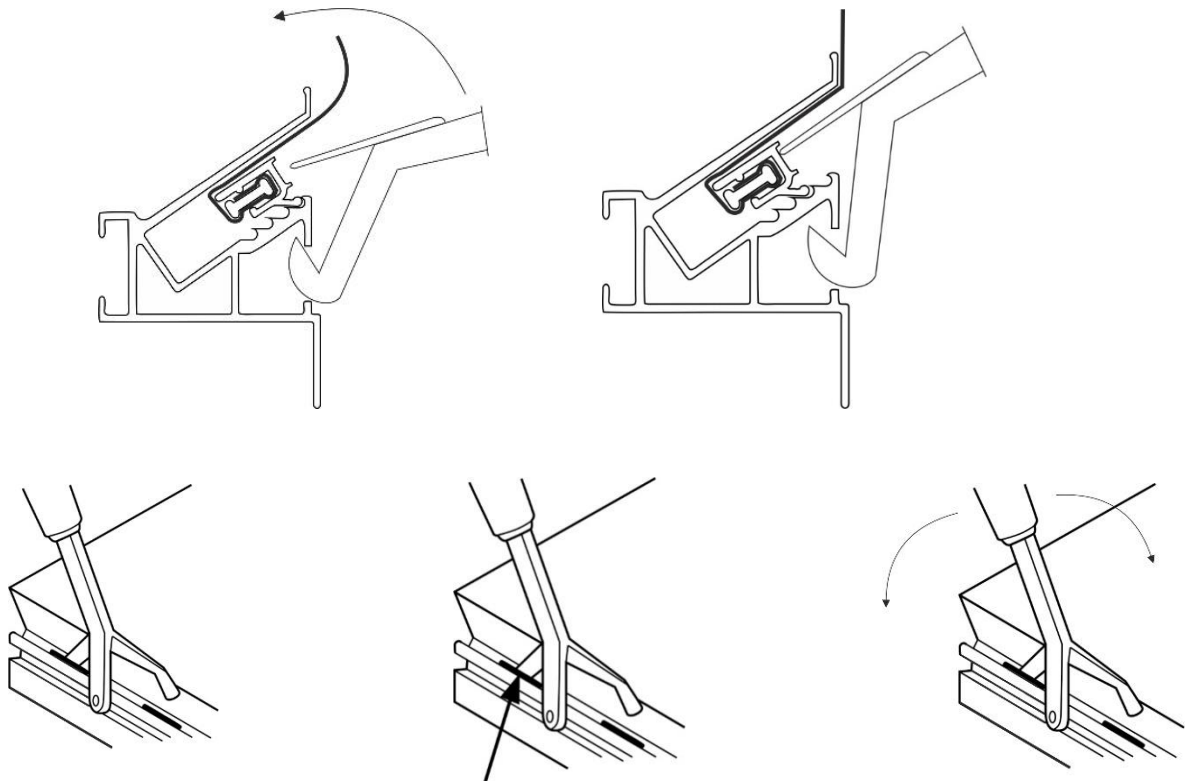
**STEP 8**

Following the plan, fold the FLEXFACE vinyl along the placement lines and install the clips over this folded edge first. The vinyl is held in place by the clips and bar. This bar is positioned between the bends of the vinyl. It is properly installed when the gutter is placed facing the direction of the front of the sign. The clips and bars should be approximately 50 mm apart. Repeat this process until all clips and bars are installed. In some applications, such as bordered advertising, a tie wire may be required.

**STEP 9**

Place the vinyl on the tension frame. Tuck all clips/bars into the gutter of the frame. The face is now ready for tensioning. Begin aligning the center clips in the center of the frame. As you begin this process, position the pivot point of the tensioner as described in the section - USING THE FLEXFACE TENSION LEVER. Place the blade of the tool between the coiled vinyl and into the gap of the tensioning profile. Push the clip/bar into the frame by "crimping" the tool until it clicks into the frame. Remember, you must start working from the center of the frame on all four sides. To loosen or remove the face of the ad, press the edge with the flat of the tool blade and pull the face out of the frame. To tighten the ad face, push the clip/bar deeper into the ad frame. A standard screwdriver will also work as a tensioning tool, although you will need to use a mallet in areas where the face will need more tension. Just be careful not to use the screwdriver to break the canvas!





### STEP 10

Once all clips are properly seated and the vinyl is sufficiently tensioned, install the 65113 tension frame cover. The cover has a 3.8 cm box on the frame. Drill holes along the frame every 100 cm apart and tighten the screws. Remember that when anchoring the frame, you must proceed from the center to the edges, or from one edge to the other.

### STEP 11

The box frame is complete. Now you need to attach the tension frame to the sidewall. Drill holes for screws no more than 50 cm apart along the top of the ad and 100 cm apart on the bottom and sides of the ad.

### STEP 12

To service and maintain the electrical components, remove the screws from the bottom and both sides of the ad only. Leave the top part fixed.

## CONNECTING THE PROFILES

All profiles, both tension and sidewall, can be connected. You can connect the profiles by inserting a strapping into the inside and screwing with suitable screws. It is ideal to secure the joint with a weld or Monolith structural adhesive.

## TENSIONING GUIDE LINES

### STEP 1

Vinyl signs made from the FLEXFACE frame require precise measurements to ensure a good fit. Always base the overall size of the sign on the dimensions.

**NOTE:** If you are line marking a surface on the banner that is not protected by a special coating, use only soluble markers. Never write on a banner with a ballpoint pen. The pen destroys the surface and cannot be repaired.

### STEP 2

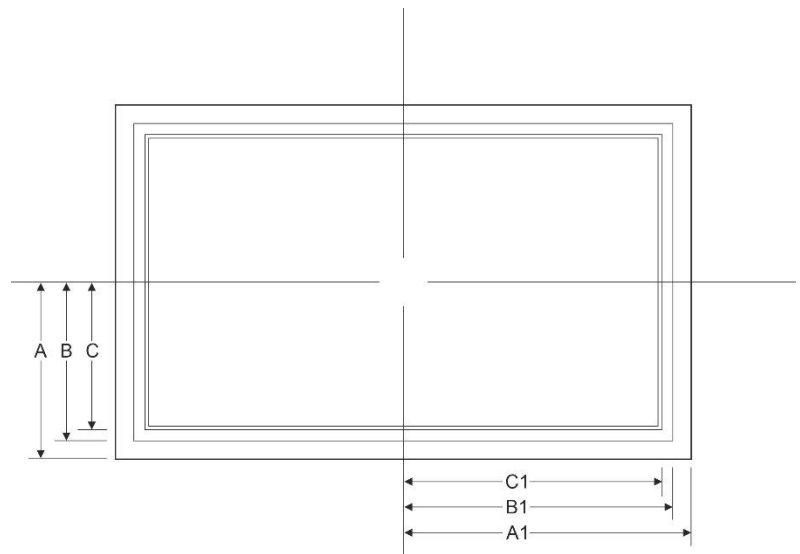
Determine the central point and central lines. Measure the height and width from both sides of the sign for accuracy. (C, C1)

### STEP 3

Add 4.5 cm to the height and width of the sail. Example 183 cm x 366 cm, the advertisement is now 187.5 cm x 370 cm. Here will be the edge of the clip. (B, B1)

### STEP 4

Now add an extra 3.2 cm to both sides of the height and length. Example 187.5 x 370 cm will now be 190.7 x 373.2 cm. The mark on the outer edge is the "Vinyl Cut Line" and indicates where to cut off the overlapping vinyl before actually installing the sign face into the frame (A, A1). For simplicity, it is sufficient to always count on a 20 cm larger banner on both sides than the actual box dimension.



## USE OF THE FLEXFACE TENSIONING LEVER

- Place the starting point of the tool along the hoop and put it in the position shown in the picture.
- Make sure the tool blade is positioned inside the groove that is on the back of the Bar.
- Rotate the tool in the direction of the arrows towards the clips.

## LIGHTING CALCULATION

For the illumination we recommend our DNH LED modules for 230V with an input of 2,5W.

For a depth of 200 mm, use a central spacing of the LED modules of 200x250 mm

For a depth of 250 mm use a centre pitch of LED modules 250x300 mm.

## STRUCTURAL REQUIREMENTS FOR FRAME REINFORCEMENT

The "FLEXFACE" tensioning allows a beautiful flat surface of the face of the ad, eliminating variations during normal weather conditions, or dilettancies, in the case of ads with a Plexiglass face. During strong winds, "FLEXFACE" holds its form and resists gusty winds. By tensioning "FLEXFACE" on all four sides, the tension is evenly distributed around the perimeter of the box, as opposed to straight-fronted ads where the tension is only on the front face. Therefore, structural bracing must be installed on most frames. The internal bracing of the Flex frame depends on the size and depth of the advertisement.

FRAME SIZE TABLE

		ADVERTISING LENGHT (cm)																																
		60,96	91,44	121,92	152,4	182,88	213,36	243,84	274,32	304,8	335,28	365,76	396,24	426,72	457,2	487,68	518,16	548,64	579,12	609,6	640,08	670,56	701,04	731,52	762	792,48	822,96	853,44	883,92	914,4				
ADVERTISING WIDHT (cm)	60,96																																	
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	304,8																																	
	335,2																																	
	365,7																																	
	396,2																																	
	426,7																																	
457,2																																		

Aluminium tubes are suitable for structural support. Use only steel supports beyond this marked limit.



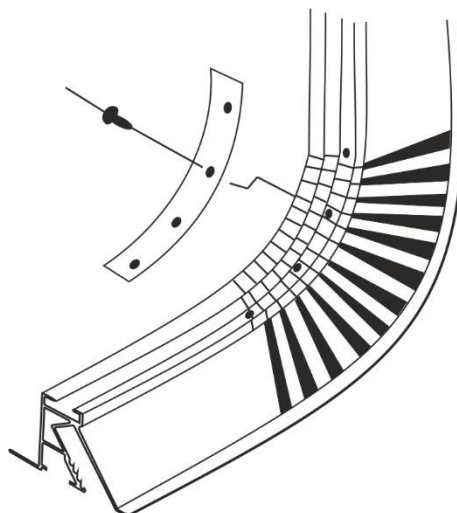
## FORMATION OF RADIUS CORNERS

Creating round or radius corners is a simple process when using a tension frame system. The method described below allows the production of any desired radius size.

**Note:** All of the following cuts are recommended to be made with a band saw only.

### STEP 1

With the bandsaw at right angles to the table, set the depth of the bandsaw to approximately 7 mm above the cutting table.



### STEP 2

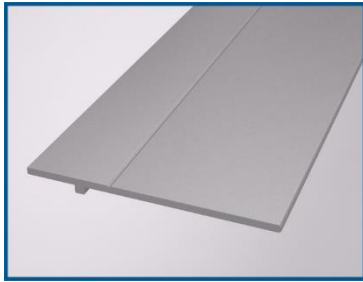
Prepare your tension frame for cutting and decide how far apart you want the notches. The spacing of the notches depends on the radius you want, but the average distance between notches is 2 cm, except on large radii, in which case the spaces are set at 10% of the radius. For example, a radius of 60 cm will require a space every 6.0 cm (see the table of notch spacings).

### STEP 3

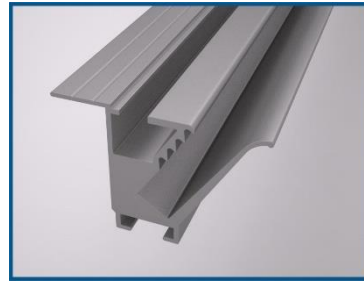
Before creating the radius, insert a 9mm x 19mm piece of coloured steel or aluminium into the gap used for the bracket supporting the frame. Anchor one end as you would for a corner bracket, and then simply bend the frame over any round object, such as a pipe, and secure by anchoring a piece of metal along the inside radius - see picture to create extra support for the corner radius.

RADIUS	DISTANCE OF NOTCHES
30 cm	3 cm
25,4 cm	2,54 cm
22,9 cm	2,22 cm
20,3 cm	2 cm
15,2 cm	1,5 cm

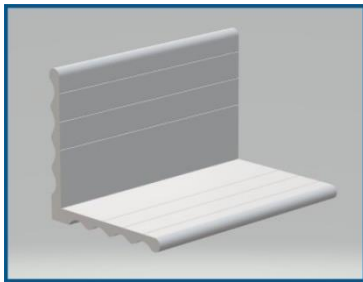
We do not recommend making smaller notches than those shown here.

LIST OF MATERIALS USED – all available on the e-shop: [www.dencop.cz](http://www.dencop.cz)

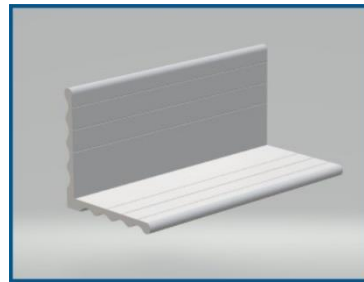
Code: 65113  
COVER STRIP 6528  
(6 m)



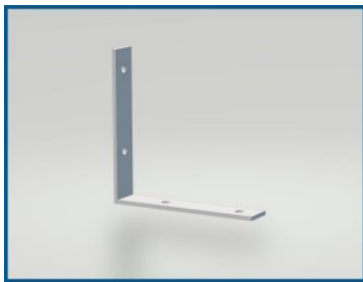
Code: 65115  
FLEXFACE FOIL REINFORCING PROFILE RAW 7144  
(6 m)



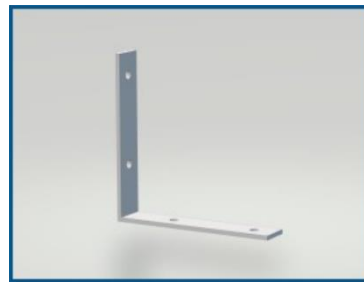
Code: 65900  
INNER CORNER FOR SIDE PROFILE 20 cm



Code: 65901  
INNER CORNER FOR SIDE PROFILE 25 cm



Code: 65910  
FLEXFACE INNER CORNER 1 PROFILE 19 mm



Code: 65911  
FLEXFACE INNER CORNER 2 PROFILE 13 mm



Code: 65930  
FLEXFACE SMALL SCREW FOR THE INNER  
CORNER 3,9 x 9,5 mm



Code: 65931  
FLEXFACE SCREW FOR INNER CORNER OF PROFILE  
3,9 X 13 mm