

NEON-SERVICE

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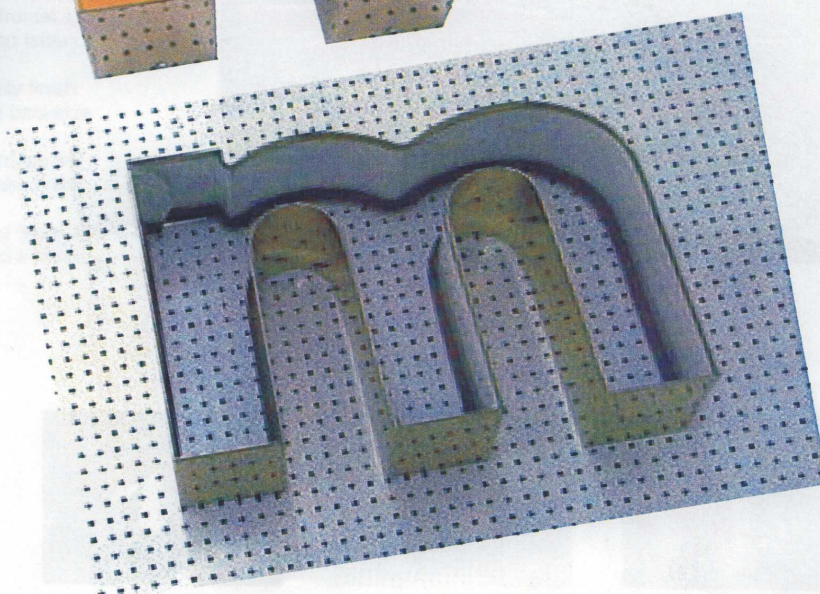
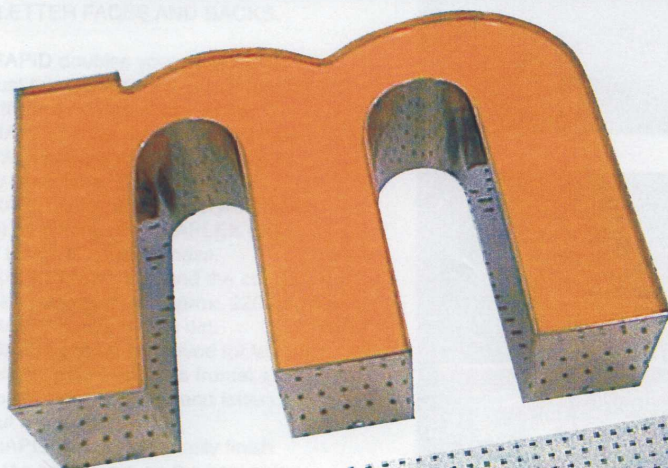
TEL./FAX. ++48 33 8123608, 8119416

Http://www.neon-service.pl. E-mail: Info@neon-service.pl.

MOUNTING INSTRUCTIONS FOR CHANNEL LETTERS

ALURAPID[®]

PAT.



QUALITY
MANAGEMENT
Certificate

Voluntary participation in regular
monitoring according to ISO 9002



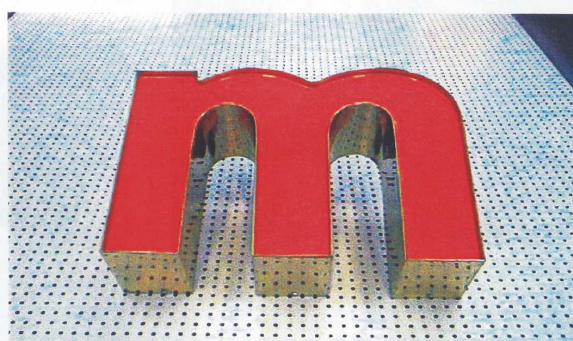
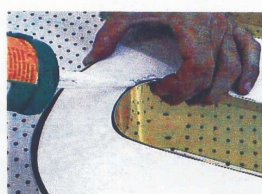
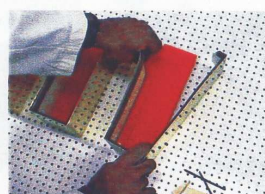
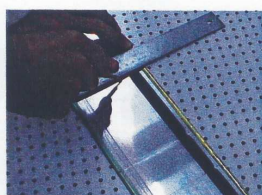
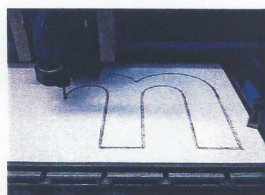
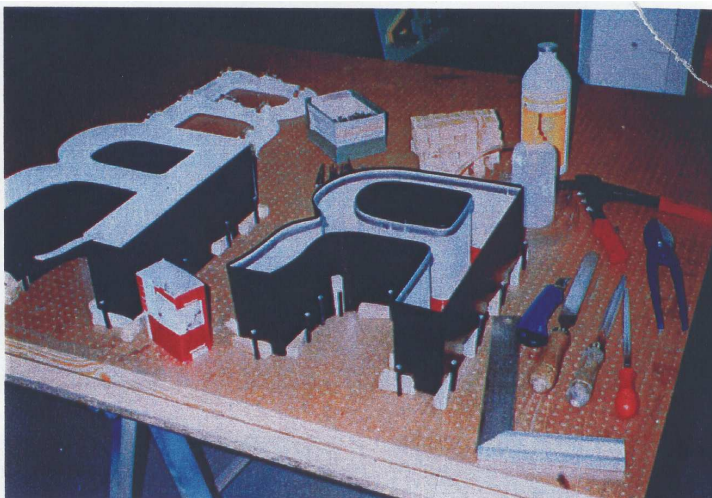
O.E.M.
ORIGINAL
EQUIPMENT
MANUFACTURERS

ALURAPID

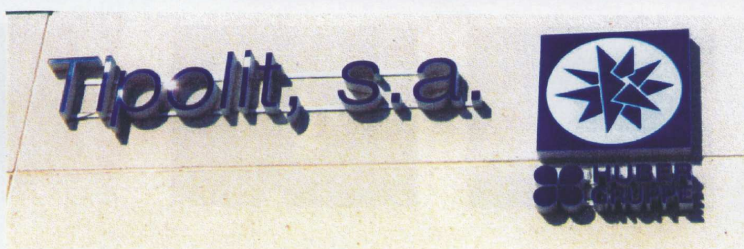
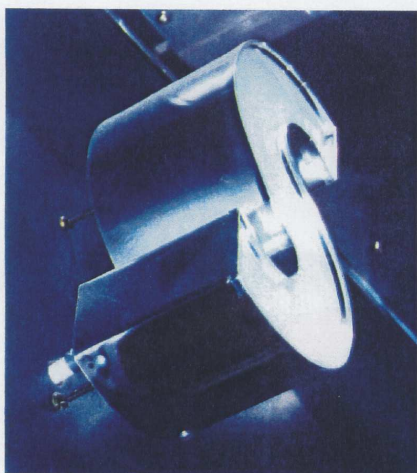
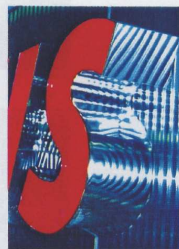
Signs can be magic!

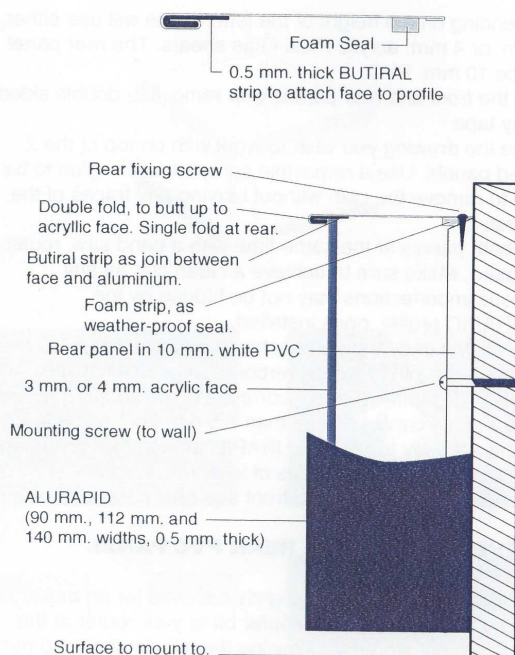
ALURAPID IS ENGINEERED FOR CHANNEL-LETTERS UP TO 125 CM. AND SMALL SIGNS ELIMINATING SHEET METAL AND PAINTING. CAM OR BANDSAW CUT LETTER FACES AND BACKS.

ALURAPID doubles your productivity with just the same staff due to the quick and efficient making of any letter. ALURAPID can be easily shaped thus obtaining designs of great intricacy in a very short time. Easy to learn. ALURAPID is fixed to the acrylic sheet (Plexi) by means of COLAPLEX and never loses its adhesiveness. ALURAPID is stainless and the colour has been baked on at approx. 220 degrees. ALURAPID hardly shows dirt. ALURAPID can be employed for letters with visible neon, using as frontal a transparent acrylic sheet and letters without illumination. ALURAPID has a high quality finish since the screws are on the backside of the luminous body. ALURAPID is extremely light, so the luminous items can be installed with minimum effort. ALURAPID is sold in coils of 50 m. in 3 widths and 11 different stock colours. Custom colours on request.



Customer service and quality guaranteed since more than 25 years worldwide with technical assistance. For assistance with additional information contact our factory or ask for our distributor in your area or country.





ALURAPID

Stainless aluminium profile, 0.5 mm thick, with a strip of BUTIRAL (plastic type) tape to seal the face, and a foam strip to seal the rear.

COLOURS

The outer side of the profile comes in various colors: matt black and matt white, bronze, metallic silver and gold, navy blue, red and grey, and anodized gold or silver. The painted finish is oven-baked at 220° C., which guarantees it against all weather conditions, including tropical heat, salt-water, etc.

FACE

3 mm. or 4 mm. acrylic Plexi-Glas plastic, from the full Plexi-Glas range of colours.

REAR

10 mm. "Konmacel" rigid PVC foam.

WIDTHS AND PACKAGING

There are 3 available widths for the profile: 90 mm., 112 mm., and 140 mm. (112 mm. being the standard). All profiles come in 50 m. coils, packaged in 65 cm. x 65 cm. x 14 cm. cardboard boxes, with weight dependent on width, as follows: 90 mm. = 11 Kg.; 112 mm. = 12 Kg. and 140 mm. = 13 Kg.

APPLICATIONS

Suitable for serial production of even highly complex text and logos, due to its great flexibility, hence its ease of use and the speed with which it can be manipulated. Furthermore, the finished product hides all details of structure, and the final anchoring screws are out of sight at the rear of the letter or symbol.

PROFITABILITY

Production quotas can be doubled, due to a very simple and efficient shaping process. The acrylic sheet is set with Cola-Plex (approximate drying time: 20 mins.) Maintenance and cleaning are very simple, and the installation does not require specialised labor.

TOOLS

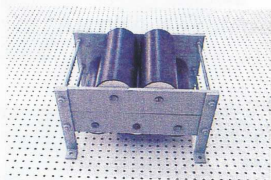
BASIC KIT

"Letter-Set" toolkit, including:

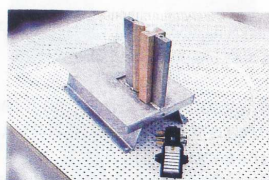
- Bending Roller.
- Aligning tool.
- Manual or Hydraulic Bender.

OPTIONAL EQUIPMENT

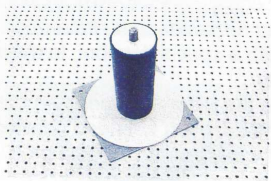
- Peg-board Work-Bench 120 x 120 cm. with ruts and pegs.
- Bottel of Cola-plex



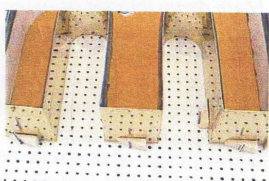
Smoothing Rollers



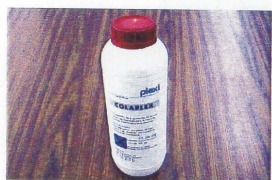
Pneumatic Bending Tool



Curving Roller

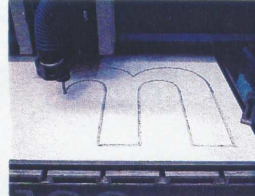
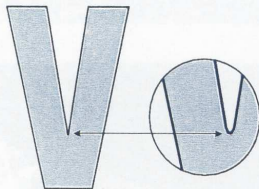
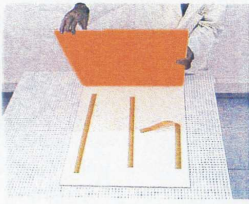


Wooden Pegs and Pins, to mount parts on work surface.



Bottel of Cola-Plex.

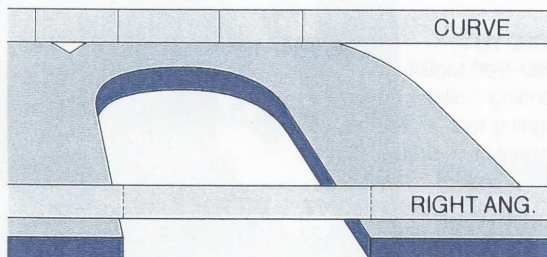
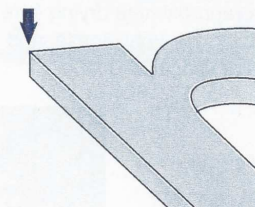
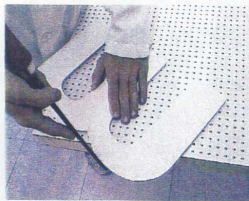
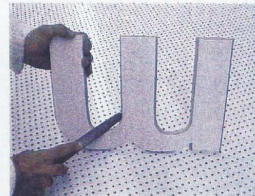
LETTER BUILDING



SHAPED REAR PANEL



BEVELLED FRONT PANEL



1. SHAPING OF FRONT AND REAR PANELS

- Depending on the height of the letters, one will use either 3 mm. or 4 mm. acrylic Plexi-Glas sheats. The rear panel will be 10 mm. PVC.
- Join the front and rear panels with removable double sided sticky tape.
- Place the drawing you wish to work with on top of the 2 joined panels. Use a removable spray-mount or glue to be able to remove the plan without leaving any traces of the adhesive.
- Cut both panels at the same time with a band saw, router, or jigsaw. Make sure to achieve a clean cut, as any obvious imperfections may not be hidden by the ALURAPID profile, once installed.
- For N's, V's and W's, try to achieve a minimum radius of 3 mm. at the join between vertices, so as to allow the ALURAPID profile to adapt correctly to the shape.
- Try not to cut curves at less than 2,5 cm. from any corner, as it is not easy to bend ALURAPID at a shorter distance.
- Try not to cut a curve radius of less than 2,5 cm.
- You may now separate the front and rear panels.

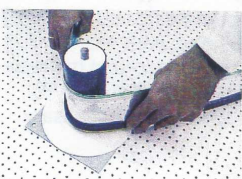
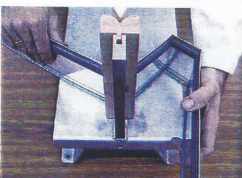
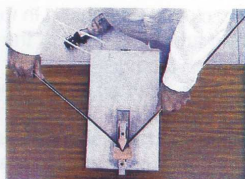
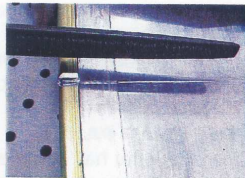
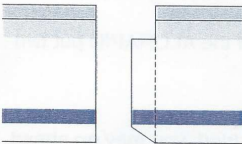
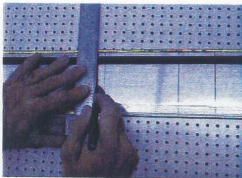
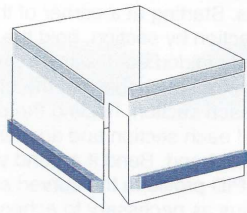
2.- BEVELLING OF THE REAR PVC PANEL

- The rear panel should be slightly bevelled for an easier fit within the profile. Fit a chamfer bit to your router at the height of your work-top, allowing the axis to show 1,5 mm. above the surface, this will act as a guide for you to follow.
- If the drawing is facing up as you cut the letter, you should make sure that the smaller face of the bevelled letter also lies upwards.
- Apply downwards pressure to the PVC panel against the table-top and move it steadily against the router bit, in the opposite direction to the rotation of the bit.
- With a file, add the finishing touches to the areas where you were not able to bevel with the router.

3. MEASURING OF THE PERIMETER OF THE LETTER

- Measure the letter, with it facing upwards.
- Use a transparent BUTIRAL tape to take your measurements.
- Start measuring from an upper corner (if possible) to allow the join of the ALURAPID profile to become invisible.
- Follow around the letter in an anti-clockwise direction.
- Mark down interior or exterior corners as usual, but for curves mark the beginning and end of each curve and differentiate between them with a special symbol, to avoid confusion with a normal corner.
- For letters without corners, like the letter "O", measure out approximately the amount of material you will need, leaving a 2,5 cm. tab at one end, and apply the ALURAPID profile around the letter, cutting off any excess material.

LETTER BUILDING



- g) When you measure the center of a letter, reduce the measurements a little, to ease installation.
- h) When working with larger shapes, try to keep any length of profile to under 300 cm. If the letter requires a greater length of ALURAPID profile, it is recommended to make it in two or more sections.

4. TRANSFERRING THE MEASUREMENTS ON TO THE ALURAPID PROFILE

- a) Once you have measured the letter, place it facing upwards. Lay down the ALURAPID strip, with the folded edge closest to you. Place the perimeter measuring tape at the left end of the ALURAPID strip and transfer all marks and symbols to it, from left to right.
- b) Take care to differentiate between interior and exterior bends, and interior and exterior curves, to avoid possible confusion.
- c) Use a square and a scribe to score a superficial line at each bending point of the ALURAPID profile. You do not need to score the curve marks.
- d) Cut a tab as shown in figure 18.
- e) Use a 6 mm. triangular file to cut down interior bends in the folded edge of the profile, but never the exterior bends.
- f) Both ends should be bevelled if the join is at a corner, if not leave both ends squared.

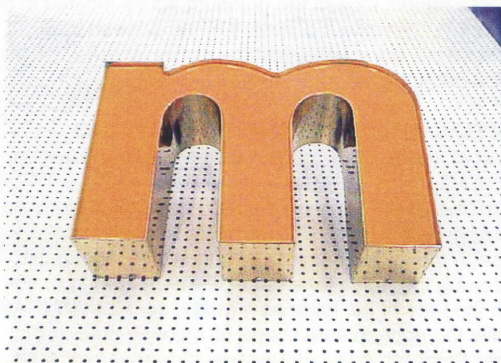
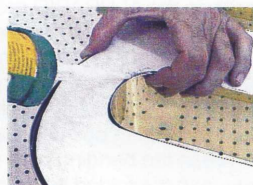
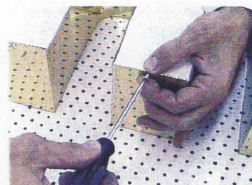
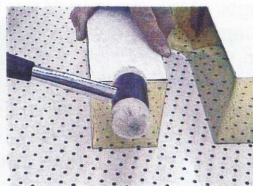
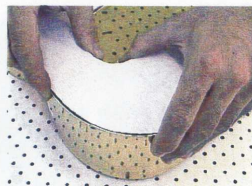
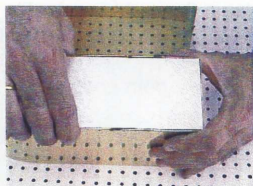
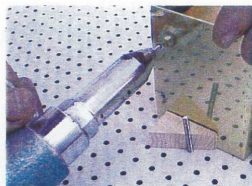
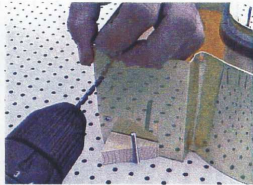
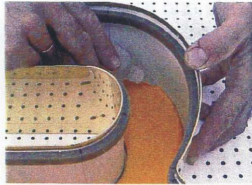
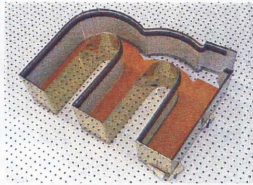
5. BENDING WITH THE BENDING TOOLS

- a) For external bends, place the ALURAPID profile between the bars of the Bender, with the folded edge facing upwards, and with the scored white face of the profile against the sharpened bar facing you.
- b) Depress the pedal gently. As the resting bar touches the ALURAPID profile, make small adjustments to adapt the material to the bending machine.
- c) In order to make reverse (internal) bends, place the ALURAPID profile between the bending bars, with the painted side facing you, and the folded edge facing downwards. Align the score mark with the sharp edge of the bar. Gently depress the pedal, and as the resting bar touches the ALURAPID profile make your adjustments to adapt the material to the bending machine.
- d) Only make 90° bends, increasing or diminishing the angle later by hand, as necessary.
- e) If you find it difficult to apply reverse bends to the profile, as described in point c), place the ALURAPID profile between the bending bars with the painted side facing you, and the folded edge facing upwards.
- f) To minimize the risk of breaking the folded edges in the reverse bends, loosen the pressure screw located in the front of the bending machine, leaving a 3 mm. gap between the bars. Re-adjust the screw later for the better definition of the external bends.

6. INITIAL ADJUSTMENTS FOR FITTING

- a) Bend all corners manually to achieve an approximate correct fit.
- b) If the sharp internal bend definition is not sufficient, as for example in the letter "N", use pliers to apply pressure close to the folded edge, to enhance the bend angle.
- c) Following the notes taken from the template tape, and with the face of the letter as a guide, give the ALURAPID profile the approximate shape all the way around the letter. Proceed all the more carefully with curves with smaller radiuses.
- d) At this point the ALURAPID profile should have taken on the shape required by the design.

LETTER BUILDING



7. ACHIEVING A PRECISE FIT

- Before trying to glue the letter shape to the profile, be sure to eliminate any remaining imperfections.
- Place the face of the letter on the work top, securing it with the aid of pins. Starting at a corner of the shape, and moving forward section by section, hold the ALURAPID profile in place by its folded edge with one hand whilst molding it to that length of shape with the other hand. Carry on around each section, holding the profile in place at the beginning of each section and adapting it to each length with the other hand. Bend it around your fingers to adapt the ALURAPID profile to the curved sections, tightening the radius as necessary to achieve a good tight fit. Proceed all the way around the shape, making sure that the fit is such that it may be glued in the next stage.

8. GLUING THE FACE TO THE PROFILE

- When fixing the face to the ALURAPID profile, bear in mind that you are fixing that face to a 5 mm. plastic strip, located within the folded edge of the profile and protruding along its flat inner side.
- Apply the glue with an appropriate applicator, tracing a welding line along the length of the join between the acrylic sheet and the strip.
- Allow it to dry for 30 min. before removing the letter from the table.
- In order to close the two ends of the ALURAPID put two rivets through pre-drilled holes.

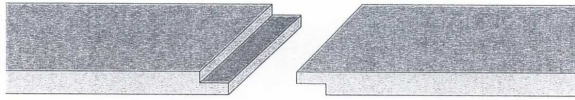
9. THE REAR PANEL

- Once the letter has completely dried, you may go ahead with the mounting of the rear panel. This should be able to slide into place easily.
- Check that each bend in the profile is even between the front and rear edges of the profile, at a perfect right angle to each face.
- Use the letter as a guideline, and start shaping the curves to fit the rear panel.
- Once you have shaped the letter, insert the rear panel, using a rubber or nylon mallet to help the fit, if necessary.
- Once you are sure that the rear panel has a correct and easy fit, remove it, wipe it down, and replace it within the profile.
- Use sandpaper or a file to adjust any areas that appear to have too tight a fit.
- Make 3 mm. holes at the fixing points and install 4 x 1/2" sheet metal screws.
- The rear panel should be flush to the rear edge of the ALURAPID profile.

10. TOUCHING UP LETTERS

- If you paint all screws and rivets before installing, you will avoid a lot of unnecessary touching up later on.
- Seal all cracks and spaces caused by incorrect measurements, with silicon or other sealing products.
- Use a foam brush to touch up edges where necessary.

LETTER BUILDING



11. CORRECTING ERRORS

- If, when applying the ALURAPID profile to the front face of the letter, you discover that there is a lack or a surplus of material, reduce either the face or the profile accordingly, by filing, sawing or cutting either down until you achieve the correct fit.
- Correct any imperfections in fit by re-fitting the panel, cleaning that part of the join and applying silicone or sealant.
- If you find that the acrylic faces break repeatedly, use a different thickness of acrylic sheet.
- Make sure that when creating a wedge shape in part of a letter, you rest it on a firm surface.
- If the ALURAPID profile should break, replace the shorter length of profile with a section with tabs at both ends.

12. MOUNTING THE CENTERS

There are 3 different types of center, each one requiring a different mounting procedure.

- For the centers of the letters "D", "P", "R" and "B".
The centers of these letters consist of a straight length of profile and a curved one. Add a tab to the straight part, and bring the curved section round, almost joining them together. Insert the straight edge back through the center of the face, and bend the curved part of the profile in so that it too may pass through the center hole, allowing the folded edge to butt up to the face. Finally glue the tab in place and rivet it.
- For the center of the letter "A".
This consists of 3 straight sections. You may need to take out the foam before inserting the center, and then replace it. Insert the center of the "A" from the front of the face, pinching two sides gently together, until the profile fits through the hole. Allow it to expand back into place, glue it and rivet it.
- For the centers of lower case letters "a" and "e".
More often than not, if the tabbed join is in a corner, it will not be feasible to spring the shape into itself enough to fit it up through the hole. It is better to place the tab in the center of the straight length of profile. Remove the foam lining and replace it at the rear of the face. Overlap the two straight sections to fit the profile through the center of the hole, then widen it out to fit in position, glue and rivet.

13. MAKING ITALIC LETTERS

- We recommend avoiding making italic letters of less than 30 cm. in height, due to the complications involved in the shaping of them. The ideal sizes would be from 60 cm. to 90 cm. in height. These letters can be created in 2 ways. One is to treat each section as an individual letter, with the ALURAPID profile applied all the way around the perimeter of each section. However, having to join the sections together, profile against profile, may truncate the flow of the letter shape, and leave unwanted gaps.
- A far better method, though more complicated, is to cut an overlap in the acrylic and PVC faces, at the join between each eventual section, and to apply the ALURAPID profile to the edge of each section with corresponding tabs its ends. To do so :
 - Cut the acrylic sheet and the PVC into the desired sections.
 - Mount the router bit in the table mounted router, adjusting it to cut down half the thickness of the plastic. Proceed to cut down both ends of each piece so that they may overlap at each join, leaving a smooth finish.
 - Line each section with ALURAPID and screw the tabs (rather than rivetting), so each section can be dismantled individually.

Our Technical Department will be happy to help you with any questions you may have concerning the building of ALURAPID letters, at any phase of their construction.