

## Conference portfolio

### [Workshop]

*Willi Egger*

In accordance to the conference's theme, a workshop for making a portfolio binder has been held. The portfolio was made so it could carry the papers for the conference, such as preprints of the proceedings, additional papers and the carpenter's pencil given to each participant. The construction is made from a single sheet of cardboard with folded flaps along three sides, so that it completely envelopes the content. The portfolio is held closed by a black elastic band.

#### 1. Introduction

A portfolio is a practical solution to keep all information gathered during a meeting or conference neatly in one place. Most portfolios are made from strong material, for instance manilla cardboard. Normally they are built from several pieces, i.e. the flaps are glued onto the back-cover. In this workshop an intriguing design is used, which allows to prepare the complete portfolio from a single sheet of cardboard without the need for glueing.

#### 2. Basic design

In order to understand the mechanics of this type of construction, it is a good idea to make a blueprint first. Although the same principles apply to the version made with cardboard, it is important to understand that the drawing is only in two dimensions. In other words, it does not include compensation for the thickness of the content and the material used for the portfolio. When making the actual portfolio, we will have to compensate for this.

The size of your portfolio is dictated by its intended content. Therefore, the height of your blank cardboard sheet should be height (h) + width (w) of the content. The width is calculated by adding twice the width of the content (w) to the width of the fold-in flap (f).

For the real world portfolio, we will take into

account the thickness of the content. This adds  $2 \times$  the spine width to the width of the sheet.

#### 3. The conference portfolio

In order to determine the size of the portfolio, one first needs to know the dimensions of the content which it should be able to carry.

For the preprints of the proceedings these dimensions are:

- Height = 265 mm
- Width = 210 mm
- Thickness = 9 mm

The space inside the portfolio should always be slightly larger than the actual dimensions of the content, not to mention we have to leave room for our carpenter's pencil.

The final dimensions of the portfolio are set to:

- Height = 275 mm
- Width = 225 mm
- Spine width = 10 mm

When choosing a material for the portfolio, it is important to check that the grain of the material is in the direction **width** axis of the material. The cardboard size should be 500 × 700 mm (width × length).

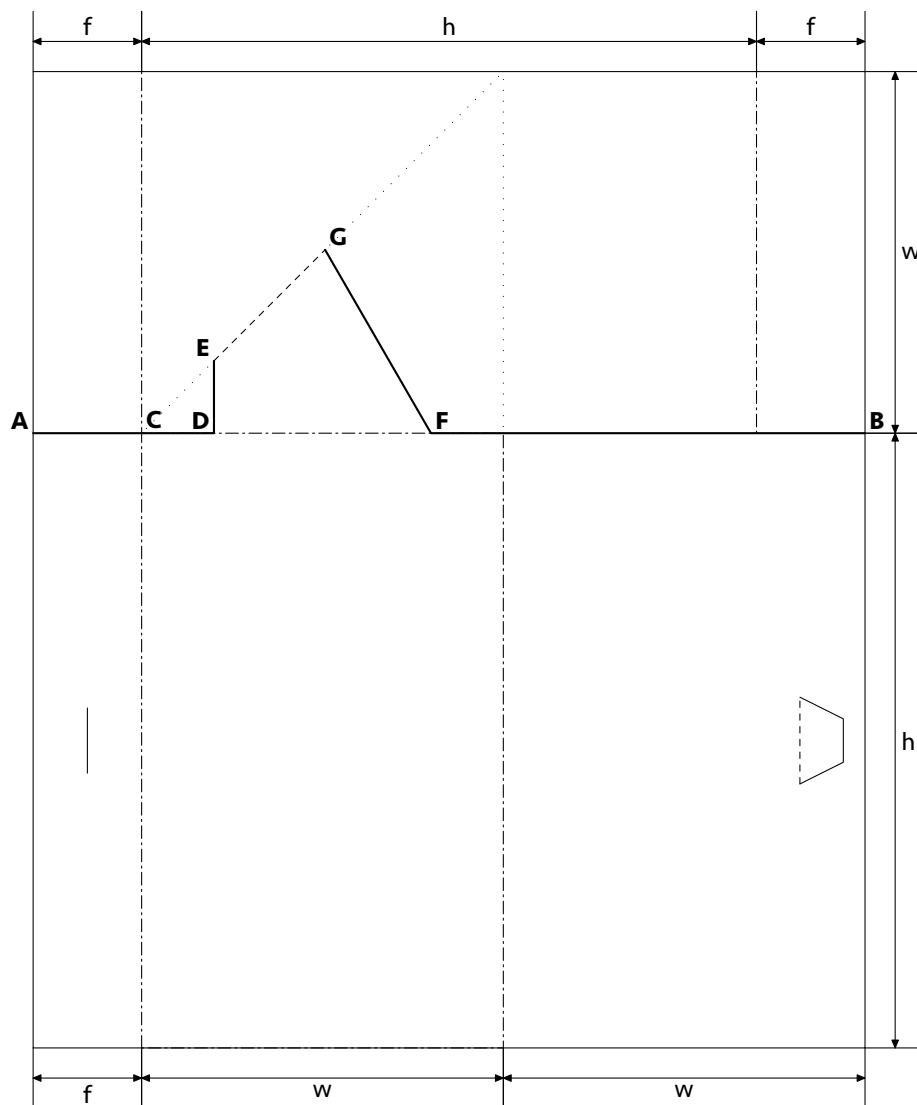


Figure 1: The blueprint for the portfolio

#### 4. Making the portfolio

In order to get good results, make sure to measure and mark precisely ("measure twice, cut once"). For creasing the folds a fairly sharp bone-folder is advised. For cutting, a cutter with snap-off blade is most suitable. The ruler used should be made of steel. Ones made from hard woods such as beechwood are also usable, however one should be careful not to cut into the wood. To make rulers more steady when drawing and cutting, a strip of sandpaper may be glued to the back of them.

When looking at the blueprint discussed earlier, we see we need to compensate for the thickness of the content (in our case, 10mm). In addition to that, we also have to take into account the thickness of the material. The latter is reflected by the fact that point C in the drawing 2 is moved to the right from the inner line of the spine by about 2 mm. Thickness of the material affects overall thickness of the portfolio, and also things such as corner radii, as stiffer materials do not fold as easily.

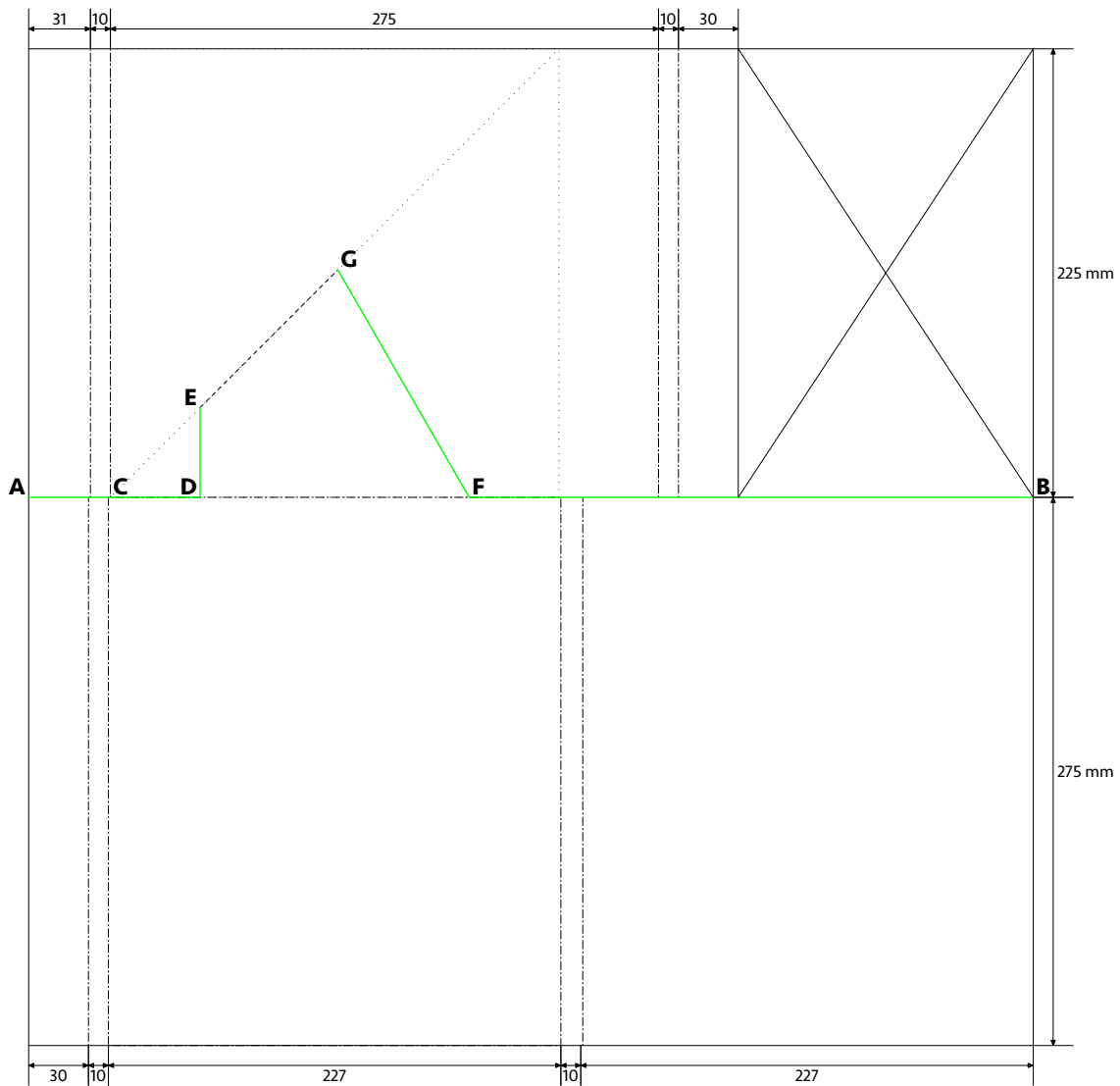


Figure 2: Conference portfolio layout

Correctly creasing the line between points **E** and **G** is crucial. This line must be made at an angle of exactly 45°.

After folding, folds **E – G** and **D – F** should be sharpened with a bone-folder.

For folding narrow spines, it is easiest to put a ruler on the inside along the line you wish to fold. Use a bone-folder to follow the edge of the ruler on the outside. As you drag it along the ruler, you push the material upwards into a straight, clean fold.

The spines are just wide enough to place an-

other crease between the outer spine folds. It is a little more work, but allows the spine to flex if the portfolio contains less paper than the spine width allows for. This guarantees a tight fit when the elastic band is used.

To make the slots used to insert a postcard into the front cover, it is best to prepare a template. The template should be 210 × 160 mm and can be made from a piece of discarded cardboard. Draw a rectangle of 150 × 100 mm, which is offset by 40 mm from the bottom and the right edge. Mark at each angle two points e.g. 15

mm offset along the rectangle's frame. Cut the drawn triangles out of the template or mark the 8 points by punching little holes with a sharp awl. By cutting the triangle a fraction of a millimeter larger than drawn, you can then insert a 150 × 100 mm postcard with ease.

For best results, make your pencil marks as lightly as possible or alternatively use the tip of the bone-folder.

When the portfolio is finished, you could cut the short edges of the fold-in flaps with a bevelled edge.

## 5. The steps for making the portfolio

- Place the sheet in front of you so the widest side is parallel to the edge of the working table.
- Mark and crease a horizontal line at 275 mm from the bottom of the sheet (A – B).
- Mark and crease a vertical line 30 mm from the left edge extending to the already creased horizontal line (A – B).
- Mark and crease a vertical line 40 mm from the left edge extending up to the already creased horizontal line (A – B).
- Point C is 2 mm right of the last creased line. Draw a line upwards at an angle of 45° starting from C.
- Draw a vertical line 80 mm from the left edge on the horizontally creased line (A – B) (D), until it intersects with the diagonal. This intersection point is point E.
- Draw a line starting 210 mm from the left edge on the horizontally creased line (A – B) (F) upwards until it intersects with the diagonal (the angle is not important) (G).
- Cut lines A – D, D – E, F – B and F – G.
- Crease E – G on the **outside** of the cover. Be very careful when doing this crease, or the portfolio will not fold correctly.
- Fold D – F precisely and sharpen the fold with the bone-folder.
- Fold E – G while turning the strip, fold down after precise positioning of the strip with the bone-folder.
- Mark the fold-in flaps at the bottom and top so that they are approximately 2 mm inside the cover after folding. Mark two lines 2 and 12 mm to the right of the fold-in (direction of the height of the portfolio).
- Completely unfold the portfolio. Mark and crease a line 10 mm to the left of the bottom turn in. Mark and crease a line 10 mm to the right of the top fold-in. Crease also the two lines in direction of the height of the portfolio.
- Cut the top fold-in to the width of the bottom fold-in flap (30 mm).
- There are now four small strips of 10 mm marked by creases. Place another crease between the creased lines if you want to give the portfolio rounded spines.
- All creased lines need to be folded now. Use the ruler and the bone-folder for this task.
- Refold the portfolio and fold the flaps towards the inside.
- Close the portfolio. Mark the width of the cover. Open the cover and check that the marks are at equal distance from the front edge.
- Cut the front cover to size. Alternatively you can also fold the oversized flap toward the inside of the front cover. By glueing the edges it forms a pouch.

### Making the closing:

For the closing an elastic band is fixed to the portfolio with two eyelets.

- Punch two holes in the back, approximately 70 mm from the left edge of the cardboard sheet (this is where the longest fold-in flap is).
- Insert the elastic band from the outside inward. Make sure you have about 10 mm of elastic band to spare on the inside.
- Insert an eyelet into the pliers and insert the pin with eyelet from the outside through the hole. Arrange the elastic

band so it aligns with the long side of the portfolio. Press firmly in place with pliers.

- Repeat the procedure for the other hole.

Make the cuts for fixing a postcard (150 × 100 mm)

- Open the front cover and flip the portfolio outside up, the front cover being on the right side.
- Place the template on the lower right edge of the front cover.
- Mark the 4 short diagonal lines. It works best with a sharp awl.
- Remove the template and cut the lines precisely.

- Insert the corners of the card.

## 6. Consideration

The article provides two drawings which enable you to make such portfolios in other sizes. Consider e.g. making a nice wrapping for a present or an invitation. It is also fine to experiment with closings. E.g. a cord could be fixed to the front cover instead of the elastic band and turned around the portfolio. The end is just tucked under the turns of the cord ...

The workshop with the participants was a lot of fun, and very recreational as intended by the theme of this year's EuroTeX.