

## Instructions for Assembling Schempp Boxes



Customers will usually receive their SchemppBoxes as a flat pack. However, we are also able to deliver our boxes in ready-constructed format where desired by the customer. Sometimes the particular design requires gluing, e.g. for large boxes made up of more than one sheet, and these will be supplied glued and folded into the complete box.

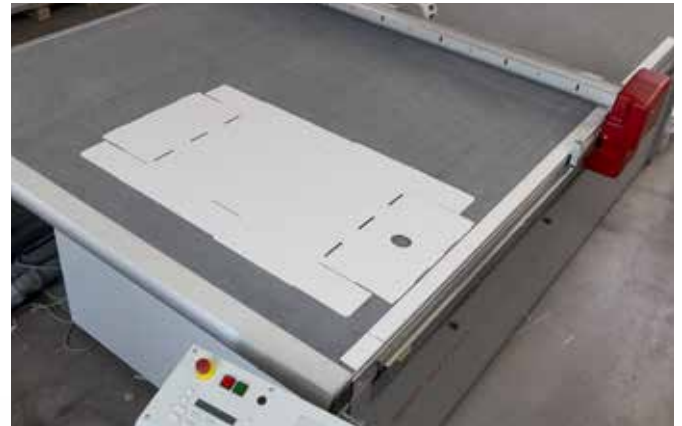
Assembling the boxes is more or less complicated, depending on the design and size of the box. It will require a certain amount of practice as well as a feel for the material which is used.

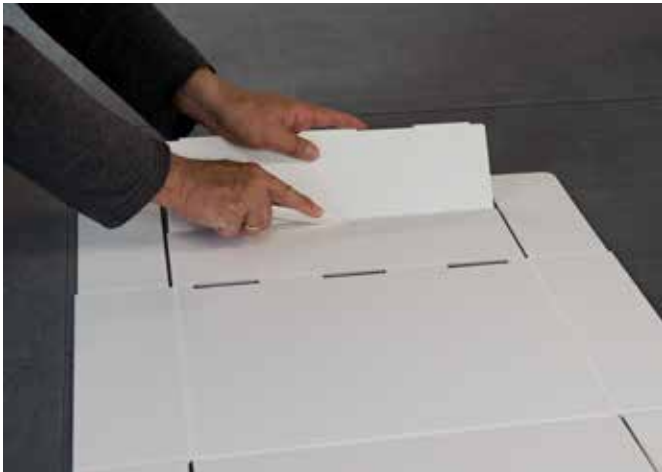
Due to its structure, cardboard does not possess the same dimensional stability as solid materials, like tables from metal or plastic. When creased, these materials would bend at the exact spot where the creasing force was applied. With corrugated cardboard, the way the corrugation runs can cause minor shifts, which affect erecting the box.

The current opinion among experts is that no metal parts should be used if possible and that is largely the wish of today's customer and furthermore that either no glue is used or, where unavoidable, as little adhesive as possible is employed (e.g. for very large boxes, which cannot be constructed from a single sheet of card). Today customers increasingly demand a box which can simply be folded and slotted together. Naturally this has consequences for the design of the box, as this is subsequently more complicated than one which is held together with staples or adhesive. This idea should be kept very much in mind when it is found that the box is somewhat difficult to assemble.

In order to assemble the box structural correctly and to give the finished box a better appearance we recommend that a bone folder is used during assembly.

1. The cutout is laid with the coloured side (grey or blue grey) or the side with additional covering face down onto a smooth working surface. **The work table should be absolutely clean, so that no dirt or damage will affect that side which will later be the outside of the box (e.g. because of dirt or impressions left).**





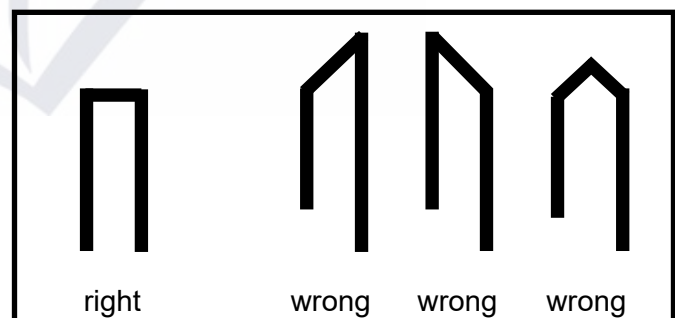
2. Now the cardboard is bent over completely (180°) toward the middle of the cutout along the creased lines. The material has a natural inner restoring force which is thus disabled or at least reduced such that assembly of the finished box is made possible and a perfectly rectangularly-shaped box can be formed. Especially those boxes with long sides tend to bow where this restoring force is not sufficiently broken at these points.

Folding over the side walls of a box is more difficult the longer and the narrower the side is. Long and narrow boxes are particularly vulnerable and there is the danger that the side becomes vertically creased during folding over. Therefore special care must be taken and the folding should be carried out slowly and in more than one step so that there is no danger of too much tension being caused in the material.

**Extra care must be taken where there is a double row of creasing lines.** The material should be carefully folded over and bent along both creasing lines equally. How the material behaves along these lines also depends on whether they lie along or at right angles to the direction of the corrugated paper layer. Double creasings at right angles to the corrugated are largely easier to fold and run evenly.

Where the double creasing rows lie parallel to the corrugated then the card tends to fold over either in only one of the creasing lines or that creases occur across the material between the lines of fold.

**As soon as it becomes apparent that the material will not fold smoothly along these lines, folding should be discontinued and with the help of bone folder the crease lines should be deepened; either the weaker of the two lines or, where folding is outside the fold line, both crease lines.**



The design calls for the material to be folded over to 90° along both creasing lines. These double creasings can always be found where the side wall must be folded over once completely over the entire height to prepare for the later insertion of the lash on the floor of the box into the resulting slot, thereby allowing the box to be constructed correctly.

**This function is then fulfilled when the double creasing is correctly folded over.** Even a small deviation at this point means that either increased tension will be caused to the floor of the box (leading to bending or misshaping of the flaps, that they perhaps overlap, or that the side walls will bend) or it will not be possible to insert the flap into the box floor or that not enough flap will be inserted to give the box stability. Consequently, folding over these double creasing will decide whether the box can actually be assembled correctly at all.



3. The box can now be assembled. Most designs are such that the beginner can clearly see which parts of the construction belong together and in which sequence flaps and double side walls must be folded over each other, in order that each and every piece carries out its task and a stable, finished box is produced.

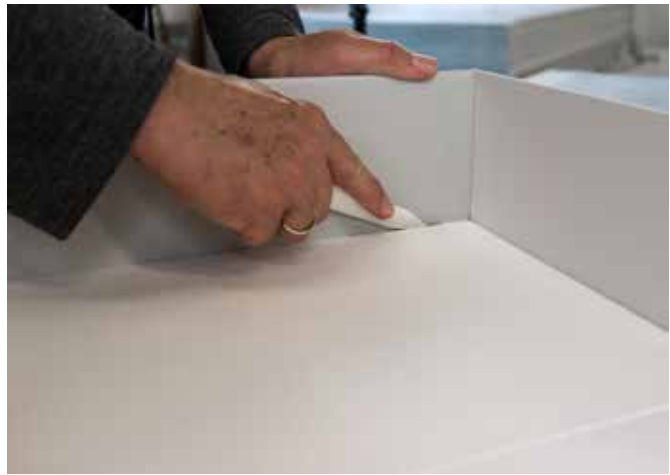


Special instructions relating to the design can be found in the descriptions of the individual box types.





The bone folder is also useful when assembling the box, e.g. in order to press flaps into the correct slot.



4. Finally – where required or where necessary – some more improvements are possible.

– Double creasing lines along side walls which were not absolutely correctly folded over allow a small amount of correction after assembly using the bone folder. Tension in the material can thus be reduced or the stability of the connection enhanced.

– Remaining restoring forces, e.g. at the back of the clamshell boxes, can be reduced by counterpressuring with the bone folder.

– The leading edge of the corrugated card can sometimes be somewhat sharp. This can be avoided by smoothing along the edge with a bone folder.



More informations about SchemppBoxes and about agerestistant corrugated cardboard can be found here:

[www.schemppbox.de](http://www.schemppbox.de)

