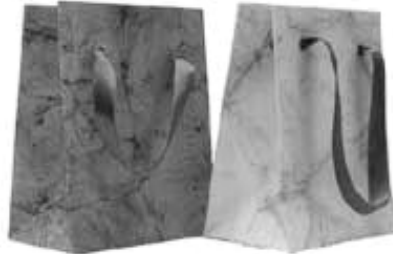


**Manual on:
Handmade Paper Carry Bags**



Introduction:

Handmade paper is a layer of entwined fibers and held together by the natural bonding properties of cellulose fibers. These fibers are obtained from variety of plant species. Each fiber has its own physical properties and lends a peculiar characteristic to the paper. Handmade paper can be classified primarily by the sheet making process.

Origin of Handmade Paper:

The handmade paper manufacturing is one of the traditional industries of the world as its invention in China dates back to 105 AD. However, Indians are credited to have used paper made from cellulose fibers even during 3rd Century B.C. Prior to this period while the leaves of palm trees were the medium of writing in India, ‘Papyrus’ made from similar named reed that grew on the banks of Nile river in Egypt was stated to have been the medium of communication of Egypt.

Handmade Paper, which had flourished in India since the Moghul period, is very much in demand even today.

Handmade paper - Specialties:

Handmade paper is Eco-friendly, bio-degradable, 100% wood free product which has a recycling value as it is made up of cloth rags and agricultural wastes thus contributing in saving trees, and preserves ecology. It has a long product life, i.e. more than 100 years and is unique in texture. It has high tensile bursting, tearing and double fold strength as compared to mill made paper and it does not turn brittle due to aging.

A brief description on how to make handmade paper in your own home or your classroom is reviewed under ‘*Making Handmade Paper in 10 easy steps*’ on page 3.

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Assembly Procedure for HMP Carry Bag: (*Medium sized bag – tall orientation*)

See hand sketch of steps on page 5

1. First make the $L1 = 1''$ fold along the top; this represents the strengthening for the carry-bag handle (made out of sturdy but attractive jute rope/strings).
2. Make the $L2 = 2.5''$ and $L3 = 0.875''$ folds, for gumming at Edge 'A', as shown in the diagram; ensure that the bottom edge is perfectly aligned, and all paper size error to appear at the top.
3. Paste along the fold at edge 'A' so that we get about 2.5" 'box' width, and allow to dry completely, before the next folding operations.
4. Make sure that the box is absolutely square; then folding completely at edge 'A', flatten the box structure and create edge 'B' at the other side, making sure of squareness.
5. Repeat #4 to get the edge 'D', taking reference from 'edge 'C' this time. All the time, ensure that the squareness is maintained.
6. Next, make the folds along 'E-E' and 'F-F', again making sure that the squareness is maintained.
7. Splay out the bottom, to obtain the fold marks for folding the bottom of the box (see sample for directions).
8. Insert the bottom cardboard retainer, which should be marginally less than the length and width of the internal dimensions of the 'box' (in this case $\sim 7.875'' \times 2.5''$), between folds.
9. Paste properly, to complete the paper bag.
10. Mark out the distance 'd' = 4 inches at the center of the bag; punch two holes with the 'hole-making' tool for inserting the eyelets; insert the eyelets and crimp with the 'crimping' tool.
11. Cut the plastic rope into 12" sections and thread one of each through the eyelets, to obtain a pair of handles (as seen in the sample); tie the ends together and lightly burn the ends of the plastic rope, to prevent it from unraveling.

Voila! Your bag is complete!



GENERAL CRAFTS: Making Handmade Paper in 10 easy steps

Materials: Not only is making homemade paper a fun experience for you and the kids, but it's a good way to recycle waste into wonderful possibilities such as envelopes, greeting cards, artwork and more. Many types of paper that can be used include:

Computer Paper (unprinted)	Non Waxed Boxes (Pre-soak in warm water)
Newspaper (If you want a grayish colored paper)	Office Paper
Magazines	Tissue Paper (For finer paper)
Egg Cartons	Typing Paper
Old Cards (For heavier paper)	Napkins
Toilet Paper	Construction Paper
Paper Bags	

Supplies you'll need include:

- Sponge
- Window Screening
- Wood Frame (An old picture frame can be used too)
- Plastic Basin/Tub (Large enough to totally immerse frame)
- Blender/Food Processor (For making paper pulp)
- White Felt or Flannel Fabric
- Staples or Tacks (For tacking screen on frame)

Instructions:

1. Select the pieces of paper to be recycled. You can even mix different types to create your own unique paper.
2. Rip the paper into small bits, and place into the blender (about half full). Fill the blender with warm water. Run the blender slowly at first then increase the speed until the pulp looks smooth and well blended (30 - 40 seconds). Check that no flakes of paper remain. If there are, blend longer.
3. The next step is to make a deckle. This is done by stretching fiberglass screen (plain old door and window screen) over a wooden frame and stapling it. It should be as tight as possible.
4. Fill the basin about half way with water. Add 3 blender loads of pulp (the more pulp you add the thicker the finished paper will be). Stir the mixture.
5. Now is the time to add the liquid starch for sizing. (This is not necessary but if the paper is going to be used for writing on, you should add some, the starch helps to prevent inks from soaking into the paper fibers.) Stir 2 teaspoons of liquid starch into the pulp.

Place the deckle into the pulp and then level it out while it is submerged. Gently wiggle the frame side-to-side until the pulp on top of the screen looks even.

6. Slowly lift the frame up until it is above the level of the water. Wait until most of the water has drained from the new paper sheet. If the paper is very thick, remove some pulp from the tub. If it is too thin, add more pulp and stir the mixture again.

7. When the deckle stops dripping, gently place one edge on the side of a fabric square (felt or flannel square). Gently ease the deckle down flat, with the paper directly on the fabric. Use a sponge to press out as much water as possible. Wring the excess water from the sponge back into the large plastic tub.

8. Now comes the tricky part. Hold the fabric square flat and slowly lift the edge of the deckle. The wet sheet of paper should remain on the fabric. If it sticks to the deckle, you may have pulled to fast or not pressed out enough water. It takes a little practice. You can gently press out any bubbles and loose edges at this point.

9. Repeat the steps above, and stack the fabric squares on a cookie sheet. Save one fabric square to place on the top of the stack to cover the last piece of paper. Use another cookie sheet to press the remaining water out of the stack (do this outside or in the bathtub, it can make a mess)

10. After you press the stack, gently separate the sheets. They can be dried by hanging on a clothesline or laying them out on sheets of newspaper. When they have dried peel them off the fabric and you have paper!

Note:

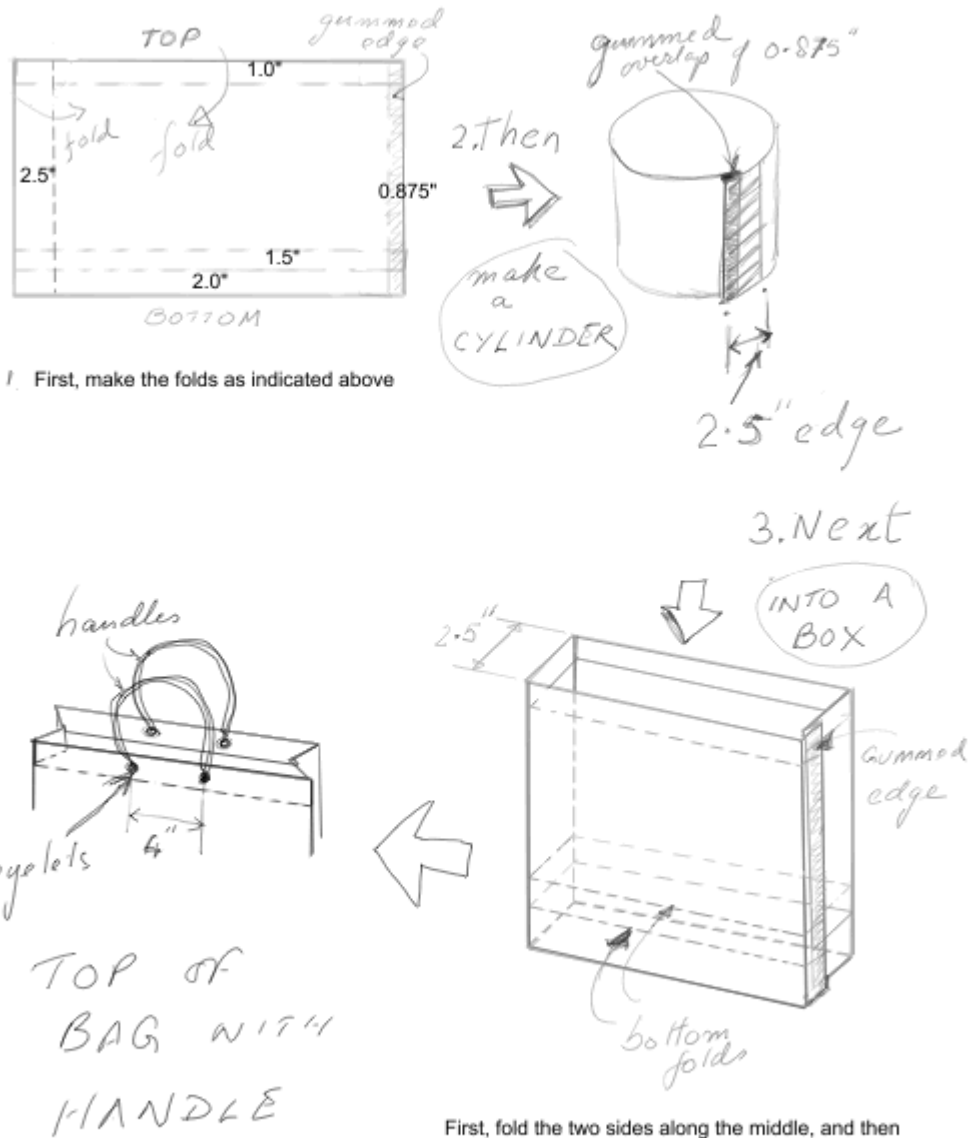
If this is the first time you are making paper, don't be afraid to experiment with different fibers, you don't have to stick with paper related products. Add whole flower heads to the pulp mixture after it has been through the blender. You can add scraps of yarn, tin foil, even seeds. Its all comes down to experimenting...some of your paper will turn out while others may not. To me this shouldn't be a craft that causes stress in your life; rather, it should be a fun way to express your creativity.

References:

1. *Handmade Paper*: How to make paper from recycled materials

Art & Handicrafts
(A division of The Sankalkpa Group)

HOW TO MAKE A 'HANDMADE PAPER' CARRY BAG



1. First, make the folds as indicated above

2. Then
make
a
CYLINDER

3. Next

INTO A
BOX

First, fold the two sides along the middle, and then
Fold at the bottom as in the sample, along the marks
shown above.