(ADHESIVES)

within the mound of pasta rather than f August 11, 1969 Toron this amount

Dear Mrs. Patri: ex so it is diluted with water. Add a little at a time

I am glad to hear that the paper which you ordered reached you in such good condition, and that you are pleased with it. I hope that any future assistance I am able to give you will be as successful.

As for your questions let me make the following suggestions and advices: The persimmon juice which we use comes from a certain variety of persimmon. Of course, I can't be certain what kind of persimmon your friend has. Furthermore, since we buy our juice I am not sure how it is prepared. So I think that the best idea is for you to tell me the size of the drying boards you require. Then I will apply persimmon juice to an appropriate amount of kozo paper, and send that to you. At that time I will give you and your carpenter instructions for the construction of the rest of the the under structure, on top of which youwill paste the sheets I will send you. Since the best time to apply the persimmon juice is during the summer months, I wish to do it as soon as possible. Therefore, please tell me the size of your drying boards as soon as possible.

As for the starch paste, the correct method method of handling it and achieving the best results is that at first you place all of the powder you received in large glass or pottery containers up to two thirds of the containers capacity. Cover the powder with a good deal of water and stir until all of the powder is swirling in suspension. Then leave this alone, covered, until the next day. On the next day pour off all of the water above the starch. Repeat this adding of clean water, stirring and pouring off the next day, once a day. At the time you pour off the previous day's water you can remove the amount of starch you intend to cook that day. This procedure keeps the raw starch from going bad, cleans it of dirt and large particles and makes the starch easier to dissolve.

When cooking the starch for the first time or so try one part of starch to five parts of water. From this you can alter the proportions to fit the following conditions: The starch and water are boiled over a medium high fire with constant, very vigorous stirring for about 30 to 40 minutes. After about the first 5 minutes the seemingly very thin starch water soup will suddenly thicken, first getting lumpy and then shortly becoming an evenly thick paste, which will look very white. It is from this initial thickening that you should judge future proportions. If it becomes too stiff add more water the next time; if to thin (creamy) add a bit more starch next time. Do not make any additions during the cooking. Whether too thick or too thin the paste will be useable. Adjustments from the 1:5 ratio should not be too extreme. At all times during the cooking continue the vigorous stirring of the paste will burn. Use a pot that will give you a comfortable, but firm grip. And a resin free wooden dowel, 1 to  $1\frac{1}{2}$ " in diameter makes a good stirrer. After the 30 or so minutes of cooking pour off the starch paste into a bowl, let cool and then cover. In a cool climate this paste can stay for about four days.

when you are ready to make use of some paste, take the amount you need from within the mound of paste rather then from the surface. Force this amount through a strainer. The paste is rarely used in such a concentrated form with our paper work so it is diluted with water. Add a little at a time and mix that amount well with the paste brush untill quite smooth. The adhesiveness of starch paste decreases very evenly and gradually as it is diluted. Thus, with experience, you will have very good control over the paste. The more concentrated the paste is the greater is its adhesiveness, but the harder and more brittle it is when dry. Therefore you will want to achieve a good balance between adhesiveness and flexibility. Of course different kinds of paper require different treatment. Always try to spread the paste evenly over the paper; both too much and too little are bad. Perhaps experimentation with scrap sheets of paper at first will give you a better understanding of the paste. At any rate, feel free to ask me any further questions as you go along. One word about cleaning up pots, brushes, etc.. If you let starch coated tools and trays soak for an hour or two they become very much easier to clean.

For the sake of your drying boards please respond as quickly as possible.

My family and Mr. Kelman send their warm regards. Mr. Kelman asked me to inform you that the orange boxes which you saw on the roofs of many houses along the countryside, and whose use puzzled you are hot water heaters, which use the sun's energy.

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