

QUESTIONS AND ANSWERS ON THE TECHNICAL SIDE

by Lance Johnson

Do you have any questions?

Send them direct to:

QUIZMASTER
And Organbuilder

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Several of our readers have written to me from time to time regarding the use of leather substitutes in theatre organs. Rather than answer each one individually in the column, I will try to summarize what my findings have been in researching this matter with the members of the American Institute of Organbuilders and others.

Several major builders of organs and organ supply houses have experimented with the product called perflex for use as pouch material rather than traditional leather. Some builders have had good success with long life, others not. One fact stands out; there is no way to simulate aging in perflex. On low pressure, that is church and classic organs, the perflex has found its niche. This was true as long as it was not used in a very humid climate and that it was not exposed to the sun or other sources of ultra-violet energy. Builders who began using perflex experienced some disastrous results until they learned how to use it.

With regard to theatre organs, the concensus is that it has never been proven as a leather substitute. Problems are ranging from coming

loose from frog-mouth type pneumatics to ballooning under very high pressure. They all seemed to think that perflex should not be used under any circumstances in high pressure work, say over 5" wind. Since most theatre organs use frog-mouth or "bellows" pneumatics, the perflex must crease somewhat in order to operate. Perflex must not even come close to creasing or its life will be shortened considerably.

The best leather substitute for theatre organs is pylon. This material is actually a fabric resembling spinnaker cloth (for sailboats) that is air-tight and extremely tough. Band organ technicians have been using it to recover outside pneumatics on drum actions as it is water resistant. Special adhesive called PVC E glue is required for bonding.

Q. I have quite a number of zinc basses that have been mitered to 6'-0" overall length. I don't like the appearance and would like to straighten them before installing them in my organ chamber. Can you tell me how to do this?

A. Unless you have had much experience in soldering zinc, I do not recommend you do this yourself. It is even difficult for professionals to straighten mitered pipes and have a neat job when finished. If you still insist, you will have to cut all miteres with a fine tooth hacksaw first. Then you will have to obtain the use of a disc sander so the cut ends can be sanded for perfect joining. Then all the old solder will have to be filed or sanded off and edges beveled. To begin soldering, use at least a 50 watt tip that has been well tinned. I use rosin core solder with rosin paste to keep the solder flowing well and the joint always clean. Place the two first pieces together on a flat surface and tack them with small portions of solder only enough to hold them together. Then test your joint to make sure the pipe is going to be *straight*. Do not complete the joint until you are satisfied that it is straight and if it isn't, break the joint apart and do it again. After you have completed the joint by running the bead of solder around, clean off the solder paste while it is still warm. Then take an aluminum file and file

joint so the solder is flush with the metal. If you plan to paint your pipes, be sure to wash them with lacquer thinner to get the old varnish and grime off completely, then prime with metal primer and apply your finish coat, preferably sprayed.

Q. Our organ club has contracted with an organ builder to install our club organ, a 3/19 Kimball, in a studio. It was originally a church and has all hard surfaces and excellent acoustics. The organ chamber was dug down below floor level with the shades being mounted starting at floor level. The chests and regulators will be on the level below the studio. Our organ builder has layed out the organ so that the chest rack boards are actually three feet below the tone opening. I have questioned this procedure since I always thought that the pipes should speak directly to the listener. What do you think about this?

A. If you were installing a classic organ, I would disagree with your builder's philosophy quite strongly. Since it is a theatre organ, I am sure you will hear the organ quite adequately with the pipes below tone opening level. I don't foresee any masking of tonal balance with this layout.

Q. I have a 2/7 Kimball theatre organ circa 1920 with a straight stop rail. The console now has combinations. I was thinking of building a horseshoe rail for this organ and adding stops. Can I still use the combination action?

A. I am afraid you will have to sacrifice your combination action if you go to a horseshoe stop rail. They are built into a mechanical frame that cannot be altered. You would have to install all new stop action magnets if you want combinations and wire them to a recorder drawer, or go to a solid state setter system. □

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