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OCCURRENCE AND REMOVAL OF GLUE STAINS

Caustic soda in glue, whether added to the glue as such or formed by chemical action during mixing, produces stains on certain species of wood, notably the oaks, maple, cherry, elm, ash, birch, and beech. Some glues stain the wood more than others, those that contain the most alkali usually being the most injurious. Generally speaking, a tendency to stain may be expected with starch, casein, or soybean glues. Blood, animal, artificial resin, and liquid glues as ordinarily formulated usually give no trouble with staining, although any dark colored glue may show through a thin, porous veneer of light colored wood. The staining effect of the alkaline glues is caused by the action of the alkali on certain constituents in the wood. While no method has yet been found to prevent the reaction, precautions may be taken that will reduce the troublesome discoloration.

Since marked staining occurs only when the alkali penetrates from the glue line to the face, little difficulty is experienced when gluing veneers thicker than 1/20". Precautionary measures on thin veneers are usually directed toward reducing the glue penetration.

Other conditions being equal, a thick glue will penetrate less and stain less than a thin glue that will be squeezed more readily through the pores of the wood. For this reason, the quantity of water that is used in the glue might be reduced or "fillers", such as wood flour, added if staining is feared.

The alkali from the glue line will penetrate more readily through wet veneer than through dry veneer. It is important, therefore, that thin veneer be re-dried