

METHOD OF MANUFACTURING A THERMOSET POLYMER UTILITY VAULT LID

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ABSTRACT

A method of manufacturing a fiber reinforced composite material lid for an utility vault including mixing an unsaturated polyester thermosetting matrix in to a resin paste, compounding the resin paste into a fiber reinforced composite
10 material, maturing the compounded fiber reinforced composite material, cutting the matured compound into a charge pattern, molding the charge pattern in a mold cavity of a heated mold under low pressure to form the lid and cooling and machining the lid. The mold includes a cavity die and a core die having a shear angle for interfacing the core die within the cavity die and a steam pot for heating
15 the cavity die and the core die, wherein the lid is molded between the cavity die and the core die and removed from the mold by a lid ejection mechanism.

Figure 2