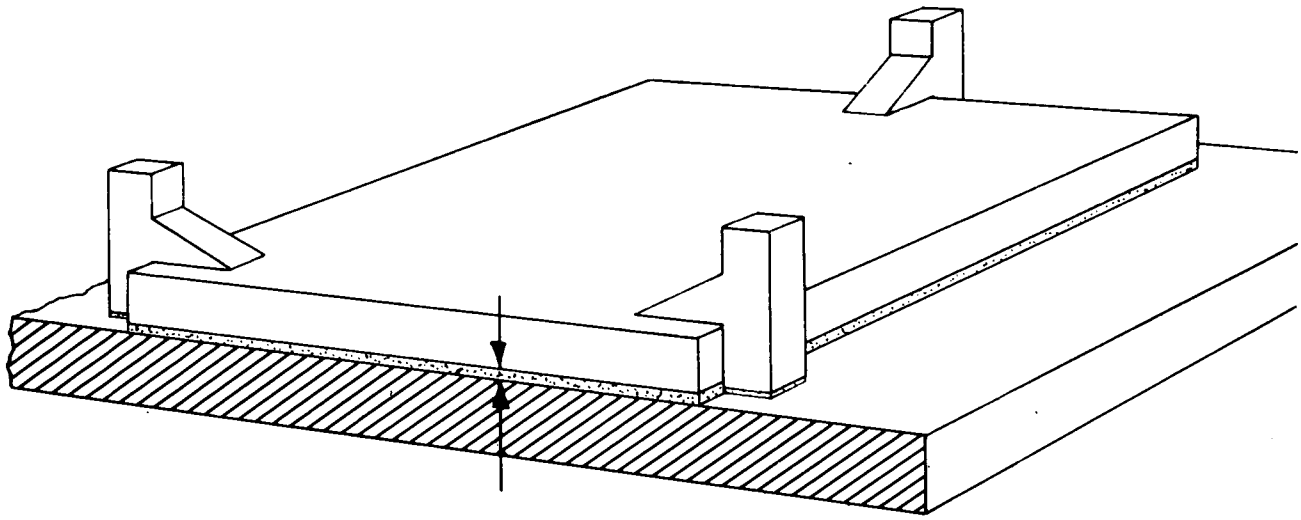
NASA TECH BRIEF

Quick-Set Temporary Bonding Clamps



The innovation described in this Tech Brief is a method of bonding materials to a flat surface where the use of bolts to hold the pieces together is undesirable. Two adhesives are used in this process: the primary or permanent bonding material, and a "quick setting" adhesive.

The clamps can be cut to any size required. The permanent bonding substance is applied to the surface of the structure. The piece to be bonded is set, and the quick setting adhesive is placed on the bottom of the clamps and then the clamps are put in place. When the permanent bonding material has set, the clamps can easily be snapped off and any residual material can be cleared off by use of a solvent. A typical configuration is shown in the figure.

This method of bonding materials is very easy to use, and can be put into effect very quickly. No permanent aftereffects are left on the surfaces to which the materials are bonded, such as mounting holes required in other methods. In addition, this method can be adapted to accommodate almost any size component, since only the number and size of the clamps need to be varied or changed. Finally, this method makes it possible to obtain a uniformly thick bond line of permanent adhesive to secure the article to the surface. It does not require the use of additional cumbersome equipment such as a vacuum source, which is required for other methods.

Notes:

1. This technique should have general interest for builders and home handymen, and should be applicable wherever fixtures must be positioned above floor level.

(continued overleaf)

2. No further documentation is available. Inquiries may be directed to:

Technology Utilization Officer
NASA Pasadena Office
4800 Oak Grove Drive
Pasadena, California 91102
Reference: B69-10406

Patent status:

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