Application Notes for 700, 1200, and HiTherm™ Series Materials

Cutting material to shape

- 700, 1200, and HiTherm, thermal interface materials, can be easily cut to any size or shape. Simple hand tools such as modeling knives, razor knives, utility knives or scissors can be used.
- Sharp blades should always be used; dull blades will tend to tear the material.
- Paper cutters can be used for cutting out large shapes.
- Leather and paper punches can be used to cut out holes.
- Steel rule dies can be used for production cutting. Contact Graftech for detailed technical information on die cutting.
- Adhesive backed materials should be cut with the backing paper attached. Multiple cuts may be required to cut through the backing paper.
- Sheets should be cut individually; do not stack sheets together or tearing may occur.

Application of adhesive backed materials

- Care must be used with 700, 1200, and HiTherm adhesive backed materials to achieve the highest performance. Use the following procedure to apply these adhesive backed materials.
  
  1. The mounting surface should be clean and dry prior to application. Clean the mounting surface with isopropyl alcohol (isopropanol) applied with a lint-free wipe or swab.

  2. The backing paper should be removed by peeling it away at an angle from the material. Keep the material flat while doing this. Peeling the material from the backing paper while keeping the backing paper flat will result in creasing and damage to the thermal interface materials.

  3. Apply the material to the mounting surface at slight angle using finger pressure to reduce the potential for air entrapment.

- Once bonded to a surface, 700, 1200, and HiTherm adhesive backed materials cannot be repositioned. Attempting to remove these adhesive backed materials will result in damage to the material.
Reuse of 700, 1200, and HiTherm™ thermal interface material on components

In general, once 700, 1200, and HiTherm adhesive backed materials have been applied to the component, that component can be removed from an assembly and reinstalled without removing the material. When the component is reinstalled, the bare face of the material will re-conform to the surface pressing against it.

If it becomes necessary to remove adhesive backed 700, 1200, and HiTherm materials from a component, then the procedure described below should be used.

Removal of 700, 1200, and HiTherm™ adhesive backed materials

- 700, 1200, and HiTherm adhesive backed materials can be removed without scratching or damaging the underlying surface by using the following procedure:

  1. Apply the adhesive side of a high tack adhesive tape (such as duct tape) to the material. Press the tape firmly against the material and pull away. Some material will transfer onto the tape. Repeat 4-5 times using a fresh portion of tape in each application. When most of the mounting surface is exposed, stop.

  2. Apply isopropanol to the remaining material and adhesive and wait 1 minute.

  3. Use a wooden or plastic scraper to push the material off the surface. Gather up the loose material using a wiping cloth. Then soak a cotton tipped swabbing stick in isopropanol and use it to remove any loose material or adhesive. Some mild scrubbing action may be necessary.

  4. Perform a final cleaning of the mounting surface with isopropanol applied with a lint-free wipe or swab.