

## **ASTM D7447-08 Standardized Adhesive CAD Symbol – Instructions for AutoCAD® Users**

### Adhesive CAD Symbol: Download/Activation Process

1. From the adhesives.org page, user selects software version for download. The Adhesive CAD Symbol is fully compatible with AutoCAD® 2007, 2008 and 2009.
2. Using the serial number listed next to the desired software version, the user downloads the free plug-in. After the download process, the user will be prompted to permanently activate the product. User can choose to activate the product immediately or within 30 days.
3. To activate the plug-in, the user will register and follow the on-line instructions to receive an Activation Key. The Activation Key is automatically generated and sent via e-mail. **A valid e-mail address is required in this process.** Once the Activation Key is received via e-mail, the user enters it in to permanently activate the product. If a user doesn't activate the product, it will run for 30 days; after which, the plug-in stops working.

### Adhesive CAD Symbol: Installation of Parametric Part Manager

1. User begins by accepting the terms of the IDX Parametric Part Manager.
2. User enters customer information including the CAD software Serial Number and installs the Part Manager to computer.
3. Installation is finalized.

### Accessing the Adhesive CAD Symbol for **AutoCAD® 2007 and 2008**

1. Open AutoCAD.
2. On the top menu, click on **IDX**.
3. Click on **PPM** on menu immediately to right.
4. Sub-menu opens up. Select the **PPM Palette**.
5. On left side of the screen, the PPM Palette display will show. Ensure the "All Parts" tab is displayed. User should see a box with the word "Adhesive" written under it.
6. Double-click to access the Adhesive CAD Symbol and have it "dropped into" current drawing.
7. Now double-click on any element of the Adhesive Symbol to open up the Parametric Part menu, which will appear on the left side of the screen.

8. To navigate down the list of parts, put cursor on the gray navigational bar to the left of the menu. The Adhesive Symbol parameters begin with “Parametric Part – General Parameters” and continue down.

#### Installation Instructions for Adhesive CAD Symbol for **AutoCAD® 2009**

1. Open AutoCAD®.
2. Click on red “**A**” in upper left corner of screen.
3. Scroll down and click on **IDX** (bottom of list).
4. Beginning with Step 3 above, follow the remaining steps.

#### Navigational Instructions for Adhesive CAD Symbol

The Symbol consists of various Elements, each of which may be custom tailored to data the user inputs in the Palette. The Elements are referenced in greater detail in [ASTM D7447-08](#), which the User is encouraged to purchase.

The Elements are:

1. Form – the adhesive’s physical form, such as **One-Part, Two-Part, or Film**.
2. Technology Family – the type of chemistry, such as **Acrylic, Anaerobic, Epoxy, Hot Melt**.
3. Surface Preparation – the type of surface pre-treatment is required, such as **Detergent Cleaning, Solvent Wipe, Chemical and Mechanical Treatment**.
4. Application Method – information pertaining to how it is applied. Criteria include:
  - a. Dispensed Bead or Roll Coat
  - b. Bead Cross Section
  - c. Mix Ratio (for a 2-part adhesive)
  - d. Applied Thickness
  - e. Design Bond Line Thickness
  - f. Bond Line Set Method (such as Mechanical Spacer)
  - g. Surface of Application (refers to which substrate surface the adhesive is applied to)
5. Curing Parameters – the type of cure, such as **Heat, Moisture, UV, Electron Beam (EB)**. For each type, corresponding criteria are to be furnished.
6. Miscellaneous Elements – includes a **Flag** denoting adhesive is to be applied in the field (vs. in a manufacturing facility); a **Circle** where the “mast line” joins the reference line and arrow line indicating the adhesive is to be applied around the entire periphery of a joint; and a **Tail** where additional details can be inserted pertaining either to the process or referencing a particular Specification.