

### General-Adhesives

According to the Environmental Protection Agency (EPA), a volatile organic compound (or VOC) is any organic compound that participates in atmospheric photochemical reactions. Basically, a compound is considered volatile if it evaporates at room temperature. Organic compounds are hydrocarbon based and are usually manufactured from petroleum products. Water is volatile, but it is not an organic compound – so water is not a VOC. Isopropanol, toluene, and ethylene glycol are examples of VOC's.

To date, the federal EPA has given little direction in the regulating of VOC's in adhesives and sealants. The federal government instead relies upon state and local air quality management districts to provide direction for adhesives and sealants. Two air quality management districts, South Coast Air Quality Management District (SCAQMD) and Bay Area Air Quality Management District (BAAQMD), have led the way in VOC regulations. Many air quality management districts across the country are adopting the regulations set by SCAQMD and BAAQMD.

Simpson Strong-Tie Anchor Systems™ fall into two main categories: Acrylic-Tie® Adhesive, ET® Epoxy-Tie Adhesive, ETF Fast Cure Epoxy, and SET High Strength Epoxy are multipurpose construction adhesives; and Crack-Pac™ Injection Epoxy, ETI-LV Injection Epoxy, ETI-GV Injection Epoxy, ETI Injection Epoxy, and ETI Gel Injection Epoxy are architectural sealants. Limits for these two categories and theoretical VOC levels for Simpson Strong-Tie Anchor Systems™ adhesives are:

#### Multipurpose Construction Adhesive VOC\* Limit/Level

SCAQMD Rule 1168 70

BAAQMD Rule 51 200

Acrylic-Tie® Adhesive 20

ET® Epoxy-Tie Adhesive 26

ETF Fast Cure Epoxy <1

SET High Strength Epoxy 53

Architectural Sealant

SCAQMD Rule 1168 250

BAAQMD Rule 51 250

Crack-Pac™ Injection Epoxy 8

ETI-LV Injection Epoxy 81

ETI-GV Injection Epoxy 78

ETI Injection Epoxy 75

ETI Gel Injection Epoxy 71

\* VOC is expressed in grams of VOC per liter.