

## Volatile Organic Compound (VOC)

According to the Environmental Protection Agency (EPA), a volatile organic compound (VOC) is any organic compound that participates in atmospheric photochemical reactions. Basically, a compound is considered volatile if it evaporates at normal ambient temperatures. Organic compounds are hydrocarbon-based and are usually manufactured from petroleum products. Water is volatile, but it is not an organic compound. Thus, water is not a VOC. Isopropanol, toluene and ethylene glycol are all examples of VOCs.

Regulations vary from state to state, but the most widely accepted criteria underlying most of them are from the South Coast Air Quality Management District. Two prominent regulations from SCAQMD are Rule 1113 and Rule 1168, applicable to coatings and adhesives, respectively. Requirements for VOC limits vary by application, with the most stringent levels in the 50–70 grams per liter range.

New construction using only adhesives and sealants meeting the requirements of SCAQMD Rule 1168 are eligible for LEED credit of one to three points under Indoor Environmental Quality (EQ), EQ Credit: Low-Emitting Materials.

Simpson Strong-Tie products listed below were tested in accordance with EPA Method 24 and ASTM D2369, and meet the requirements of SCAQMD Rules 1113 and 1168.

Anchoring Adhesives	VOC (grams/liter)
AT-XP <sup>®</sup> High-Strength Anchoring Adhesive	30
ET-HP <sup>®</sup> Anchoring Adhesive	3
SET-XP <sup>®</sup> Structural Anchoring Adhesive	3
SET-3G <sup>™</sup> High-Strength Epoxy Adhesive	2

Repair Products	VOC (grams/liter)
CI-GV Structural Injection Epoxy Gel	10
CI-LPL Long Pot Life Structural Injection Epoxy	<1
CI-LV Low-Viscosity Structural Injection Epoxy	2
CI-LV FS Fast-Setting Low-Viscosity Structural Injection Epoxy	13
CI-SLV Super-Low-Viscosity Structural Injection Epoxy	8
CIP-LO Epoxy Paste-Over	4
Crack-Pac <sup>®</sup> Injection Epoxy	7
Crack-Pac <sup>®</sup> Flex H <sub>2</sub> O <sup>™</sup> Polyurethane	3
CSS-EP Epoxy Paste and Filler	7
CSS-ES Epoxy Primer and Saturant	3
CSS-ESLPL Long Pot Life Epoxy Primer and Saturant	6
CSS V-Wrap <sup>™</sup> 770 Epoxy Primer and Saturant	<1
CSS V-Wrap <sup>™</sup> PF Epoxy Putty Filler	5
ETR Epoxy Paste	7

This information is updated periodically. For the most current and complete information about these and other Simpson Strong-Tie<sup>®</sup> anchoring and direct-fastening products, call your local Simpson Strong-Tie representative at (800) 999-5099 or visit [strongtie.com](http://strongtie.com) and request our full-line *Anchoring and Fastening Systems for Concrete and Masonry* catalog.