



# ICAT Industries Inc.

---

## CEL-400G Epoxy Parging System

### PRODUCT PROFILE

**CEL 400G is a moderately flexible, two component, 100% solids, epoxy parging material for damp concrete and gasproofing.**

**CEL 400G** is a tough, moderately flexible 100% solids epoxy hybrid parging compound specifically formulated to fill and bridge cracks and voids in concrete structures. Its excellent adhesion to damp concrete and its ability to form an impervious membrane make it a superior alternative to cementitious compounds as the parging and priming are accommodated in a single pass, thus eliminating a large portion of the labour involved in the remediation process.

CEL 400G may be sprayed or trowel-applied in thicknesses exceeding 30 mils. When used in conjunction with CEL 400 as the topcoat, intercoat adhesion failures are eliminated by means of a unique chemical bond between the two layers. Its intercoat window of 2-16 hours allows it to accommodate a variety of job requirements. CEL 400G has zero VOC and is odourless during and after the application.

### **TYPICAL APPLICATIONS:**

- Waste Water Facilities
- Gasproofing
- Sewer Systems
- Pulp & Paper Facilities
- Secondary Containment
- Concrete Tanks
- General Maintenance
- Manhole Restoration

### TECHNICAL DATA

#### **PHYSICAL PROPERTIES:**

Specific Gravity	0.80 (water =1)
Flash Point	>250°F (121°C)
Volatile Organic Compounds (VOC)	0 grams/litre
Recommended Coverage	10-60 mils to ensure pinhole free coverage
Container Size	20 Litre kit
Adhesion	Concrete: 300 - 600 psi to break
Hardness	Shore "D" 55
Impact resistance	160+ in. Lbs.

---

# CEL 400G TECHNICAL DATA

---

Pot Life	10 minutes at 20°C 2 minutes at 65°C
Tack Free Time	1.5 hours at 20°C
Full Cure	7 days at 20°C
Relative Humidity Tolerance	Up to 100%
Theoretical Coverage	1 sq. m / litre at 1 mm thickness
Cleaning Solvent	MEK or Xylene

## APPLICATION PROCEDURES

### **SURFACE PREPARATION:**

- 1) If contamination due to service is either present, or expected to be present on the existing concrete substrate, cleanse with a 3000 psi water blast using a detergent solution capable of dissolving the contaminant. Rinse the washed surface with clean water prior to subsequent steps in order to remove the detergent from the concrete.
- 2) Repair loose or badly damaged concrete according to the Five Star Structural Concrete (or equivalent) directions. Once the repairs have been completed, remove existing coating and/or deteriorated concrete by abrasive sandblast. Sand-blasting will produce a rough surface with a texture that is similar to coarse sandpaper.

### **PREPARATION & APPLICATION:**

- 1) Store all materials in accordance with the manufacturers written recommendations. All materials shall be thoroughly mixed prior to application. Failure to do so may diminish the quality of the coating.
  - 2) Apply **CEL 400G parging compound** to all concrete surfaces in a single pass to the specified film thickness (based on theoretical coverage + 15%) using a trowel to smoothen the surface as much as possible.
  - 3) When **CEL 400G** has set up to a tacky state (but not fully cured), apply **CEL 400** Elastomeric Epoxy as the top coat. If the **CEL 400G parging material** has fully cured before the top coat is ready to be applied, the surface should either be abraded or wiped with an acceptable solvent, if deemed appropriate by the Engineer or ICAT Industries, such as MEK or Xylene.
-

# CEL 400G APPLICATION PROCEDURES

## PREPARATION & APPLICATION CONT'D:

### RECOAT WINDOW:

SUBSTRATE TEMPERATURE	TACK FREE/RECOAT WINDOW	MODERATE SERVICE
21°C	1.5 hours	3 hours
15°C	3 hours	5 hours

### SUBSTRATE TEMPERATURE FOR APPLICATION:

Minimum recommended: 10°C    Maximum recommended: 32°C

### CAUTIONS:

1. It is important to remember that the pot life will vary depending on the quantity of epoxy mixed and the ambient temperature. Larger quantities and higher temperatures will reduce the pot life considerably.
2. The substrate temperature must be at least 3° C (5°F) above the dew point during all blasting and coating procedures. To calculate the dew point, consult the chart at the end of the Application Procedures section.

### CLEAN UP

Use MEK or Xylene for clean-up. Consult and understand the Material Safety Data Sheet for each of these products before using them.

---

# CEL 400G APPLICATION PROCEDURES

---

## DEW POINT CALCULATION CHART:

%RH	AMBIENT AIR TEMPERATURE °F (°C)							
	50(10)	<b>60(16)</b>	70(21)	80(27)	90(32)	100(38)	110(43)	120(40)
90	47(9)	57(14)	67(19)	77(25)	81(31)	97(36)	107(42)	117(47)
85	45(7)	55(13)	65(18)	75(24)	84(29)	95(35)	104(40)	114(46)
80	44(7)	54(12)	63(17)	73(23)	82(28)	93(34)	102(39)	112(44)
75	42(6)	52(11)	62(17)	71(22)	80(27)	91(33)	100(38)	110(43)
<b>70</b>	40(4)	<b>50(10)</b>	60(16)	69(21)	78(26)	88(31)	98(37)	107(42)
65	38(3)	48(9)	57(14)	67(19)	76(24)	86(30)	95(35)	105(41)
60	36(2)	46(8)	55(13)	65(18)	74(23)	83(28)	92(33)	102(39)
55	34(1)	43(6)	53(12)	62(17)	71(22)	80(27)	90(32)	99(37)
50	31(-.5)	41(5)	50(10)	59(15)	69(21)	78(26)	87(31)	96(36)

Dew point is the temperature at which moisture will condense on substrate surfaces. For example (note the *italicized bold* numbers), if the air temperature - top row - is 16°C and the relative humidity - left column - is 70%, the dew point is 10°C.

## ORDERING INFORMATION

For additional information, prices or to place an order, please contact your ICAT Industries sales representative or call our offices direct.

Customer Service: (705) 739-0445  
#2-648 Welham Rd.  
Barrie, Ontario  
L4N 9A1

Fax: (705) 739-0609

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or inability to use the product. Before using, user shall determine the suitability of the product for the intended use, and user assumes all risk and liability whatsoever in connection therewith. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

---