



## Technical Bulletin # 116

**RE: LevelCure LCB 951 Self-Leveling Underlayment guideline for radiant heat.**  
**DATE REVISED: January 07, 2005**

Heating cable or Hydronic radiant heat systems to receive C-Cure LCB 951 Self-Leveling Underlayment should comply with these guidelines which supplement C-Cure's product information sheets and instructions on product labels.

This guideline is for residential use only, and does not apply to radiant mat or net mounted systems.

Expansion joints must be installed per TCA EJ-171. Deflection shall not exceed 1/360 of the span including live and dead load. Deflection criteria of 1/720 should be used for natural stone and for tile larger than 12" x 12" (305 mm x 305 mm).

All surfaces to receive LevelCure LCB must be structurally sound. Surfaces shall be free of dust, wax, sealers, old adhesive residue, curing compounds, oil, gypsum-based underlayments, surface hardeners, paints, old flooring and other foreign material before application of primer. A 3/16" wide gap shall be left at all perimeter edges, walls and around fixed objects to allow for expansion. These gaps shall remain empty when the installation is complete.

### **Over Approved Properly Prepared Concrete**

Concrete shall be completely exposed, fully cured (28 days minimum), free of moisture and efflorescence. Smooth, steel troweled concrete floors must be roughened to ensure a good bond. Prime cleaned surface with LevelCure Primer 943 diluted 1 to 1 with water.

After the primer has dried, install heating components per manufacturer directions. Install LevelCure LCB making sure to cover cable or tubes a minimum of 1/2" .

### **Over APA Approved Exterior Grade Plywood**

Plywood surfaces shall be of exterior grade, and when placed over conventional floor joists, shall be of a design and thickness to provide a secure, rigid substrate base. Allow a gap of 3/16" to 1/4" (4.8 to 6.4 mm) between sheets of plywood. Apply minimum 1"

wide masking tape to these gaps prior to the application of LevelCure Primer 943.

Prime cleaned surface with LevelCure Primer 943 diluted 1 to 1 with water. After primer has dried, fasten ProLath 950 plastic lath to the subfloor every 2" around the perimeter and every 4" in the field. The lath must be butted, not overlapped. Stagger lath joints so they don't line up with underlying substrate joints. Install heating components over the lath per manufacturer's directions. Install LevelCure LCB making sure to cover the cable or tubes a minimum of 1/2".

- A minimum cure of LevelCure LCB is obtained in 12 to 24 hours.
- Check for moisture prior to installation of moisture sensitive flooring materials.
- The use of an crack isolation membrane such as Pro-Red 963, UltraCure 971 or Uniflex 916 is required.
- Bond ceramic and porcelain tile with PST 948 Acrylic Modified Mortar system.
- A waiting period of 14 days after installation of finished flooring is required prior to putting the radiant floor heating system into service.

Additional product information may be referenced from the LevelCure LCB 951 product information sheet. Contact C-Cure Technical Services department for methods not covered in this guideline.

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