

Formerly known as  
X-Shield SF Primer

## Technical Data Sheet



30260515

# X-Prime SF

High performance primer for coating and floor systems

### Product Description

X-Prime SF is a high penetration primer suitable for use with a wide range of epoxy coatings and floor systems.

### Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Low viscosity
- Solvent free
- Penetrating
- Enhances bond
- Stops out gassing

### Specification Compliance

SCAQMD Rule 1113  
LEED NC2009 IEQ 4.2

### Laboratory Test Data

Property	Typical Results
Volume solids	100%
Specific gravity	1.05 ± 0.05
Pot life	60 mins at 30C (86F)
Touch dry	3 hours at 30C (86F)
Recoat time	6 to 24 hours at 30C (86F)

### Volatile Organic Content

VOC = <10g/L

### Theoretical Coverage

X-Prime SF 10m<sup>2</sup> per liter (110ft<sup>2</sup> per quart).

Actual coverage will depend on wastage and surface profile and can be up to 30% or more higher than theoretical coverage.

### Packaging

1, 5 and 15 liter packs  
1 quart and 1 gallon packs - USA.

### Shelf Life

18 months when stored below 30C (86F) under shade in a dry environment.

### Application Guidelines

Epoxy coating and floor systems should be applied by experienced coating crews. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

### Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by captive blasting to produce a lightly exposed aggregate surface i.e. a ICRI CSP 4 or 5 surface profile. Any bug holes (blow holes) should be filled with X-Shield BugFill or X-Tech Primer Filler.

### Moisture Testing

The concrete slab should be tested for moisture with the Rapid RH system following the procedure in ASTM F2170. If the humidity reading is greater than 80% then conduct moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (Both test kits are available for purchase from X-Calibur). If the MVER is under 3lbs/1000ft<sup>2</sup>/24h use X-Prime SF. If the MVER is 3 to 5 lbs/1000ft<sup>2</sup>/24h use a single coat X-Prime MT100 at 165 microns wft. If the MVER is 5 to 12 lbs/1000ft<sup>2</sup>/24h use two coats of X-Prime MT100 at 200 microns wft per coat.

### Mixing

Mix X-Prime SF using the following technique. Add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500 rpm) with an X-Shield Coating Mixer Paddle for 3 minutes or until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

### Application

Apply a single coat of 100 micron (4mils) wet film thickness using brush, roller or airless spray. When using airless spray, tip size should be 0.015" to 0.0018" at a pressure of 2200psi. Allow to dry before over coating. Ensure that no ponding of the primer occurs and that it is not applied too thick. Recoat after 6

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to 24 hours at 30C (86F). If the primer is left to dry for more than 24 hours the surface will have to be re-primed. Porous substrates may require a two coat application. Clean equipment using X-Shield Solvent S.

### **Limitations**

Will not accommodate movement cracks.

Do not be apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.

Avoid excessive application.

Avoid skin contact.

Do not discard into the water system.

### **Health and Safety**

**This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website [www.x-calibur.us](http://www.x-calibur.us)**

### **Authorized Technical Specialist**

Please note that only X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit [www.x-calibur.us](http://www.x-calibur.us) for a full list of X-Calibur ATs.

### **Datasheet Validity**

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on [www.x-calibur.us](http://www.x-calibur.us) to ensure you have the latest version.

### **Warranties**

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Systems Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.