

BC-CRETE MF AS

A SELF-SMOOTHING ESD POLYURETHANE SCREED (2 – 4 mm)

DESCRIPTION:

BC-Crete MF AS is a self-smoothing 3 component thermal shock ESD (Anti-static) polyurethane floor coatings. Seamless, high chemical, high mechanical, conductive properties, heat and slip resistance with matt finish.

PRODUCT FEATURE:

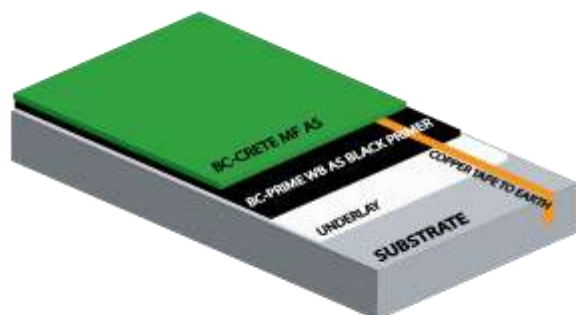
BC-Crete MF AS is high-tech manufacturing requires flooring with conductive properties and use for GMP, hygienic where the subjected to heavy traffic, impact and surface is required without the risk of static build up floor. Areas use for military arsenal, ammunition dump, electronic, semi-conducting device areas, high power station and explosion risk plants.

BENEFITS:

- Hard wearing, good abrasion resistance.
- High chemical resistance against alkalis, acids and organic solvent.
- High mechanicals and impact resistance
- Resist fungi, mildew and bacteria growth.
- Solvent free, odorless.
- After cured, non-cytotoxic response.
- To eliminate electrostatic discharge from human body, trolley and vehicles. Meet Floor British standard BS2050.

COLORS:

- Standard
 - MF Green, MF Red, MF Grey, MF Cream, MF Buff, MF Light Grey.
- (Exposed to UV may occur color change)



TECHNICAL DATA

Density (28C) g/cm ³	1.9g/ml
Tensile strength	25 Mpa
Compressive strength (28 days)	50N/mm
Adhesive strength	>2.0 Mpa (Concrete failure)
Flexural strength	21MPa
Service temperature:	at 3mm : 5 ⁰ C ~ 80 ⁰ C(max) at 6mm : -5 ⁰ C ~ 100 ⁰ C(max)
Shore D hardness	79 ~ 84
Cytotoxicity (2.4 or less)	below < 0.5
ESD Floor Main Checking Criteria & Spec :	
Surface to Ground (Earth) Rg Spec (BS-2050)	1E+4Ω ~ 1E+9 Ω (1-9 x 10 ⁴ Ω to 1-9 x 10 ⁹ Ω)
Surface to Surface (Earth) Rs Spec (BS-2050)	1E+4Ω ~ 1E+9 Ω (1-9 x 10 ⁴ Ω to 1-9 x 10 ⁹ Ω)
Decay Time Through Human Body	Spec: < 20 sec
Complied ANSI/ESD S-20.20-2007 Human Body Voltage (HBM)	< 100 VOLTS
System Resistance	< 3.5E + 7ohm (Ω)
ASTM D 4060 -10 Taber Abraser	38mg
Wear Index in mg/1000 revolutions/1kg	
BS 6920: Part 1 :2000 clause 6	<2.39 or less
Growth of Aquatic Microorganisms	
ASTM E96/E96M-10	1.23±
Water Vapor Transmission, g/hr.m ²	
Mixing ratio by weight	Part A : Part B : Part C 3 : 3 : 12
Packing Size	18kg
Pot life (working time)	15 ⁰ C : 30min 25 ⁰ C : 25min 30 ⁰ C : 22min
Shelf life & storage (unopened and in good conditions temperature 10°C to 30°C)	12months
Material consumption:	1.9kg/m ² @1mm
Recoating time(28°C)	within 14 to 18 hours
Curing time:	

	15°C	25°C	32°C
Human traffic	36hrs	30hrs	24hrs
Light traffic	48hrs	36hrs	30hrs
Fully chemicals cure	7days	6days	5days

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SUBSTRATE REQUIREMENT & PREPARATION:

Substrate concrete or screed should be a minimum of compressive strength 25N/mm² and adhesive pull-off strength of minimum 1.5N/mm². The substrate should be clean and free from laitance, oil, dust, loose constituents, paint residues, chemicals, algae and other contamination should be removed. The substrate should be dry and free from ground water pressure. If substrate moisture exceeded 7%, apply Epoxy mortar (compressive strength 80N/mm²) 4-5mm thick as a moisture barrier. The substrate must be prepared by vacuum shot blasting, rough contaminations to remove by grinding. Cracks and hollows should be properly remedied. Prepare grooves 3mm wide x 3mm deep at all edges, bay joints columns, doorways and drains for anchoring purpose.

MIXING :

Shake Part A Polyol before pour into the barrel, pour all Part B and Part A into the clean mixing barrel and mix for 5 second by using a suitable electrical stirrer (with 750watt High Power Mixer), then only add in the pigmented Part C powder to mix at-least one minute and ten seconds until it fully achieved a homogeneous consistent.

APPLICATION :

- Apply BC-Prime WB AS (+/- 150 μ thick) as a primer for sealing well the substrate porosity.
- Usually within 14~24 hours; when BC-Prime WB AS coat cured, then only allow to do layering BC-Crete MF AS Topping onto the BC-Prime WB Primer AS.
- Must apply BC-Crete MF AS within the pot life (working time), spread the composite matrix with notched squeegee or pin rake and set it to the correct depth or requirement thickness. Immediately release the air/bubble by using spike roller.

TEMPERATURE CONDITIONS OF APPLICATIONS:

- Do not apply when the relative humidity exceeds 90% on when the surface to be coated is less than 5% above the dew point.
- Do not apply temperatures below 5°C and temperatures above 40°C.

Maintenance and care after cure :

We recommend basic cleaning and maintenance will prolong the life of polyurethane floors, clean regularly using a single or double headed rotary scrubber drier in conjunction with alkaline detergent.

Further Information :

Warning and precautions information relating to the safe handling of this product should be found in Material Safety Data Sheet. To be advise to put on suitable clothing and eye-ware for protection purpose. The application area/site must be in good ventilation otherwise advisable to use a portable exhaust fan.

Important Note :

Best Crete product are warranty against defective materials. Due to different substrate and working conditions, no guarantee of an application result or any liability claims. The users are required to have a test ahead based on their intended use.