

## VUKA CRETE HD ESD

### DESCRIPTION

Vuka Crete HD ESD is a multi-component, water based polyurethane compound incorporating antimicrobial technology for industries requiring high strength, heavy duty chemical resistant floors. Trowel applied at between 6mm and 9mm thickness. It is specifically formulated to function as an electrostatic dissipative flooring system.

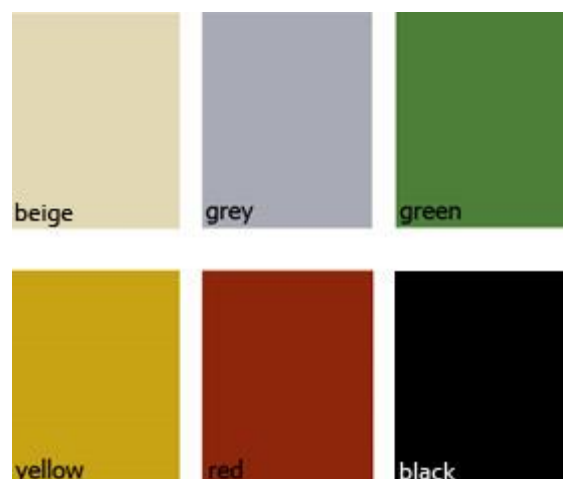
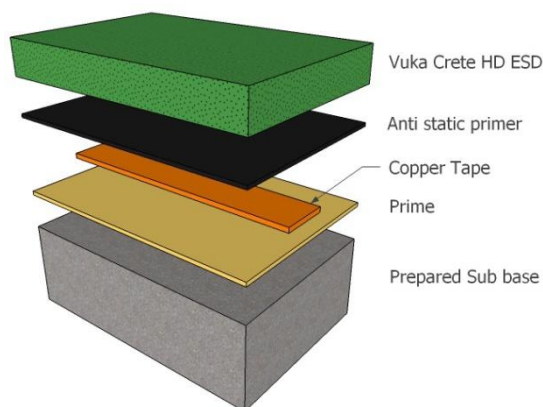
### USES

Typically specified for aggressive chemical environments requiring anti-static flooring. Used in a variety of environments requiring ESD flooring including chemical processing plants, secondary chemical containment zones, solvent decanting plants as well as paints and solvent storage areas.

### BENEFITS

- Meets ANSI/ESD S541-2003 requirements
- ESD performance range  $10^6$  to  $10^{10}$  ohms
- Non-tainting, quick curing
- Monolithic seamless finish
- High abrasion and impact resistant
- Resistant to a broad spectrum of chemicals
- Anti-slip surface
- Anti-microbial technology
- Standard colour range
- Heat resistant 9mm to 120°C
- Can tolerate steam cleaning

### ILLUSTRATION



Product colours will differ slightly and it is best to obtain actual colour samples where required.

## VUKA CRETE HD ESD

### CHEMICAL RESISTANCE

For chemical resistance information please contact our Technical Department

### TYPICAL PROPERTIES

The following are typical properties achieved at 20C and 50% relative humidity.

Light traffic @ 20°C	24hrs
Heavy traffic @ 20°C	2 Days
Full cure @ 20°C	7 Days
Compressive strength	>50Mpa SABS 863:1994
Tensile strength	>10Mpa SABS 1253:1994
Flexural strength	>20Mpa SABS 864:1994
Hardness Shore D	80
Impact Resistance	ISO6272-1:2011 1kg weight >1.8m 2kg weight >1.5m
Slip resistance	Dry > 80 Wet >40 Pendulum Slip Test Method BS7976-2
Water absorption	Nil – Contest test. (Impermeable)
Bond Strength	Greater than cohesive strength of 25N/mm <sup>2</sup> concrete > 1.5 N/mm <sup>2</sup> Proceq Dyna
Temperature resistance	6mm -25 °C to 100 °C
Temperature resistance	9mm -40 °C to 120 °C

### ANTI MICROBIAL ADDITIVE

The ULTRA FRESH anti-microbial additive incorporated into Vuka Crete HD ESD inhibits the growth of most bacteria and fungi in contact with the floor. This results in a daily hygienic advantage through the use of anti-microbial technology. It is intended to compliment good housekeeping practices and a suitable cleaning regime.

### SURFACE REQUIREMENTS

Concrete / Grano surfaces must have a minimum compressive strength of 25N/mm<sup>2</sup>, a minimum tensile strength of 1.5N/mm<sup>2</sup>, be at least 40mm thick. The substrate must be dry, free of oils waxes fats and other contaminants. Vacu-blasting,

scarification, abrasive grinding followed by vacuum cleaning is preferred. The surface must show open pores throughout with exposed aggregate. **Acid etching is not acceptable.** It is mandatory to cut grooves into the subfloor to minimise temperature and shrinkage stress. Typically 8mm x 8mm, 150mm from and running parallel with walls, plinths, columns and any finished edge such as expansion joints.

### PRIMING

The prepared substrate must be sealed with Vuka Prime 102, porous floors might require two coats. Apply copper tape and prime with Vuka AS Primer. All in strict accordance with Vuka Floors literature.

### MIXING

Vuka Crete HD ESD is a pre weighed kit for optimum performance and must not be split. Into a rotary pan mixer empty the Part A, Part B, fibers and pigment components. Mix to an even consistency for about 30 seconds. Gradually add the aggregate and mix for 3 minutes until a fully wetted lump free mixture is obtained.

### APPLICATION

Vuka Crete HD ESD is poured evenly over the appropriate area to be covered, spread the mix evenly with a plastic trowel. The preferred application is to use a screed box applicator preset to the specified thickness, laying the screed 70cm to 80cm wide. Close surface with a plastic trowel. Use a mohair or textured roller in gentle sweeps in one direction over the surface to provide the desired finish. Avoid excessive rolling as it could lead to surface pin holing and reduced slip resistance.

### PRODUCTS REQUIRED

This system is built up as follows  
Vuka Prime 102  
Copper Tape  
AS Primer  
Vuka Crete HD ESD

## **VUKA CRETE HD ESD**

### **COLOUR STABILITY**

This product is not colour fast and will change colour over time especially when exposed to direct sunlight and high intensity lighting. Exhibits a yellowing effect most noticeable in the grey. The discolouring does not compromise the products chemical resistance or physical characteristics.

### **CURING**

At 25C constant, excessive traffic, aqueous contact and exposure to aggressive chemicals should only take place after 7 days when full cure has been achieved. At 10C constant, full cure would take a minimum of 12 days.

### **STORAGE**

If stored in original, unopened and undamaged sealed containers in dry conditions at temperatures between +10 C and +25 C.

Vuka Prime 102: 12 months from date of production.

AS Primer: 12 months from date of production.

Vuka Crete Part A & B: 12 months from date of production.

Vuka Crete Part C: 8 months from date of production. Must be protected from humidity.

### **HEALTH AND SAFETY**

Use of basic principles of industrial hygiene and protective clothing such as gloves, goggles, masks will enable the product to be used safely. Splashes into eyes should be washed immediately with clear water and medical advice sought.

### **BILL OF QUANTITY DESCRIPTIONS**

Contact Vuka Floors for a detailed bill description to suit your specific requirements.

### **MODEL SPECIFICATION**

Prepare surface and install Vuka Crete HD ESD water based polyurethane compound 6mm thick in strict accordance with the technical data

obtainable from Vuka Floors. All work to be done by Vuka Floors approved applicators.

### **REFERENCE PANEL**

A reference sample should be installed by the applicator prior to the start of the contract to ensure correct coverage, workmanship and acceptance by the client as a standard for the project.

### **FURTHER INFORMATION**

This product will change in colour over time. Especially when subject to high levels of UV and or chemical attack. For best colour stability consult our technical department. This does not compromise the products physical and chemical resistance characteristics.

Vuka Floors products are guaranteed against defective materials and manufacture and are sold subject to its Terms and Conditions which may not be overridden in any other legal documentation.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience at the date of issuance it is subject to change without prior notice. User must contact Vuka Floors to verify correctness before specifying or ordering. No warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

Figures given for consumption / spread rates are theoretical and do not allow for additional materials due to surface profile, porosity, variations in level and wastage etc.