

THIS METHOD STATEMENT COVERS THE SURFACE PREPARATION MIXING & APPLICATION OF **UCRETE CSAS** A POLYURETHANE SLIP-RESISTANT ANTI-STATIC CONDUCTIVE FLOORING SYSTEM.

**METHOD STATEMENT: UCRETE CS10AS / CS20AS - 6mm thickness**

**1. PREPARATION:**

- 1.1. At the time of installation of the **UCRETE CSAS** the substrate concrete should have a minimum tensile strength of 1.5 MPa, be more than 7 days old and the surface should be dry.
- 1.2. Surface Laitance must be removed by mechanical action; suitable equipment includes captive shot blasting equipment (e.g. Blastrac), Concrete Scarifiers and Diamond Grinding (for edge work and small areas ONLY).
- 1.3. Anchor / Termination grooves (see below) to be cut into the substrate where not already present.

**2. DETAILING:**

- 2.1. Anchor / Termination grooves must be present in the surface of the concrete within 75 mm of all 'free edges' these may be cast into the surface or cut subsequently. 'Free Edges' includes all joints, column bases, perimeter walls, drainage channels, door thresholds etc. Joints are also required wherever movement is expected including adjacent to stainless steel channels, machine bases, around columns and at any construction joint in the substrate. Anchor / Termination grooves are nominally square in section with each side twice the thickness of the floor.
- 2.2. Anchor grooves/ Termination grooves should be included either side of all day joints in the substrate in preparation for a joint, should movement subsequently occur.
- 2.3. **Anchor / Termination grooves are nominally square in section for the Ucrete systems and should be twice the thickness of the floor in both width and depth.**

**6mm Ucrete CS10AS / CS20AS**

**12 x 12mm**

- 2.4. At soft joints subject to traffic and at channels, the grooves should abut the joint, to provide extra protection to the arris against impact and to prevent the ingress of liquids under the floor in the event of sealant failure.
- 2.5. **NB: Refer to Master Builders Solutions Detailed Sketches for Anchor and Termination Grooves.**

**3. PRIOR TO INSTALLATION:**

**3.1. Storage**

Materials should be stored under cover, out of direct sunlight. **Part 3** must be raised off the floor and kept dry. **Part 1, Part 2** and **Part 4** must be protected from temperature extremes.

**Ideal storage temperature is 15°C - 22°C.**

The substrate concrete should be installed to the tolerances required of the finished floor. Any repairs to the substrate or correction of levels etc. should be done in good time prior to the installation of the **UCRETE CSAS**.

**4. INSTALLATION OF THE UCRETE CS10AS / CS20AS:**

**4.1. Ideal ambient application temperatures are 15°C to 25°C (MAX). Relative Humidity levels affect the curing rate of the Ucrete system and ideally should be above 50% during application.**

**4.2. The mixed UCRETE CS10AS / CS20AS should be within 15°C to 20°C range during installation.**

Once laid **UCRETE** will cure very effectively even at low temperatures.

Applications should not proceed if the temperature is expected to be less than 3°C below the dew point at any time during the operation.

**4.3. Summary of Storage, Mixing and Application Temperatures.**

Item		Temperature
Material Storage Area		15°C to 20°C
Mixed Material		15°C to 20°C
Application area (Ambient)		15°C to 25°C
Substrate Surface		15°C to 25°C

**NB: UCRETE should not be applied in direct sunlight or to very hot substrate surfaces.**

**5. UCRETE CSAS applications do NOT normally require the use of a primer unless the surface to which it is being applied is extremely porous. IF this is the case follow the detail below:**

**It MUST however be applied to the areas of the floor where the copper earthing tape is to be applied in order to ensure full bonding of the tapes to the substrate.**

**OPTIONAL: UCRETE PRIMER FS – (Scratch Coat 1 mm)  
(Fast Setting - Heavy Duty Fast Slurry Primer)**

**UCRETE PRIMER FS** should not be applied on to:

Damp substrates - Concrete and other cementitious substrates must be visibly dry.  
Weak substrates - the average pull-off strength shall be 1.5 N/mm<sup>2</sup>.

**Application to substrates of lower strength may affect the long-term performance of the applied flooring. This is particularly relevant in areas subject to heavy use be it thermal or mechanical.**

**5.1. Mixing:**

5.2. Pour the contents of the **Part 1 (Red Cap – 2.83 kg)** and the **Part 2 (Blue Cap – 2.86 kg)** into a 20 L heavy-duty plastic mixing bucket and mix using a suitable slow speed handheld mixer with a **Collomix KR** type mixing head for 20 seconds.

5.3. Add the **Part 3 bag (7 kg)** and continue mixing for a further 2 minutes or until the mix becomes homogeneous. **DO NOT overmix.**

5.4. The working life is approximately 10 minutes. Multiple units may be mixed, but **Do Not** mix more material than can be applied in 10 minutes.

**5.5. Application of UCRETE PRIMER FS (Optional & Copper Tape Installation)**

The **UCRETE PRIMER FS** is applied by Squeegee or Steel Trowel from:

**(a) 0.6 kg / m<sup>2</sup> (0.38 mm) to 1.6 kg / m<sup>2</sup> (1 mm)**

5.6. Above coverage rate will depend on substrate profile and does not include any wastage.

5.7. **Mixed material should be poured out immediately onto the floor otherwise it will Exotherm very quickly and set. Do NOT leave mixed material in the bucket.**

5.8. Anchor grooves 8 mm x 8 mm (**Maximum**) can be filled out with the **UCRETE PRIMER FS**. Larger anchor grooves must be brushed out and filled with the subsequent **UCRETE System**.

5.9. The subsequent over-coating / application can be carried out when the **UCRETE PRIMER FS is tack free** typically as follows.

(1) 8 Hours at 10°C-15°C

(2) 6 Hours at 20°C

(3) 4 Hours at 30°C

**The above timings are dependent upon both temperature and humidity. If the humidity is <50% a delay in setting / curing of the UCRETE PRIMER FS can be expected and overlayment times would need to be extended.**

**The surface MUST be dry to the touch before overlaying. Premature application of the Ucrete CS overlayment can lead to bubbles in the surface (out-gassing). Ideally the primer should be left overnight (12 hours).**

- 5.10. Ensure that **UCRETE PRIMER FS** has been correctly applied and cured.
- 5.11. **NB:** Should the primer coat be left for more than 48 hours; mechanical surface preparation will be required to produce a suitable surface for the application of the body coat. This will necessitate re-priming.

## **6. COPPER EARTHING STRIP:**

Once the primer has been completed and is dry (left overnight), apply the self-adhesive copper tape to the area. The copper tape should be applied each 10m, extending 1 metre onto the dried primer. The tape should extend up the wall so that all tapes can be connected when the floor has been completed. Each individual floor panel (a panel can be considered as being isolated by expansion joints) should have copper tape. No area of the floor should be more than 10 meters from a copper tape in any direction.

**NB: A minimum of 2 earthing points MUST be provided for in any room that is not directly linked to the balance of the flooring system (Individual rooms with no connecting corridors etc.**

**(See Section 7 – Special Techniques Below)**

**NB: Resistance to ground: 104 – 106 Ω (EN 1081) (IEC 61340-5-1 ECF)**

## **7. SPECIAL TECHNIQUES:**

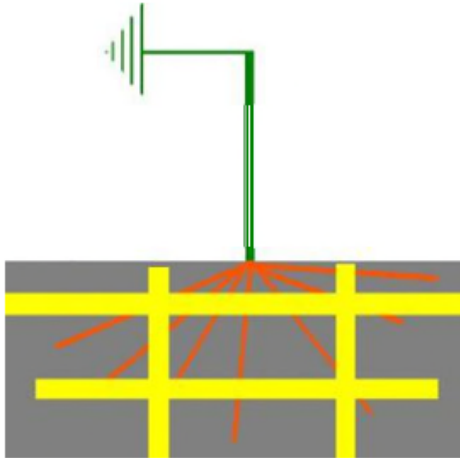
### **7.1. EARTH CONNECTIONS FOR ANTI-STATIC SYSTEMS**

**Earth connections and copper tape have to be applied to all anti-static UCRETE systems.**

Copper tape and earth connections are applied to the surface of the cured **UCRETE PRIMER FS** before the application of the anti-static coat. **IE:** Before **UCRETE PRIMER LCAS** is applied. Ensure the earth connections have been correctly applied and sufficient copper tape must be left uncovered to allow for connection to the next bay of material.

### **7.2. MAIN EARTH CONNECTIONS**

Every floor should have at least one earth linkage connection as shown in figure 1 above. It is however good practice to install more than one connection even in small areas, this is insurance should one be damaged.



As the area of floor increases the number of connections should also be increased. Individual rooms should be connected to earth along with corridors etc. On a large open area, connections at each corner should be considered. In addition, careful thought should be given to areas divided by expansion joints, these have to either be bridged by copper tape or treated as isolated areas with individual earth connections.

**Figure 1.**

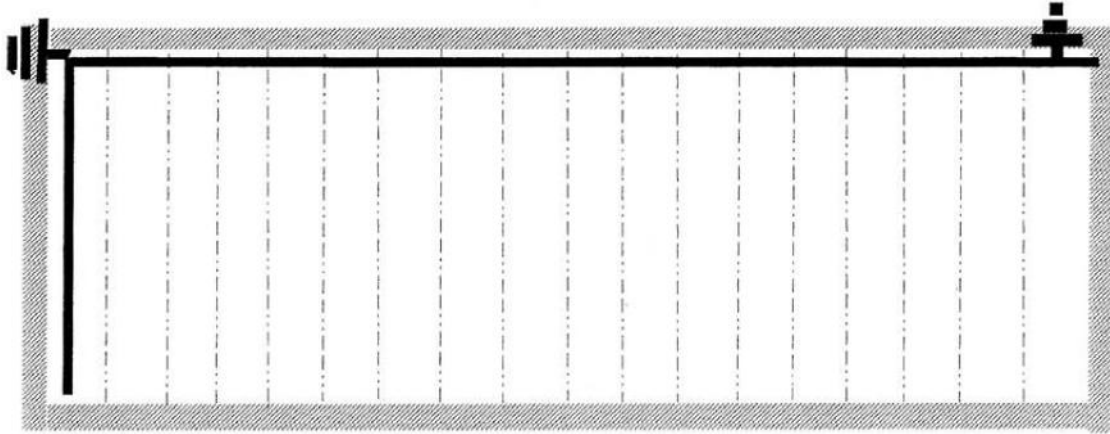
- (a) A multi strand piece of copper wire is connected to the earth at one end and opened out to a fan shape at the other.
- (b) Self-adhesive copper tape is then used to fix the fan of copper wire to the floor. The primer, whether regular or scratch primer, should be abraded where copper tape is to be applied to ensure good adhesion.
- (c) The strips of copper tape that will extend into the main floor are then placed over this area. Ensure good contact is made between the copper tape and the multi strand wire.
- (d) If required, this configuration can be glued into place with a conductive scratch primer (such as **UCRETE MF AS**). Care must be taken to keep the thickness to a minimum so the connection will not be visible in the finished floor.

### 7.3. COPPER TAPE GEOMETRY

Connected to the main earth points are strips of self-adhesive copper tape. The copper tape is applied to the cured primer. The purpose of the tape is to ensure that each bay of material is connected back to the main earthing point and that each mix within the bay is also connected.

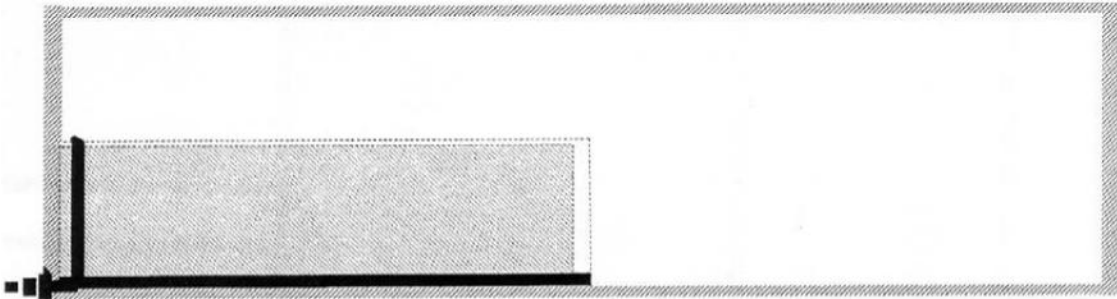
- 1) To achieve this result, an “L” of copper tape is used in each bay of material applied and these are then linked together as work progresses and are connected to the earthing points.
- 2) With **UCRETE** anti-static systems bays should be no more than 10m wide. The length is determined by the area that can be applied in one day. In the event that it is essential to apply more than a 10m bay consult **UCRETE** for specific recommendations. The following detail drawings show possible working sequences and copper tape geometries for a number of situations. The copper tape shown is the **MINIMUM** required. The use of more tape for added security or for areas where it is felt movement / cracking may occur thus isolating that area will not adversely affect the performance of the floor.

**Figure 2** (90m<sup>2</sup> room - 6m x 9m)

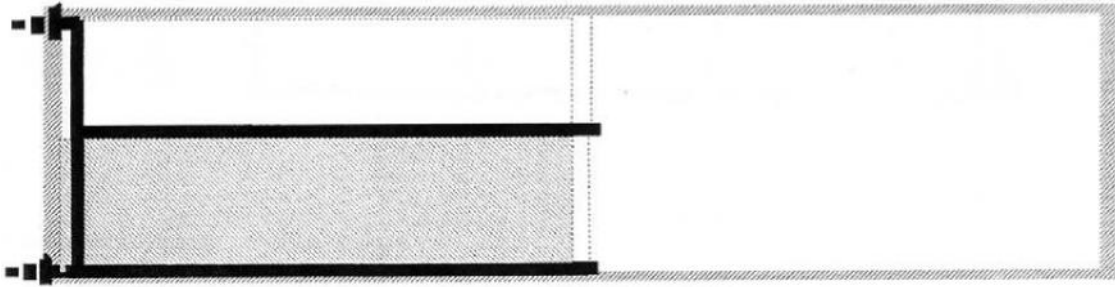


**Figure 3 – 5** (1200m<sup>2</sup> room - 20m x 60m)

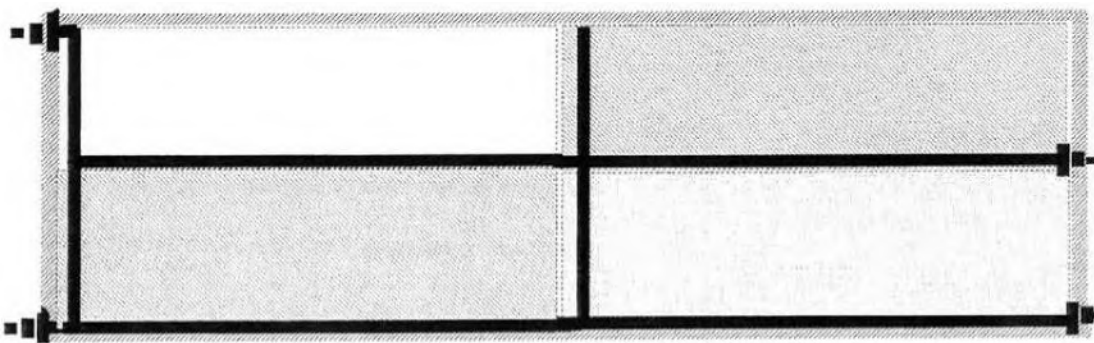
- 3) This will be applied in four bays. First the primer is applied on the initial area to be coated. The primer is applied to a larger area than required 10-15cm to each side. This allows for easier connection of adjacent pieces of copper tape. When the primer is cured, the copper tape is applied in the same “L” shape as figure 2. Ensure sufficient tape is applied to allow for connection to the next bay. **UCRETE anti-static systems** are then applied to this area.



- 4) The primer to the next area is then applied. When cured another “L” of copper tape is applied connected at the top to the previous bay of material. This area is then coated.

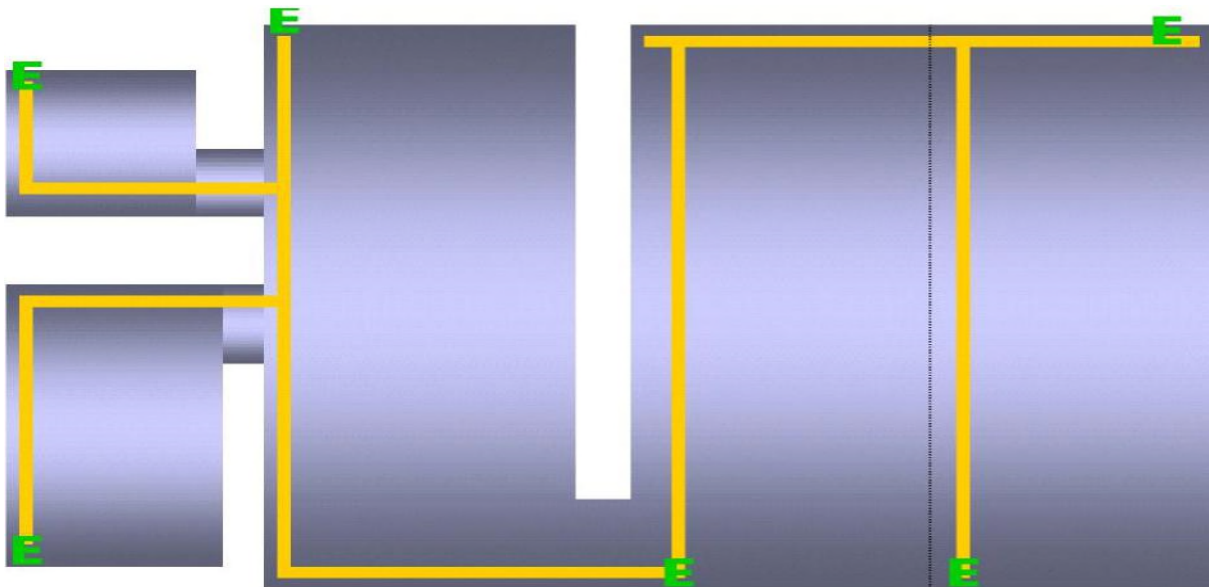


5) Work then continues in the same way with the last two bays.



**Figure 6.**

Using the same principles this is a plan for a more complicated area.



**NB:** The earth linkages can be positioned as required by adjusting the copper tape geometry. Discuss the location with the client and / or the site electrical engineer.

**8. UCRETE CS10AS / CS20AS (6 mm)**

The length of the application bay should be such as to produce a strip of material along the whole length of the bay from a single or double mix to allow for efficient application and maintaining a wet joint for finishing. Recommended Maximum length of any application bay is as follows:

Thickness	Bay Size Width	Bay Size Width (Max)
6 mm	5.5 m long (1 mix)	11 m long – (Double Mix)

**9. Packaging:**

Pigmented Basecoats	Part 1	Part 2	Part 3	Part 4
UCRETE Basecoat BC6AS (21.22 kg)	2.93 kg	3.29 kg	14.5 kg	0.5 kg
UCRETE CSAS- Filler				
a) Filler F5AS (for Ucrete CS10AS)	25 kg			
b) Filler F20AS (for Ucrete CS20AS)	25 kg			
UCRETE TCCS - Pigmented	Part A	Part B	Part C	
UCRETE TCCS (10.39 kg)	10.00 kg	0.23 kg	0.16 kg	

**10. MIXING UCRETE BASECOAT BC6AS:**

- 10.1. Mixing is critical for **BASECOAT BC6AS** as incorrect mixing will adversely affect the antistatic properties of the finished floor. Too little mixing leads to clumps of fibres left in the mix which inhibit flow and leave a poor surface appearance. Excessive mixing breaks up the fibres. Correctly mixed material will have very few lumps of fibre, a good colour and individual fibres should just be visible in the surface of the finished basecoat.
- 10.2. Suitable mixing equipment: Collomatic XM2 650, hand-held Collomix Xo6 + KR mixing head or similar.
- 10.3. The lowest speed setting should be selected and the machine, if a Collomatic, should be set up with two “claw” blades. Star wheels must not be used.
- 10.4. Mix a minimum of 2 units at a time.
- 10.5. Mix the liquid components **Part 1** and **Part 2** and the **Part 4** until a homogenous uniform mix is achieved.



- 10.6. Add the **Part 3** powder and mix for a further 2-3 minutes. Do not exceed 3 minutes.
- 10.7. If for any reason non-dispersed **Part 3** powder is found in the mixing pan, mix using a hand-held Collomix Xo6 + KR mixing head for a further 10 seconds (Slow speed. 350 rpm - max 450 rpm).

## **11. APPLICATION: UCRETE BASECOAT BC6AS:**

11.1. **UCRETE CSAS is a broadcast system that provides two surface textures which can be installed on to a basecoat to produce a floor 6mm thick.**

11.2. Spread the mix evenly over the substrate using a pin screed with the pins set to the appropriate thickness using a notched steel trowel for edgework if required as per the following coverage rates.

11.3. (a) **UCRETE CS10AS** is produced by broadcasting **Filler F5AS (4 – 5 kg/m<sup>2</sup>)** into the **UCRETE BASECOAT BC6AS (10 – 12 kg/m<sup>2</sup>)**

(a) **UCRETE CS 20AS** is produced by broadcasting **Filler F20AS (4 – 5 kg/m<sup>2</sup>)** into the **UCRETE BASECOAT BC6AS. (10 – 12 kg/m<sup>2</sup>)**

NB: Above coverage rates will depend on substrate profile and does not include any wastage.

11.4. Use a spike roller to produce a smooth even finish. The whole floor should be spike rolled at least twice. On the first pass, the spiked roller should be pushed right through the material to the substrate to assist the flow, release the air and to help remove pin screed marks and give a uniform finish to the floor.

11.5. Subsequent passes with the roller should be held lightly on the surface to bring the resin up to the surface and so improve the aesthetics.

11.6. To ensure an even finish all trowelling and spike rolling should be completed before the mix is more than 10 minutes old.

11.7. Care should be taken against splashing resin onto the already scattered floor by too aggressive use of the spiked roller as this will create surface defects.

**NB:** If the **BASECOAT BC6AS** does not flow sufficiently and pin rake marks, etc. remain in the surface even after spike rolling, try the following remedies.

- Raise material temperature
- Increase mix time (but do not exceed 3 minutes after addition of **Part 3**)
- Increase thickness
- Raise substrate and or site temperature

Failure to address the problem will result in poor aesthetics with a variable surface texture and a sub-standard finish.

## 12. BROADCAST – FILLER F5AS / FILLER F20AS:

12.1. The **BASECOAT BC6AS** must be flat and smooth prior to broadcasting. Imperfections in the surface of the **BASECOAT BC6AS** will be seen in the finished floor.

12.2. The time at which the **BASECOAT BC6AS** is scattered is critical:

- Too early and the surface will become uneven.
- Too late and the aggregate will not penetrate sufficiently.
- To ensure long term performance, it is essential that the scatter is applied early enough to allow absorption into the surface.

12.3. At 20°C the scatter should be started after 10 - 15 minutes, so typically after a further two to three mixes of **BASECOAT BC6AS** have been applied and the same gap kept as the application proceeds. This will be reduced at higher temperatures, one to two mixes, and extended at lower temperatures, three to four mixes.

12.4. The appropriate **FILLER** is broadcast into the wet **BASECOAT BC6AS**. If hand scattering is undertaken, care must be taken to ensure an even scatter is achieved. Ensure that the aggregate falls vertically onto the surface of the **BASECOAT BC6AS**, **never** throw the aggregate at the floor.

12.5. As the scatter is applied, the resin from below should be seen to rise to the surface. The aggregate scatter is then continued until an excess is applied. It is important to scatter to excess otherwise bald patches will be created which will detract from the aesthetic appearance, conductivity and the slip resistance of the floor. The application rate of **4-5 kg/m<sup>2</sup>** is much higher than that usually used for scatter systems. It has been found that this level of scatter is required to produce a consistent, durable and uniform finish.

12.6. After overnight cure the surface should be lightly abraded using a single disc floor scrubbing machine fitted with a sanding pad prior to removing excess sand by brush and vacuum. The use of the rotary sander removes the partially adhered aggregate producing a much more uniform surface and reducing coverage rates for the **UCRETE TCCS** topcoat. Provided the excess sand is clean and dry it can be re-used for subsequent areas. After sanding, clean the whole floor by vacuum.

## 13. UCRETE TCCS - APPLICATION GUIDELINES:

**Ucrete TCCS** is designed to be used as part of the systems **Ucrete CS10, Ucrete CS10AS, Ucrete CS20, Ucrete CS20AS** and **Ucrete CS30**.

### 13.1. Storage

In covered warehouse conditions and out of direct sunlight. Materials must be raised off the floor and kept dry.

**On site: store above 10°C and below 25°C.**

**Part C must be protected from extreme temperatures as found in a shipping container or van.**

**In warehouse or on-site: store above 5°C and below 25°C. Liquid components must be protected from frost.**

### 13.2. Packaging

**Part A 10 kg** Pigmented resin

**Part B 0.23 kg** Hardener

**Part C 0.16 kg** Catalyst

### 13.3. Coverage

<b>(a) Ucrete TCCS on Filler F5AS for Ucrete CS10AS R11 Floor</b>	0.4 - 0.6 kg/m <sup>2</sup>
<b>(b) Ucrete TCCS on Filler F20AS for Ucrete CS20AS R12 Floor</b>	1.0 - 1.2 kg/m <sup>2</sup> (in two layers)

**NB:** Above coverage rate does not include any wastage.

## 14. PLANNING THE APPLICATION:

- 14.1. It is important to remember that you are not painting the floor but applying a Ucrete Topcoat. The width of the bay should be such as to produce a strip of material **minimum** 50 cm across along the whole width of the bay to allow for efficient use of the squeegee and roller. The **maximum** bay widths are therefore:

For **Ucrete CS10AS** floor 30 m

For **Ucrete CS20AS** floor 20 m 1st application 30 m 2nd application

On larger floors plan how the area is to be divided to produce the most practical and aesthetically acceptable floor.

Make sure there are sufficient operatives on site to apply the whole of the mix within the 3-4 minutes before the next mix arrives. **This should not be fewer than 4 people.**

Operatives can wear spiked shoes, but these must have flat spikes to prevent damage to the floor. Alternatively, they may wear 30-60 grit self-adhesive sandpaper ("deck," or "grip," tape). This allows for more freedom of movement and reduces damage to the aggregate surface.

As with all grades of Ucrete the mixing and the application of the material must occur at the same rate.

Ensure adequate ventilation and that there are no foodstuffs in the area during application. There is an odour during application. The floor is non tainting after 5 hours. The air must be removed from the area and exchanged with fresh air prior to reintroducing foodstuffs, forced ventilation may be required in some circumstances, e.g. in the middle of a factory.

### 14.2. Temperature requirements

**Site temperatures 10 - 30°C (>3°C above Dew Point)**

**Material temperatures 12 - 25°C**

Temperature is critical to the correct application of the **Ucrete CSAS**. **Ucrete CSAS** is a system sold where aesthetics is a key selection factor. Ensuring better control of site and materials temperatures during installation will give produce a better-looking floor. These should be factored into the site discussions with the client and main contractor.

Temperatures below 12°C will make application more prone to problems.

The air and substrate temperature during application should be above 10°C.

**Do not use at temperatures above 30°C**

### 14.3. Preparation of Basecoat

The surface of the basecoat must clean, dry and free from loose particles of aggregate, prior to the application of the **Ucrete TCCS**. To achieve the necessary standard of preparation the broadcast basecoats must be abraded using a mechanical sanding machine fitted with a pad appropriate to the grade of aggregate broadcast used. Filler F20AS will need sanding pads that are coarser than those used for Filler F5AS. Once abraded the surface should be swept and thoroughly vacuumed.

**Important:** Failure to follow this step will result in surface defects (pinholes and material tearing) and poor aesthetics. It is a mandatory application process.

### 15. MIXING:

15.1. Mixing is critical. Mix in the Part A container with a high-speed electric drill at **minimum 450 RPM** with a **Collomix DLX** type mixing head / helical paddle with a **minimum 75 mm diameter**.

**Important:** The mixing process of **Ucrete TCCS** is unique and very different to the normal mixing requirements of other Ucrete products. During each mixing step air must be introduced into the mix. Mixing in air is important to the correct curing of the material and helps the reaction proceed. If this step is omitted, then the material may remain tacky and not fully cure.

15.2. Air should be introduced by systematically raising and lowering the mixing paddle and turning air into the mix. **Keep the drill at full speed to introduce the right amount of air**. This may feel very odd in the beginning since it is the exact opposite of other standardised mixing instructions. Ensure training of the mixing team is completed before starting work.

15.3. **Important:** Correct mixing is critical. Insufficient mixing will lead to tacky or uncured material. Overmixing can reduce working time. **A timer must be used. It is impossible to accurately control the mixing times without a timer; it is as important as having the right mixer.**

### 16. TOOLS:

Correct tools and equipment will facilitate the application and ensure the best possible results.

16.1. **Squeegee** - The wider squeegees have been found to be most effective. You should avoid using a squeegee that is less than 450mm wide.

Large folded rubber squeegees work best to correctly spread the material. The foam should be closed cell neoprene type. The example below is from multitool.de and comes in 450, 550, 750 mm sizes. It is a comparatively firm foam squeegee and is recommended. Suitable alternatives may be found via Roll Roy LLC in the U.A.E.



## 16.2. Rollers

Rollers are used to apply **Ucrete TCCS**. However, they are not used to move or redistribute the topcoat in the traditional way. They are used to even the surface in a similar way to a roller on the surface of **Ucrete UD200**.

The roller should follow the direction of the squeegee application. This is normally across the width of bay. Rolling up and down or at right angles to the squeegee application should be avoided. This can result in dropping freshly applied material into old which can lead to surface defects.

Saturated rollers which can be caused by heavy rolling or incorrect roller selection, have been found to create pinholes. The closed cell polyethene roller (structure roller) is currently the most effective roller found to finish **Ucrete TCCS**.



Tools will need to be replaced every 20 – 40 minutes depending upon temperature due to the rapid resin cure. It is therefore imperative that an adequate stock of consumables such as roller refills etc. are kept on site.

## 17. APPLICATION:

17.1. Do not apply when atmospheric condensation is occurring or likely to occur before full cure is attained, i.e., when the dew point is reached or when the ambient or substrate temperature is within 3°C of the dew point.

Pour the mixed **Ucrete TCCS** across the width of the bay immediately after mixing. Avoid leaving material in the bucket as it will reduce the working time.

### 17.2. Two Squeegee Method

The material is installed using the **Two Squeegee** method. This requires two installers to be assigned to the squeegee, both wearing flat spikes or 30-60 grit sandpaper on their shoes.

The first squeegee should be considered the spreading tool to achieve the correct consumption rate. This is similar then to a trowel, pin rake or screedbox in other installations. Emphasis should be given to spreading the material out quickly and efficiently to keep up with the continuous mixing.

The seconding squeegee should be considered the finishing tool to achieve the final level and even floor. This squeegee could be compared to the back-rolling step in other applications like **Ucrete UD200**. Emphasis should be given to working the **Ucrete TCCS** into the texture of the aggregate to remove any trapped air. Rolling is still required but when the second squeegee application is finished the floor should not have any ponded material and very few squeegee marks. This step is the only opportunity to move excess material down the bay.

**Important:** It is crucial that the material is physically forced into the texture to wet and remove the air from the troughs of the aggregate. Using this method is the simplest and fastest way to achieve a good looking, defect free floor.

- 17.3. Just like all Ucrete products the **Ucrete TCCS** will increase in temperature slightly during curing, even on the surface of the floor. This takes place more rapidly with **Ucrete TCCS** as it is a fast curing product. Any air left trapped under the topcoat will expand when the temperature of the curing topcoat increases. This can cause pinholes.  
In the worst-case poor wetting will result in tear marks in the finished floor. This is where the squeegee has not passed over the surface multiple times, forcing the topcoat into the surface from both directions. This does not occur with the two-squeegee method.
- 17.4. Rolling as the final finishing step is still required and is done using the closed cell texture roller. It is important to achieve the correct coverage rate and as uniform an appearance as possible with the squeegee, so the roller only needs to remove any slight irregularities.  
The closed cell rollers do not pick up and move large amounts of material, so the two-squeegee application must be done to a good standard.
- 17.5. Lightly roll across the bay to leave a uniform finish. More pressure can be used to disperse small excesses of Topcoat. If the roller picks up too much of the **Ucrete TCCS** it is likely that too much pressure has been used. A full roller will allow material to spill off the ends and leave deposits at the end of each stroke. Spray off the roller onto older mixes will cause defects. To avoid this, remove the excess **Ucrete TCCS** by rolling out onto a piece of cardboard or better, change the roller sleeve.  
**Important:** Roll across the bay and not at right angles to it. Rolling at right angles can cause defects between one mix and the next.
- 17.6. A uniform surface is best achieved by lightly rolling across the bay, with a wide (25 - 40 cm) closed cell polyethylene roller to remove and final marks left by the two squeegees.  
Fresh mixes of material should be poured close to the wet edge making sure there is not a gap left, care needs to be taken at the join between mixes to ensure the area is repeatedly squeegeed in both directions Use a brush and small squeegee for corners and edgework.
- 17.7. **DO NOT** apply when atmospheric condensation is occurring or likely to occur before full cure is attained, i.e., when the dew point is reached or when the ambient or substrate temperature is within 3°C of the dew point. Normally full cure is reached after 24 hours, but under very cold or very dry conditions this may be extended to 48 hours.

17.8. The cutting of ANY joints required within a **Ucrete CSAS** applied system **MUST** be done extremely carefully to avoid cutting any of the copper earthing tape. Predetermined joints **MUST** have been provided with a suitable loop in the copper tape to ensure it is below the level of any saw cut. Cuts should be made with a diamond bladed floor saw and within 24 hours of casting of the Ucrete, especially IF the underlying concrete floor is less than 3 months old and subject to shrinkage etc.

17.9. **MasterSeal CR 460** Joint Sealant to be applied as per the **Master Builder Solutions Method Statement**.

## 18. CURING:

18.1. Full cure is normally reached after 3 - 5 hours. If necessary, the 2nd application can be applied once the first is dry to the touch, typically after 2 – 3 hours.  
Overcoating must take place within 48 hours at 20°C.

## 19. WASTE DISPOSAL:

Primary packaging / containers should be disposed of as contaminated / hazardous waste in accordance with local regulations.

### 19.1. Warnings and precautions

In its cured state Ucrete is physiologically non-hazardous. For normal flooring applications **Ucrete CSAS / Ucrete TCCS** does not require the use of respiratory protective equipment during installation. Normal precautions for handling resinous materials should be followed.

### 19.2. Caution

**Ucrete TCCS - Part B.** If exposure to air when finely dispersed (on cleaning rags or dry absorbent materials) an exothermic reaction may occur, the material itself is not self-igniting. **DO NOT use dry cleaning cloths.** Spillages of material should be diluted with water before collecting with a non-combustible absorbent material.

19.3. Collect contaminated clothing / cleaning cloths / absorbent / water / spilled mixture into metal containers and seal. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. The Part B container should be resealed after use to prevent spillage.  
Operatives should consult the CoSHH risk assessment and their work instructions.

### 19.4. Storage

In covered warehouse conditions and out of direct sunlight. Materials must be raised off the floor and kept dry.

On site: store above 10°C and below 25°C. Part C in particular must be protected from extreme temperatures as found in a metal container or van.

In warehouse: store above 5°C and below 25°C. Liquid components must be protected from frost.

## 20. POST INSTALLATION:

- 20.1. No Building Trades or traffic to be allowed on to the freshly laid **UCRETE CSAS** for at least 24 hours at 15°C to 20°C, longer at lower temperatures.
- 20.2. It is normal for the installation of joints to take place and no other trades should have access until the sealant has cured sufficiently to resist damage.
- 20.3. If the floor is to be handed to the client in a pristine condition, then it must be protected from other trades. Full protection of the whole floor by temporary covers consisting of polyethylene sheeting overlaid with hardboard, or plywood depending on the trades and traffic to have access, with joints taped and fixed. Ensure the floor is completely tack free at the time of covering, typically after 24 hours at 15°C to 20°C.

### NOTE:

The above guide provides a summary of the installation of a **UCRETE CSAS** floor and should be read in conjunction with our technical data sheets.

The **UCRETE** Applicator is a specialist in the installation of **UCRETE** floors and is to install the floor in accordance with our current guidelines and best site practice.

Ucrete Industrial Flooring is only available from:

**Master Builder Solutions Construction Chemicals LLC, P.O. Box 37127, Dubai, UAE.**

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### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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