Acrylicon Flooring Systems Installation Guidelines

Acrylicon's Vision

The Acrylicon Group's vision is to be the foremost manufacturer, supplier, consultant and installer of market-leading industrial floors. We aim to be considered a partner that has knowledge and that bases their success on high quality, innovative design and excellent performance to ensure satisfied customers.

These guidelines are to be used in conjunction with Acrylicon accredited practical training and are in themselves no means a mandate to install Acrylicon Flooring Systems. The information and technical advice is based on intensive research and years of experience but implies no liability or other legal responsibility on our part, including in relation to third party intellectual property rights, especially patent rights. We reserve the right to make technical alterations in the course of further development and the customer is not released from their obligation of checking our data and recommendations for the suitability of their own particular application. Performance of any product described herein should be verified by testing, which we recommend be carried out only by qualified experts and is the sole responsibility of the customer.

These guidelines are in themselves in no way all-encompassing and are to be used in conjunction with local Health and Safety Legislation and Project Management Procedures.

In designing these we have tried to offer explanations as to why things are done in certain ways, as it is important to **always assess what is in front of you** rather than try making one solution fit every situation. If you are in any doubt as to the correct course of action, address this with your National Representative or Acrylicon Polymers GmbH before proceeding.

Storage and Handling

This is to be used in conjunction with The Material Safety Data Sheets and all relevant local Health and Safety Regulation governing the Transport and Storage of Hazardous Substances.

All components of the Acrylicon System should be stored in cool, dry and protected condition out of direct sunlight and in accordance with relevant health and safety regulations. Storage temperatures must not exceed 25°C/77°F and the products should not be stored near naked flames or heat sources. Stored in unopened or sealed containers under these conditions the components have a shelf life of twelve months from the date of production.

If the resins are exposed to prolonged storage in direct sunlight or high temperatures (above 25°C/77°F) this can initiate autopolymerisation (gelation) of the resin without a catalyst. This should be avoided at all cost as once the material has gelled (albeit partly), the whole drum must be discarded. Similarly, should the resin be exposed to too low temperatures the paraffin wax in the resin can separate and solidify. This is not permanently detrimental, but should the resin have been exposed to low temperatures it is important to condition it at 15°C -20°C (59°F - 68°F) and then thoroughly mix the paraffin wax back in and test before using it.

If you are installing in colder environments, it is important to allow the materials time to stabilise at that temperature as that will allow for correct curing times and ensure the product does not have moisture from dew points. If your resin arrives too warm for your installation environment, a way to accelerate the cooling is to hang canvas drop cloths that have been soaked in water over the barrels and utilise your exhaust fans to blow air onto them.

It is imperative before use that barrels of resin are mixed for a minimum of 5 minutes with a propeller mixer to distribute the paraffin wax evenly throughout the resin and then a minimum of twice a day thereafter while in use. Similarly, if the resin is being decanted into smaller containers it needs to be mixed before decanting and the decanted resin mixed before installation.

It is important from a safety perspective to store the resins and catalyst separately.

Ensuring correct acclimatisation of the materials prior to installation is important for all products, including fillers and aggregates.

For information on what to do in the event of spillage, contact with eyes, contact with skin etc., ensure you have familiarised yourself with the processes in the relevant Material Safety Data Sheets.

Ventilation

When installing Acrylicon Flooring Systems we want to ensure air exchange in the installation area to assist with the curing process, keep the exposure (parts per million) reduced, reduce the flammability risk of the wet resin and extract the smell of the resin from the installation area. To do this you need to create an area of negative pressure via extraction to allow clean air to be drawn into the installation environment. Negative pressure also allows affected air to be drawn out of the corners where it might otherwise remain. An important thing to keep in mind when planning and monitoring your extraction is that the vapour from our resins is heavier than air and therefore in higher concentration near the floor.

This is achieved by installing zip walls or sealing appropriate areas with plastic and then setting up fans to extract to the exterior of the building while ensuring that there is sufficient inlet from the interior of the building to allow incoming airflow to replace the extracted air. Ensure you have sealed off any outlets that would enable the vapour to be spread around the building. An important thing to ensure is that you are not extracting near an air-conditioning intake, as this will distribute the vapour around the interior of the building.

The extraction should be tested by a smoke test to ensure that the extraction is good and that the air is not just being re-circulated.

While we want to achieve air exchange, we do not want fans blowing directly on the curing resin, as this will adversely affect the curing. The exception to this is when installing Acrylicon Primers containing Primer Additive as the Primer Additive air dries and as such can be assisted.

From a flammability perspective you need to ensure the concentration of vapour in the air does not exceed 2.1 % by volume (21 000 ppm) at 20°C as this is when there is a risk of flammability by open flame. Once cured, our products are not considered a flammability risk.

In some markets, extractor fans can be fitted with active coal filters to remove the smell of the resin.

Mixing

The mixing area should be located to have as short a transportation distance of the mix as possible between the mixer and the installer to minimise separation in mixes that contain aggregates. When installing in larger areas, plan on moving the mixing station as you go along rather than trying to cover the whole area from one mixing position. An easy way to achieve this is to cover pallets with plastic protection and build your mixing station on them. That way you can easily move the mixing station with a pallet truck instead of having to re-build it a number of times. This is also useful for long, narrow corridors.

To achieve a good mixing station, preparation, precision and neatness are important as well as ensuring that the mixer is not interrupted or diverted from their task as this could result in a lapse in concentration and therefore an incorrect mix and an unsatisfactory or failed floor. The mixer should prepare by ensuring that only the materials for the current flooring layer are on the mixing station and that there is sufficient room to work. An example of good preparation for mixing a Décor body coat is to have a number of buckets with the quantity of quartz for a mix pre-blended and measured and with a plastic cup with the catalyst measured into it placed on top. That way once the resin has been measured out the catalyst is (a) not missed out and (b) mixed in before the quartz. Once the laying starts things can move at pace and good preparation and a mixer with a precise nature will negate the pressure.

It is important to ensure that there are no lumps in the Catalyst Powder BPO, as this will cause a localised area to cure too quickly and have yellow discolouration.

If using Liquid Catalyst BPO, you need to create the vortex in the resin with the mixer and then add the catalyst slowly to achieve even distribution. A good way of measuring the liquid catalyst and applying it slowly to the mix is to use a large syringe.

The Catalyst should be mixed for a minimum of 60 seconds to ensure good dispersion and a timer should be at the mixing station to ensure this consistent mixing.

The mixing Sequence should always be as follows, mixing between the addition of each component:

Resin Catalyst Additives Pigments Aggregates

This is to ensure that the liquid and powder components are evenly distributed before adding the aggregates, as they will never distribute evenly if added afterwards. If the Catalyst is missed out of sequence it is not to be subsequently added and the **mix is to be discarded**.

The Catalyst is always to be measured precisely in accordance with the mix size and substrate temperature to ensure the correct curing time. A new wet layer has to be in contact with a cured layer for at least 7 minutes before its own curing starts to solve the cured layer and allow the chemical bonding to occur.

As soon as a mix with aggregates has been mixed it needs to be taken to the floor layer and poured out. If it or any part of it has been left standing it needs to be re-mixed as the resin and aggregate will have separated and the mix will not be even. When pouring it out it needs to be done in a quick and even motion and preferably back on itself, as then the top (more resin) and bottom (more aggregate) of the mix will be installed together and ensure good evenness.

When mixing a mix containing aggregates, it is important to remember that the quantities in the batch guides are based around room temperature and that the resins have less viscosity at lower temperatures and more at high and adjustments need to be made to ensure the mix has the correct qualities, especially when installing the self-levelling layers.

When mixing a mix containing aggregates it is good to mix in a metal bucket as it can rip shards off a plastic bucket and contaminate the mix.

The floor below the mixing area should always be protected by a plastic tarpaulin. Any spill should be dealt with immediately as besides the immediate area, it could be trodden in and across the floor.

Acrylicon System Chemical Resistance

AcryliCon screeds and coatings are highly resistant to chemical attack and offer excellent protection against spills and leakage of organic and mineral oils, fats, acids, alkalis and a wide range of industrial cleansers and disinfectants.

Our testing involves the immersion of a cured unfilled sample in the test medium at 20°C. The compressive strength of the sample is then tested after 28 days of storage and the rating 'Fully Resistant' stipulates that the strength may not deviate by more than 20% from that of a control sample stored in air at 20°C.

The following ratings should be considered as general guidelines for a number of reasons. Firstly, many proprietary products in practical use (e.g. disinfectants or cleansers) are compounds of a number of chemicals and a simultaneous exposure to two or more of these chemicals may produce a more severe effect on AcryliCon coatings and screeds. Furthermore, the chemical resistance of AcryliCon finished products are influenced both by pigments and fillers used in the recipe, as well as the effect of temperature on concentration of chemicals over time, hence no individual or overall guarantees can be offered by AcryliCon and it is highly recommended that local tests are performed in special cases.

Should you have any questions on the chemical resistance of our products, please contact AcryliCon's Technical Services department for further advice.

Rating:

Fully Resistant + Resistant (Short Term) o Not resistant

			A	cids			
Acetic Acid 10%	+	Acetic Acid 30%	О	Acetic Acid Conc.	-	Chromic Acid 10%	+
Chromic Acid 20%	+	Chromic Acid 40%	-	Citric Acid 10%	+	Citric Acid 30%	+
Formic Acid 10%	0	Formic Acid 30%	-	Hydrochloric Acid 10%	+	Hydrochloric Acid Conc.	+
Lactic Acid 10%	+	Lactic Acid 30%	+	Nitric Acid 10%	+	Nitric Acid 30%	o
Nitric Acid Conc.	-	Oxalic Acid 10%	+	Phosphoric Acid 10%	+	Phosphoric Acid 40%	+
Phosphoric Acid Conc.	0	Salic Acid 10%	+	Salic Acid Conc.	+	Sulphuric Acid 30%	+
Sulphuric Acid 50%	0	Sulphuric Acid Conc.	-				
			Al	kalis			
Ammonia 10%	+	Ammonia 30%	o	Caustic Soda 10%	+	Caustic Soda 50%	+
Calcium Hydroxide	+	Potassium Hydroxide	+				
		Salt	Solutio	ons (saturated)			
Ammonium Chloride	+	Ammonium Sulphate	+	Calcium Chloride	+	Potassium Chloride	+
Potassium permanganate	+	Sodium Carbonate	+	Sodium Chloride	+	Sodium Hypochlorite 15%	+
Sodium Sulphate	+						
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Acrylicon System Chemical Resistance

			So	Ivents			
Acetone	-	Benzene	-	Butanol	-	Butyl Acetate	-
Butyl Ether	-	Chloroform	-	Cyclohexane	+	Ethanol	-
Ethanol 10%	0	Ethyl Acetate	-	n-Heptane	+	n-Hexane	+
Isopropyl Alcohol	-	Cresol	-	Methyl Ethyl Ketone	-	Perchloroethylene	o
Phenols	0	n-Propyl Acetate	-	n-Propyl Alcohol	-	Styrene	O
Turpentine	0	Toluene	-	Trichloroethylene	-	Xylene	-
		N	atural	Oils & Fats			
Animal Fats	+	Blood	+	Castor Oil	+	Linseed Oil	+
Olive Oil	+	Vegetable Fats	+				
			Petro	chemicals			
Crude Oil	+	Diesel Fuel	+	Gasoline (high/normal octane)	0	Hydraulic Oil (e.g. Skydrol)	c
Kerosene	+	Mineral Oil	+	Paraffin Oil	+	Petroleum	+
White Spirit	+						
		Clear	nsers (& Disinfectants			
Ammonia Solution	+	Calcium Chloride	+	Carbolic Acid	-	Formalin	4
Hydrogen Peroxide 10%	+	Hydrogen Peroxide 30%	+	Hydrogen Peroxide 80%	0	Liquid Ammonia	4
Soap Water	+	Enzyme / no-rinse cleaners	-				
		F	ood &	Beverage			
Fruit Juice	+	Beer (5% alcohol)	+	Wine (11% alcohol)	+	Cola	4
Milk & Dairy	+	Coffee/Tea	+				

Disclaimer

This information and all further technical advice is based on intensive research and many years of experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make technical alterations during the course of further development. The customer is not released from the obligation of checking our data and recommendations for the suitability of their own particular application. Performance of the product described herein should be verified by testing, which we recommend be carried out only by qualified experts in the sole responsibility of the customer.



Substrate Preparation Methods

Sanding:

This is not an approved method of substrate preparation for Acrylicon Flooring Systems. The reason for this is that it does not remove the fine particles from the surface of the concrete and simply redistributes them and fills the pores of the concrete, resulting in poor penetration of the primer. Also, on an uneven floor, areas of the substrate can be missed.

Acid Etching:

This is not an approved method of substrate preparation for Acrylicon Flooring Systems.

Grinding - CSP Value of 2-4: Recommended when installing thinner systems such as the Variant Paint and Laquer Systems.

Grinding with a multi-head, contra-rotating diamond grinder (Minimum of 226 Kg/500lbs) is a suitable preparation method for Acrylicon Flooring Systems. Only metal bond diamonds (6-36 grit) should be utilised as resin bond diamonds will leave a residue which may act as a bond breaker and potentially lead to curing issues. This method however leaves particles on the floor that should always be vacuumed with two passes at perpendicular angles afterwards. It also needs supplementing with a hand grinder in the areas next to the walls to ensure the entire substrate has been prepared. It is very useful when using this method to source the tooling from a local supplier with good knowledge of the concrete in the area as incorrect tooling can waste time and money. It is crucial to remove the cream/laitance to expose "salt & pepper" aggregate in the concrete. In today's concrete, there are many more chemicals utilized in concrete mix designs which are brought to the surface during the finishing process. This leaves a higher concentration of these chemicals at the surface which can lead to primer curing issues.

Shot Blasting - CSP Value of 4-5: Recommended when installing Flake, Variant 2-3mm, MultiGrip, Installing Over Tiles and Decor in lower impacted areas. Do NOT use this method if installing Décor in heavy industrial, fork truck, wet or heavy load environments as these areas will require Scarifying.

Shot Blasting is a preparation method by which small steel pellets are fired at the substrate to remove the laitance and get back to cracked aggregate and is a suitable preparation method for Acrylicon Flooring Systems. These are vacuumed back into the machine with the removed laitance and re-used. This results in a clean and dust-free substrate. Where the shot blasting passes overlap, there will be a ridge that you will need to remove with a multi-head, contra-rotating diamond grinder. This also applies with the areas up to walls where shot blasting does not reach, although this is supplemented with a hand grinder as well. It is also sometimes quicker if you are installing a flooring system that requires a smoother substrate in a large area to shot-blast and then grind over, rather than doing the whole area by grinding. Shot blasting is not suitable for removing oil or other greasy substances from the substrate and flame-spalling should additionally be used. If this is not an option, the contaminated area should be removed and filled in with Acrylicon Levelling Screed. Shot Blasting is also a suitable preparation method for natural stone surfaces. A recommendations to achieve a greater CSP value quickly is to utilize a 550 shot with a smaller blaster opening (10-12" blaster) and at a slower pass rate – Generally 2 passes will achieve a CSP of 5-6 on medium to hard concrete.

Scabbling/Scarifying: - CSP 5-6: Recommended when installing Décor in heavy industrial, fork truck, wet or heavy load environments.

Cylindrical Scabbling/Scarifying is a preparation method by which a machine with a rotating drum with spikes attached gouges into the substrate and which is suitable for Acrylicon Flooring Systems. The difference between the two is that scarifying is more aggressive than scabbling and actually removes the substrate, whereas scabbling gouges into it. For wet areas we always cross-scarify to ensure a larger relative surface area so that if the integrity of the flooring system was ever breached by liquid, it remains localised and does not create a bow wave, for example when forklift trucks drive over it. This can be followed up by a light grind with a multi-head contra-rotating diamond grinder to remove the tips of the laitance to ensure a good surface for the primer to bond to, especially if

contamination is present. It also needs supplementing with a hand grinder in the areas next to the walls to ensure the entire substrate has been prepared. This method however leaves particles on the floor that should always be vacuumed with two passes at perpendicular angles afterwards.

CSP (Concrete Surface Profile) Values are the standard for the recommended surface roughness of concrete for coatings applications put forth by ICRI (International Concrete Repair Institute). We recommend that applicators order the CSP chip set to accurately determine and achieve the proper surface profile during the concrete preparation.

Caution! The texture and appearance of the profile obtained will vary depending on the concrete strength, the size and type of aggregate, and the finish of the concrete Fig. 6.2: CSP 2 Fig. 6.1: CSP 1 Fig. 6.3: CSP 3 surface. On sound substrates, (acid-etched) (grinding) (light shotblast) the range of variation can be sufficiently controlled to resemble the referenced CSP standard. As the depth of removal increases, the profile of the prepared substrate will be increasingly dominated by the type and size of the coarse aggregate. Fig. 6.4: CSP 4 Fig. 6.5: CSP 5 Fig. 6.6: CSP 6 (light scarification) (medium shotblast) (medium scarification) Fig. 6.9: CSP 9 Fig. 6.10: CSP 10 Fig. 6.7: CSP 7 Fig. 6.8: CSP 8 (heavy abrasive blast) (scabbled) (heavy scarification-(handheld concrete rotomilled) breaker followed by abrasive blasting)





The ICRI Chart showing the recommended Surface Profile as compared to the thickness of coating being applied.

	Concrete Surface Profile									
Material to be applied	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6	CSP 7	CSP 8	CSP 9	CSP 10
Sealers, 0 to 3 mils (0 to 0.075 mm)										
Thin films, 4 to 10 mils (0.01 to 0.025 mm)										
High-build coatings, 10 to 40 mils (0.025 to 1.0 mm)										
Self-leveling toppings, 50 mils to 1/8 in. (1.2 to 3 mm)										
Polymer overlays, 1/8 to 1/4 in. (3 to 6 mm)										
Concrete overlays and repair materials, >1/4 in. (>6 mm)										

Table 7.2: Preparation Methods

	Concrete Surface Profile									
Surface preparation method	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6	CSP 7	CSP 8	CSP 9	CSP 10
Detergent scrubbing										
Low-pressure water cleaning										
Grinding										
Acid etching										
Needle scaling										
Abrasive blasting										
Shotblasting										
High- and ultra-high-pressure water jetting										
Scarifying										
Surface retarder (1)										
Rotomilling										
Scabbling										
Handheld concrete breaker										

Preparation of Substrates:

Acrylicon Flooring Systems can be laid on a number of different substrates with the main criteria being that the substrate allows good penetration by the resin for bonding and is clean, firm and adequately dry. It is important to comprehensively assess the substrate to ensure it is suitable for the installation of resin flooring as the integrity of the whole system is reliant on this and bad substrate is the biggest cause of floors that fail.

Acrylicon Systems cannot be laid on:

Asphalt

This is due to uncertainty of how well it is compressed, what type it is and its age. Also, some asphalt requires moisture and when sealed by Acrylicon starts cracking up.

Acrylicon Systems can possibly be laid on:

Epoxy Screed

Epoxy Screed can only be laid on if it has been tested for bond, strength (Schmidt Hammer Test) and curing and passed.

Acrylicon Systems can be laid on:

Concrete

When installing Acrylicon Flooring Systems on normal concrete it needs to have been allowed to cure for at least 28 days, free from external moisture. The concrete needs to have a minimum compressive strength of 25N/mm² (3625psi) and optimally 35N/mm² (5076psi). For moisture, Acrylicon specifies that Relative Humidity (moisture leaving the concrete) be measured rather than the moisture content within the concrete, as this is more accurate. For Acrylicon Flooring Systems a maximum of 95% Relative Humidity is permitted. Best results are achieved with a tool like the Protimeter Hygromaster, where a 12mm hole is drilled and then filled with a measuring stick. The measuring stick is left for 24 hours and thereafter you read the relative humidity with the Protimeter.



The preparation of concrete for Acrylicon Flooring Systems is dependent on the system. For thin systems (Variant Paint, Variant/Flake/Lacquer System) we prefer a grind with a multi head contra-rotating diamond grinder. This is because, being a thin system the surface of the substrate is likely to be reflected through the system and we want it as smooth and as even as possible. Preparation for these systems should be thought about in the same way a commercial painter prepares a wall in that a lot of time is spent ensuring the surface is perfect and then the coating goes on easily and looks good.

For the Décor System being installed in wet areas we always cross-scarify. This is to increase the relative surface area so that if liquid were to breach the system, it remains localised and does not create a bow wave and spread, for example when a forklift drives over it. If contaminants are present, follow this up with a grind by a multi-head contra-rotating diamond grinder to remove the peaks as well. If the contaminants or moisture are such that flame spalling is required, ensure to grind again after that to remove the debris of what has been burned.

Tiles

Acrylicon Flooring Systems can be installed on tiles but they need to be at least 25mm thick and fully bedded. Thin tiles need to be removed.

For installation on tiles, first grind the tiles with a multi-head, contra-rotating diamond grinder to get the edges down and the glazing off so that the primer can penetrate. Then shot blast to also clean up the joints. Tiles should not be scarified as the vigorousness of this can cause well-bonded tiles to pop up.

To install an Acrylicon Flooring System on tiles a Flexible Scrape Coat and Fibreglass Arming layer need to be installed. This is built up by first priming with Acrylicon Steel and Tile Primer (including Steel and Tile Primer Additive) to enhance the grip. A Flexible Scrape Coat of Acrylicon Flexible Resin, Acrylicon Standard Filler SV and Thixo is then installed to level the joints. A Fibreglass Arming layer is then installed with 300g/m2 fibreglass and Acrylicon Bodycoat 1061 SW to bind the tiles. This is followed by an Acrylicon Standard Primer coat into which quartz may be broadcast, depending on the flooring system and the flooring system is built up from there.

Important to note is that we warrant our bond to the first layer and do not warrant the construction and integrity of the subfloor.

Steel:

Steel is prepared by grinding, sandblasting or shot blasting to ensure all coverings and corrosiveness have been removed. Within two hours it then needs to be primed with Acrylicon Metal Primer or Acrylicon Steel and Tile Primer to ensure the corrosive process does not start again. This is then followed by a coating of Steel and Tile Primer (without the Steel and Tile Primer Additive) and the flooring system is then built up from there.

Wood

When laying wood to lay a flooring system on top of, you need to cross lay tongue and groove plywood to a thickness where it is not flexible. This needs to be screw and glue attached to both the subfloor and each other to the timber manufacturer's recommendation to achieve the non-flexibility. It is then primed with Acrylicon Steel and Tile Primer without the Steel and Tile Primer Additive as that makes the coat too flexible.

Old MMA - Not Acrylicon

The only time you can lay over old MMA other than Acrylicon is if the floor has retained all its original properties and not lost it's plasticisers and become spongy and porous. You would also need to insure that its bond to the substrate has very good integrity. Ensure the floors have been degreased prior to attending site and grind with a multi head contra-rotating diamond grinder, prime with Acrylicon Standard Primer and build up the flooring system from there.

Acrylicon

Ensure the floors have been degreased prior to attending site before grinding with a multi head contra-rotating diamond grinder and then priming with Acrylicon Standard Primer.

Polyurethane Modified Cement

Ensure that the Polyurethane Modified Cement has retained its integrity and not become brittle. Ensure the floors have been degreased prior to attending site before cross scarifying and priming with Acrylicon Standard Primer or Acrylicon Special Primer.

Terrazzo

For Terrazzo it is extremely important to ensure that all pollutants have been removed such as the wax in the Terrazzo. This is best prepared by shot blasting and priming using Acrylicon Standard Primer or Acrylicon Special Primer.

Other Screeds

These are to be checked with Acrylicon Polymers GmbH on a case-by-case basis, as there is a large variation globally.

Priming

Acrylicon Flooring Systems have a number of priming solutions, depending on the substrate that they are installed upon.

It is imperative to ensure you have taken care to correctly prepare the substrate as detailed in Substrates and their Preparation for the flooring system you are laying and the substrate onto which it is being laid and to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

To this end the primer coat should always be thoroughly inspected to ensure all areas are completely cured and that the entire area has a uniform glossy appearance. To check any suspicious areas for curing, push a sharp tool into it to ensure that it has fully cured. If any of the finish is not glossy, this indicates that the primer has been absorbed into the substrate and a further priming coat is required to ensure all the substrate pores are filled and that there are no dry spots. If this is not achieved, air from within the substrate can create curing issues within the subsequent body coat and the chemical bonding between layers will not be complete. This will create integrity issues within the flooring system.

After the substrate has been prepared and before installing the Primer Coat, both **Curing** and **Bond Tests** need to be performed. For the Curing Test, choose some random areas, paying particular attention to where substrates look different, potentially contaminated or look like they have issues and roller apply the primer to areas of about 30cm x 30cm. Test for curing by pushing a sharp tool into it to ensure it has fully cured. The primer should be extremely hard all the way through. Once this has passed, proceed to the Bond Test. On top of each of the curing test patches, apply about a 15cm round dollop of the body coat and allow this to cure. Once cured, use a hammer and chisel to remove it and ensure that the breach has occurred in the substrate and that the primer is at a minimum of 80% covered with the substrate that has been ripped up. Mark the samples with location, date and time and retain them. Should these tests not pass, you need to ascertain the reason and remedy it before proceeding with installing the primer.

The thickness of the Primer Coat will vary dependant on what system you are installing on top of it. For the thinner systems like Lacquer, Variant Paint, Variant and Flake, it is necessary to install a thicker Primer Coat at a consumption of 0.45-0.5L/m² (42-46 ml/ft²) as what you want to achieve is a "glass like" surface once the primer has been installed. This is assisted by paying attention to your substrate preparation and getting that as smooth as possible before applying the thicker primer coat. This then enables the layers installed on top of it to have as smooth and even appearance as possible. For the thicker systems like Décor, Levelling Screed and Industry, the primer is installed at 0.35L/m² 33ml/ft²), but you still need to ensure it achieves a uniform "glossy" appearance without any dry spots.

If the Primer has not gone off in a small, localised area you can try **shocking the primer**, curing it by over-coating it with a 50/50 mix of Acrylicon Sealer Resin and Primer Additive and increasing the BPO to what it would be for 10 degrees colder than the current substrate temperature. If the whole system doesn't cure or shocking the primer does not work, remove the resin with a shovel and then grind the substrate further to remove all contamination. Check that the contamination has been removed with curing tests and bond tests before proceeding.

Acrylicon Standard Primer

Acrylicon Standard Primer Batch

1L Acrylicon Sealer

0.33L Acrylicon Primer Additive

Powder (Liquid Catalyst BPO			
0° C/32° F	50g/L	50g/L	42ml/L	
10° C/50° F	40g/L	40g/L	33ml/L	
20° C/68° F	30g/L	30g/L	25ml/L	
30° C/86° F	20g/L	20g/L	17ml/L	

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Standard Primer can be used on all compatible substrates except Steel, Tiles and Wood and should be used on all wet areas. The addition of the Primer Additive increases the flexibility of the Sealer Resin making it good for penetrating the substrate and therefore for use as a primer.

Acrylicon Primer Additive air-dries so the following needs to be taken into account:

- It should only be added to the mix directly before delivering it and not mixed in advance, as it will dry while waiting.
- Never use a barrel pump for Primer Additive as it will dry and make the pump unserviceable.
- Primer Additive cans should always be kept closed when not dispensing, as exposure to air will cause it to dry.
- As the Primer additive air-dries, you can use your fans to gently blow air across Acrylicon Standard Primer to assist with the curing. It is important to ensure good housekeeping to prevent blowing dust, grit or contamination across the floor.

The Primer is generally installed at 0.35L/m² (33ml/ft²)by cross rolling it to ensure a good even coating, marking where you need to reach with each batch to achieve the correct consumption while still taking into account the finish needing to be achieved for the flooring system that is to be laid on top. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use, as hair loss will be reduced resulting in better floors. If you have concerns over moisture or contaminants, the amount of Primer Additive can be increased to a maximum of 1:1 ratio.

Acrylicon Standard Primer for Thin Systems

Acrylicon Standard Primer Batch for Thin Systems

1L Acrylicon Sealer

1L Acrylicon Primer Additive

Ро	wder Catalyst BPO	Liquid Catalyst BP				
0° C/32° F	50g/L	50g/L	42ml/L			
10° C/50° F	40g/L	40g/L	33ml/L			
20° C/68° F	30g/L	30g/L	25ml/L			
30° C/86° F	20g/L	20g/L	17ml/L			

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Standard Primer for Thin Systems can be used on all compatible substrates except Steel, Tiles and Wood. The addition of the higher quantity of Primer Additive assists it's ability to deal with contaminants and moisture, as the systems will be thin.

Acrylicon Primer Additive air-dries so the following needs to be taken into account:

- It should only be added to the mix directly before delivering it and not mixed in advance, as it will dry while waiting.
- Never use a barrel pump for Primer Additive as it will dry and make the pump unserviceable.
- Primer Additive cans should always be kept closed when not dispensing, as exposure to air will cause it to dry.
- As the Primer additive air-dries and there is an increased quantity in this primer, ensure you have good airflow over the surface with your fans to assist with the curing. Ensure good housekeeping to prevent blowing dust, grit or contamination across the floor.

The Primer is installed by cross rolling it to ensure a good even coating at 0.45 – 0.5L/m² (42-46ml/ft²) consumption, marking where you need to reach with each batch to achieve this and ensure a glass like appearance is in place for the system to be laid on top as it will be thin and unevenness will be reflected through. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use, as hair loss will be reduced resulting in better floors.

Acrylicon Special Primer

Acrylicon Special Primer Batch

1L Acrylicon Primer Resin

	Powder Catalyst BPO	Liquid Ca	atalyst BPO
minus 10° C/14° F	70g/L	70g/L	58ml/L
0° C/32° F	50g/L	50g/L	42ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	30g/L	30g/L	25ml/L
30° C/86° F	20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Special Primer can be used on all compatible substrates except Steel, Tiles and Wood, but should not be used in wet areas. It is however useful in installation areas where isocyanides are banned as it does not use the Acrylicon Primer Additive.

The Primer is installed by cross rolling it to ensure a good even coating, marking where you need to reach with each batch to achieve the correct consumption while still taking into account the finish needing to be achieved for the flooring system that is to be laid on top. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use, as hair loss will be reduced resulting in better floors.

Acrylicon Steel and Tile Primer

Acrylicon Steel & Tile Primer Batch

1L Acrylicon Steel & Tile Primer Resin

190 ml Primer Additive

3.6g Acrylicon Steel & Tile Primer Additive

	Powder Catalyst BPO	Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	50g/L	50g/L	42ml/L
20° C/68° F	40g/L	40g/L	33ml/L
30° C/86° F	30g/L	30g/L	25ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Steel and Tile Primer is for use on metal, tiles and non-porous surfaces. Steel and Tile Primer is more flexible than Acrylicon Standard Primer and therefore can also be used on wood, but for that the Steel and Tile Primer Additive is removed from the mix. The Steel and Tile Primer Additive acts as an adhesion promoter to assist adhesion to non-porous surfaces.

The Primer is installed by cross rolling it to ensure a good even coating, marking where you need to reach with each batch for consumption while still taking into account the finish needed to be achieved for the flooring system that is to be laid on top. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use as hair loss will be reduced resulting in better floors.

Acrylicon Multi-Grip Primer

Acrylicon Multi-Grip Primer Batch

1L Acrylicon Steel and Tile Primer

0.25L Acrylicon Primer Additive

	Powder Catalyst BPO	Liquid Catalyst BPC				
5° C/41° F	45g/L	45g/L	37ml/L			
10° C/50° F	40g/L	40g/L	33ml/L			
20° C/68° F	30g/L	30g/L	25ml/L			
25° C/77° F	25g/L	25g/L	21ml/L			

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Multi-Grip Primer is used for the initial priming layer of the Acrylicon Multi-Grip System and utilizes a combination of Acrylicon Steel & Tile Primer and Acrylicon Primer Additive for its flexibility and ability to penetrate the substrate.

The Primer is installed by cross rolling it to ensure a good even coating, marking where you need to reach with each batch for consumption while still taking into account the finish needed to be achieved for the Acrylicon Multi-Grip System as it is a thin system. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use, as hair loss will be reduced resulting in better floors.

Acrylicon Metal Primer

Acrylicon Metal Primer is a single component, anti-corrosive primer that can be applied onto most metallic substrates including steel, stainless steel, aluminum, copper, etc. It must be stirred thoroughly before application as the solvents and fillers separate during storage.

The metallic substrate must be dry, clean and free from any contaminants, loose rust or surface corrosion and must be mechanically prepared to Swedish Standard SA2.5. The primer must be applied within 3 hours (maximum) of the preparation to prevent surface oxidization on bare steel.

The coverage rate is 0.2 kg or 0.2L/m² (19ml/ft²) and the primer can be applied by roller, brush or airless spray. It dries by solvent evaporation and one coat is sufficient. It does not need over-scatter.

Acrylicon Metal Primer is compatible with all Acrylicon resins and does not require additional priming with another primer. Primed surfaces can be left exposed before over-coating, provided they remain uncontaminated and physically undamaged.

Acrylicon Metal Primer can be used on Galvanized Metal in the following ways. **On new Galvanized Metal:**

 A water based detergent should be used to thoroughly degrease the surface followed by rinsing with fresh water. If a solvent must be used to remove the oil/grease from the surface of galvanised steel, then clean thoroughly afterwards with an emulsion detergent and rinse with plenty of water to ensure all traces of solvent are removed from the surface.

- Allow to dry.
- Prime with Metal Primer.
- Perform Pull-off (tensile bond strength) tests where a minimum of 2 MPa must be achieved.
 This should be conducted with an Elcometer 106 or equivalent.

On old or weathered Galvanized Metal

- Remove any salts (white zinc corrosion) using a low pressure fresh water wash. A hard bristle scrubbing brush may be useful in removing the zinc salts. Care must be exercised not to damage the galvanised coating.
- Wash with a detergent as in the above and rinse thoroughly to remove any residues from the surface.
- Allow to dry.
- Prime with Metal Primer.
- Perform Pull-off (tensile bond strength) tests where a minimum of 2 MPa must be achieved.
 This should be conducted with an Elcometer 106 or equivalent.

The reason it is important to do the pull off test is that the Primer is bonding to the galvanized coating, but it is important to ensure the integrity of the bond of the galvanized coating to the metal.

Temperature(C)	Drying time(min)
5	180
10	100
15	70
20	30

Acrylicon Lacquer System Pigmented Primer

Acrylicon Lacquer System Pigmented Primer Batch

1L Acrylicon Sealer

1L Acrylicon Primer Additive

50ml Liquid Pigment

	Powder Catalyst BPO	Liquid Catalyst BPC			
0° C/32° F	50g/L	50g/L	42ml/L		
10° C/50°	F 40g/L	40g/L	33ml/L		
20° C/68°	F 30g/L	30g/L	25ml/L		
30° C/86°	F 20g/L	20g/L	17ml/L		

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Lacquer System Pigmented Primer can only be laid on good concrete, cementitious screeds or Acrylicon Levelling Screed. The addition of the higher quantity of Primer Additive assists it's ability to deal with contaminants and moisture, as the systems will be thin.

Acrylicon Primer Additive air-dries so the following needs to be taken into account:

- It should only be added to the mix directly before delivering it and not mixed in advance, as it will dry while waiting.
- Never use a barrel pump for Primer Additive as it will dry and make the pump unserviceable.
- Primer Additive cans should always be kept closed when not dispensing, as exposure to air will cause it to dry.
- As the Primer additive air-dries and there is an increased quantity in this primer, ensure you have good airflow over the surface with your fans to assist with the curing. Ensure good housekeeping to prevent blowing dust, grit or contamination across the floor.

The Primer is installed by cross rolling it to ensure a good even coating at 0.45 – 0.5L/m² (42-46ml/ft²) consumption, marking where you need to reach with each batch to achieve this and ensure a glass like appearance is in place for the system to be laid on top, as it will be thin and unevenness will be reflected through. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. When you have finished, clean your roller out with MMA Cleaner or Ethyl Acetate and re-use, as hair loss will be reduced resulting in better floors.

Fibreglass Arming

Fibreglass Arming is an additional layer installed within our flooring systems after an initial primer coat to deal with a number of situations. These include laying a flooring system over multiple substrates, overlaying of tiles to reduce the potential of any movement cracks reflecting through the flooring system above, overlaying a substrate where we have doubts regarding the integrity and minimising the potential of any other cracks reflecting through to the surface.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming, Mixing and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

The resins used within a Fibreglass Arming layer vary between Acrylicon Bodycoat 1061 SW, Acrylicon Flexible and a combination of the two depending on what you are looking to achieve with the layer. You would use pure Bodycoat 1061 SW if you were looking to bind a substrate of suspect integrity or varying types together, Pure Flexible if you were looking to create a membrane for example as a reenforcement membrane to not allow liquid to pass should the top flooring system be breached and a mixture of the two as the arming layer on Tiles or Wood so that it can handle a bit of movement within the substrate when exposed to mechanical stress or additionally where there may be thermic movement, for example on a loading bay that is exposed to the weather when the roller door is open. Strips of Fibreglass Arming can also be installed for example where two sound substrates join or for re-enforcing a crack. If you are unsure of what variation to use, please consult your national representative or Acrylicon Polymers GmbH.

Priming Notes:

A Fibreglass Arming Layer is to be installed on top of a primer coat suitable for the flooring system being installed and followed by a further primer coat before commencing with the rest of the flooring system. No quartz is to be scattered into the initial primer coat, but if a quartz scatter is required for the flooring system being installed, this is broadcast into the primer layer above the Fibreglass Arming.

Consumption Notes:

Resin consumption is $1.6L/m^2$ (149ml/ft²) for $300g/m^2$ Fibreglass and $1L/m^2$ (93ml/ft²) for $150g/m^2$ Fibreglass.

Fibreglass Arming:

Acrylicon Body Coat Fibreglass Arming Batch 1L Acrylicon Bodycoat 1061 SW Powder Catalyst BPO **Liquid Catalyst BPO** 0° C/32° F 60g/L 50ml/L 60g/L 10° C/50° F 40g/L 40g/L 33ml/L 15° C/59° F 35g/L 30ml/L 35g/L 20° C/68° F 30g/L 30g/L 25ml/L 30° C/86° F 20g/L 20g/L 17ml/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Flexible Fibreglass Arming Batch

1L Acrylicon Flexible

ı	Powder Catalyst BPO	Liquid Catalyst BP			
0° C/32° F	60g/L	60g/L	50ml/L		
10° C/50° F	40g/L	40g/L	33ml/L		
15° C/59° F	30g/L	30g/L	25ml/L		
20° C/68° F	25g/L	25g/L	21ml/L		
30° C/86° F	15g/L	15g/L	12ml/L		

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Mixed Fibreglass Arming Batch

0.5L Acrylicon Bodycoat 1061 SW0.5L Acrylicon Flexible

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	32g/L	32g/L	26ml/L
20° C/68° F	27.5g/L	27.5g/L	23ml/L
30° C/86° F	17.5g/L	17.5g/L	14ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

To install the Fibreglass Arming, lay the sheets out next to each other without overlapping, as this will create a bump that will be reflected through the flooring system. Then, except for the first sheet, fold them back on themselves to create walkways between them. You will fold them out again as you install them.

Do not pour the resin directly onto the fibreglass as this makes it harder to saturate evenly. Pour the resin into a trough and dip the roller and roll out gently onto the fibreglass until it is saturated. This is first done lengthways along the sheet and then crossways side to side. Ensure you squeeze out any bubbles, as this will weaken the construction.

If you are re-enforcing a crack with a strip if fibreglass, ensure it extends 10cm each side of the crack.

Allow to fully cure.

Once cured, go over it with a diamond grinder to remove any bumps or stray fibreglass strands to ensure you have a suitable surface to continue laying your flooring system on.

Scrape Coat

A Scrape Coat is installed where you have areas of the floor that are not even, for example where you have had to remove poor quality concrete and need to smooth it off to enable you to install a good quality floor.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming, Mixing, Fibreglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Priming notes:

The area first needs to be prepared and primed with the possible addition of a light quartz scatter to assist the scraping out of the coat if laid thick. Once completed a further primer coat will be required on top of the Scrape Coat. This should be in line with the flooring system being installed which can then follow.

Scrape Coat:

30° C/86° F

Acrylicon Scrape Coat Batch 1L Acrylicon Flexible 0.6 - 0.7L Acrylicon Filler SV Sylothix as required **Powder Catalyst BPO Liquid Catalyst BPO** 0° C/32° F 60g/L 50ml/L 60g/L 10° C/50° F 33ml/L 40g/L 40g/L 20° C/68° F 21ml/L 25g/L 25g/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

15g/L

15g/L

When mixing, Sylothix is added to the resin mix by feel to achieve the correct consistency to be moulded suitably for the requirement. If the Scrape Coat requires some extra thickness additional 0.7-1.2mm Quartz can be added.

12ml/L

The mixture is applied to the relevant area and then scraped out with the straight edge of a suitable scrape for the task to achieve a nice, smooth surface. Allow to fully cure.

Crack Repair and Joint Installation

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming, Mixing and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Hairline Crack (Crazing) Repair:

This relates to small hairline cracks or crazing that are not deep. These are not live cracks but a consequence of concrete tension during curing and settling.

Substrate Preparation Notes:

Saw cut into the crack to open it up and remove all the damaged concrete. This needs to be done to a depth that will allow it to be filled with an appropriate amount of resin to ensure structural integrity, penetration and good bond either side and to at least twice its original width. Vacuum the crack to ensure all debris has been removed.

Priming Notes:

The crack and surrounding area are primed with Acrylicon Standard Primer. This is applied with a paintbrush to ensure all areas within in the crack are coated. This may be enough to fill smaller cracks in which case no further action is required.

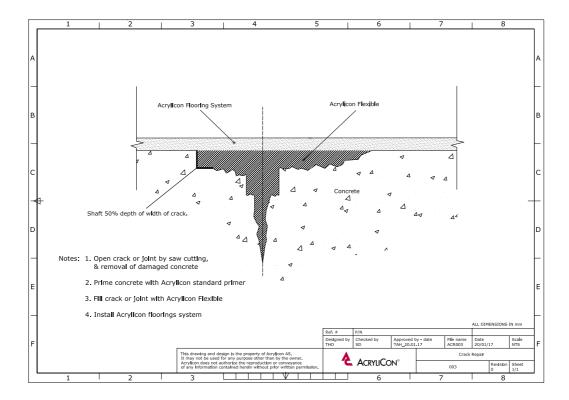
Installation:

Thoroughly inspect the primer coat before commencing with the crack repair to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Acrylicon Flexible Batch				
1L Acrylicon Flexible Resin				
Sylothix as r	equired			
P	owder Catalyst BPO	Liquid Ca	atalyst BPO	
0° C/32° F	60g/L	60g/L	50ml/L	
10° C/50° F	40g/L	40g/L	33ml/L	
15° C/59° F	20g/L	20g/L	17ml/L	
20° C/68° F	15g/L	15g/L	12ml/L	
30° C/86° F	15g/L	15g/L	12ml/L	
The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.				

Fill in the crack with Acrylicon Flexible Resin to which you add Sylothix to create the correct viscosity so that it can be applied with a trowel and achieve a nice smooth surface level with the floor.

Once this has fully cured you can install the Acrylicon Flooring System that has been chosen, commencing with the primer coat.



Non-Induced Crack Repair

This relates to deeper cracks that are non-induced i.e. caused by movement of the substrate.

Substrate Preparation Notes:

Saw cut and chisel into the crack to open it up and remove all the damaged concrete. You need to ensure that it is cut or chiseled out to a depth and width to allow sufficient space to insert a bond breaker and still be filled up with a good amount of material. This is to ensure there is enough material in the crack to withstand the thermal and mechanical loads so that the repair does not collapse under these stresses due to being too thinly applied.

Installation:

It is important to install a bond-breaker in these cracks so that if the crack were to move again, it does not just crack up through or next to your repair. Depending on the depth of the crack, this can be either quartz, a backer rod or fine sand. If using a backer rod, do a curing test on it. This is filled or placed into the bottom of the crack. If using quartz or sand, pass a vacuum over the joint to remove about the top 15mm of quartz.

Priming Notes:

The crack and surrounding area are primed with Acrylicon Standard Primer. This is applied with a paintbrush or radiator roller to ensure all areas within in the crack are coated.

Thoroughly inspect the primer coat before commencing with the crack repair to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into

any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Acrylicon Flexible Batch

1L Acrylicon Flexible Resin

Sylothix as required

Powder Catalyst BPO		Liquid Catalyst BPO	
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	20g/L	20g/L	17ml/L
20° C/68° F	15g/L	15g/L	12ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Fill in the crack with Acrylicon Flexible Resin to which you add Sylothix to create the correct viscosity so that it can be applied with a trowel and achieve a nice smooth surface level with the floor.

Grind the area over the joint with a hand grinder to reduce the depth of the area by the amount needed to lay a 300g/m² fibreglass arming layer.

Acrylicon Body Coat Fibreglass Arming Batch

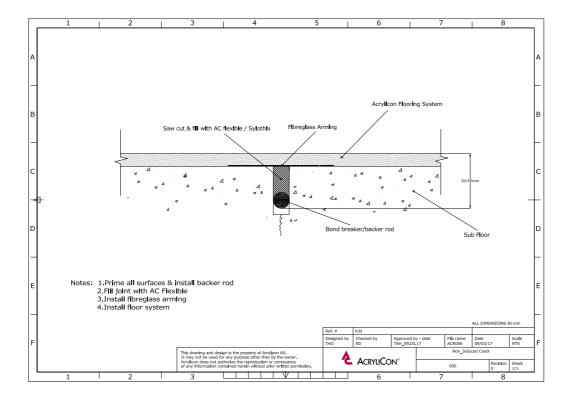
1L Acrylicon Bodycoat 1061 SW

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50°	30g/L	30g/L	25ml/L
15° C/59°	20g/L	20g/L	17ml/L
20° C/68°	15g/L	15g/L	12ml/L
30° C/86°	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Lay an Acrylicon Body Coat Fibreglass Arming strip with 300g/m² fibreglass as detailed in the section on Fibreglass Arming at least 4 times as wide as the joint width. Scrim Tape may also be used.

Once this has fully cured you can lay the Acrylicon Flooring System that has been chosen, commencing with the primer coat.



Structural Movement Joint

This relates to mirroring an existing structural movement joint that is in the concrete.

Preparation:

Mark on the wall where the joint is so that you will know after the flooring system has been laid and remove any foam or filler materials that are left over from the slab construction phase with a screwdriver or chisel. Chisel a "V" into the joint and hand grind each side of the crack to the same level. Be sure to remove any damaged substrate. Vacuum thoroughly to remove all debris.

Priming Notes:

The joint and surrounding area are primed with Acrylicon Standard Primer. See the two methods below for further detail as well as the process if any repairs to the substrate are required.

Installation:

When repair of the arris is required:

The joint and surrounding area are primed with Acrylicon Standard Primer. This is applied with a paintbrush or radiator roller to ensure all areas within in the crack are coated.

Thoroughly inspect the primer coat before commencing with the joint creation to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

The joint is then filled with Acrylicon Industry or Acrylicon Levelling Screed and ground smooth once it has cured.

Acrylicon Levelling Screed Batch

2L Acrylicon Levelling Screed Resin

15kg Acrylicon Levelling Screed Filler

Powder Catalyst BPO		Liquid Ca	atalyst BPO
minus 5° C/32° F	60g/L	60g/L	50ml/L
0° C/32° F	50g/L	50g/L	42ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	30g/L	30g/L	25ml/L
30° C/86° F	20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Acrylicon Industry Batch

2L Acrylicon Industry Resin

15kg Acrylicon Industry Filler

Catalyst

The Catalyst is contained within the product and as such normally further Catalyst must not be added. Similarly, no temperature additives should be added and either standard Industry or the Industry C low temperature option should be used, depending on the installation temperature. The only exception is that if the product is over a year old, 30g of Powder or Liquid Catalyst BPO (25ml Liquid Catalyst BPO) per litre of resin must be added to compensate for expiration of the BPO within the product.

If further catalyst is added, it needs to be mixed into the resin before adding the filler.

Install the Flooring System required from the primer onwards.

Once the flooring system has fully cured, make a saw cut 8-20mm wide and at least 30-40mm deep for the joint, but ensuring you go deeper than the Levelling Screed or Industry. This is lined up between the marks previously made on the walls.

It is important to install a bond-breaker so that if the joint were to induce a crack, it does not just crack up through or next to your joint. This can be done in one of two ways. You can either place a backer rod at the bottom or you can fill the joint with 0.7-1.2mm quartz.

If you have used the quartz method, then pass a vacuum over the joint to remove about the top 15mm of quartz. If using a backer rod, be sure to perform a curing test.

Tape up around the joint and prime with Acrylicon Standard Primer. This is applied with a paintbrush or radiator roller to ensure all areas within in the crack are coated. Remember to remove the tape while the resin is still wet.

Thoroughly inspect the primer coat to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Acrylicon Flexible Joint Batch

1L Acrylicon Flexible Resin Sylothix as required

25ml Liquid Pigment

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	20g/L	20g/L	17ml/L
20° C/68° F	15g/L	15g/L	12ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Tape off around the joint and fill it with Acrylicon Flexible resin to which pigment and Sylothix have been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet.

If this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.

Joint reflected through floor without arris repair:

Remove any foam or filler materials that are left over from the slab construction phase with a screwdriver or chisel. Chisel a "V" into the joint and hand grind each side of the crack to the same level. Be sure to remove any damaged substrate. Vacuum thoroughly to remove all debris.

Make a saw cut 8-20mm wide and at least 30-40mm deep into the joint and vacuum, removing all the debris.

It is important to install a bond-breaker so that if the joint were to induce a crack, it does not just crack up through or next to your joint. This can be done in one of two ways. You can either place a backer rod at the bottom or you can fill the joint with 0.7-1.2mm quartz. If you have used the quartz method, then pass a vacuum over the joint to remove about the top 15mm of quartz. If using a backer rod, be sure to perform a curing test.

Tape up around the joint and prime with Acrylicon Standard Primer. This is applied with a paintbrush or radiator roller to ensure all areas within in the joint are coated. Remember to remove the tape while the resin is still wet.

Thoroughly inspect the primer coat before commencing with the joint creation to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Acrylicon Flexible Batch 1L Acrylicon Flexible Resin Sylothix as required **Liquid Catalyst BPO Powder Catalyst BPO** 50ml/L 0° C/32° F 60g/L 60g/L 33ml/L 10° C/50° F 40g/L 40g/L 17ml/L 15° C/59° F 20g/L 20g/L 12ml/L 20° C/68° F 15g/L 15g/L 12ml/L 30° C/86° F 15g/L 15g/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

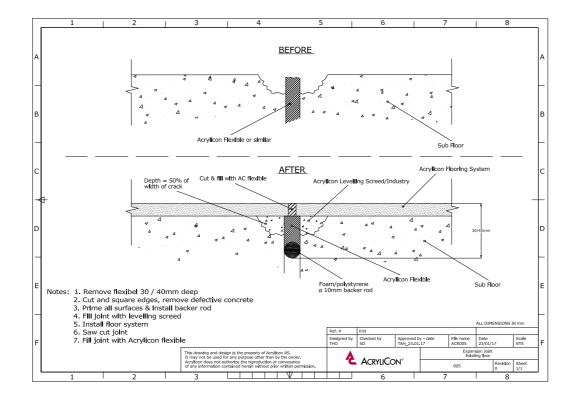
Tape off around the joint and fill it with Acrylicon Flexible resin to which Sylothix have been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet. If this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.

Install the Acrylicon Flooring System from the primer coat onwards.

Acrylicon Flexible Joint Batch 1L Acrylicon Flexible Resin Sylothix as required 25ml Liquid Pigment **Liquid Catalyst BPO** Powder Catalyst BPO 50ml/L 0° C/32° F 60g/L 60g/L 33ml/L 10° C/50° F 40g/L 40g/L 17ml/L 15° C/59° F 20g/L 20g/L 12ml/L 20° C/68° F 15g/L 15g/L 12ml/L 30° C/86° F 15g/L 15g/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Make a saw cut 8mm to 20mm wide through the installed flooring system in line with the marks you have made on the walls. Tape off around the joint and fill it with Acrylicon Flexible resin to which pigment and Sylothix have been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet.

If this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.



Saw-Cut Induction Joints and Day Joints

This relates to saw-cut induction joints that have been cut into the slab and how to mirror them through your flooring system or overlay with the flooring system, depending on the likelihood of future movement. Day Joints are cut into the slab along selected joins of the slab where cracking has occurred.

Substrate Preparation Notes:

If you plan to reflect the joint through the finished floor - mark on the wall where the joint is so that you will know after the flooring system has been laid.

For Saw-Cut Induction Joints, remove any foam or filler materials that are left over from the slab construction phase with a screwdriver or chisel. Use a hand grinder to grind each side of the crack to the same level. Vacuum thoroughly to remove debris.

For Day Joints, make a saw cut 15-20mm wide and 30-40mm deep along the join in the slab and remove all debris by vacuuming thoroughly.

It is important to install a bond-breaker so that if the joint were to move, it does not just crack up through or next to your joint. Perform this in one of two ways. You can either place a backer rod at the bottom or you can fill the joint with 0.7-1.2mm quartz. If you have used the quartz method, then pass a vacuum over the joint to remove about the top 15mm of quartz. If using a backer rod, perform a curing test.

Priming Notes:

The joint and surrounding area are primed with Acrylicon Standard Primer. This is applied with a paintbrush or radiator roller to ensure all areas within in the crack are coated.

Installation:

Thoroughly inspect the primer coat before commencing with the joint creation to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Acrylicon Flexible Joint Batch

1L Acrylicon Flexible Resin

Sylothix as required

25ml Liquid Pigment

Powder Catalyst BPO		Liquid Catalyst BPO	
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	20g/L	20g/L	17ml/L
20° C/68° F	15g/L	15g/L	12ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Creating a joint which is not reflected through the flooring system:

Having installed the bond breaker and primed, tape off around the joint and fill it with Acrylicon Flexible resin to which Sylothix has been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet. As this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.

Grind the area over the joint with a hand grinder to reduce the depth of the area by the amount needed to lay a 300g/m² Body Coat Fibreglass Arming layer.

Acrylicon Body Coat Fibreglass Arming Batch

1L Acrylicon Bodycoat 1061 SW

Powder Catalyst BPO		Liquid Catalyst BPO	
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	30g/L	30g/L	25ml/L
15° C/59° F	20g/L	20g/L	17ml/L
20° C/68° F	15g/L	15g/L	12ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Lay the Acrylicon Body Coat Fibreglass Arming strip with 300g/m² fibreglass as detailed in the section on Fibreglass Arming at least 4 times as wide as the joint width. Scrim Tape may also be used.

Install the Acrylicon Flooring System starting with the primer coat.

Creating a joint which is reflected through the flooring system:

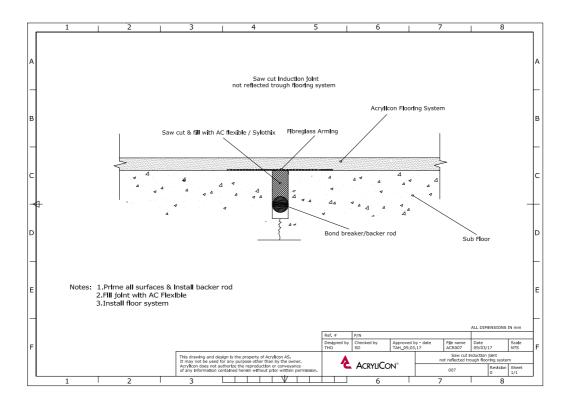
Having installed the bond breaker and primed, tape off around the joint and fill it with Acrylicon Flexible resin to which Sylothix has been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet. As this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.

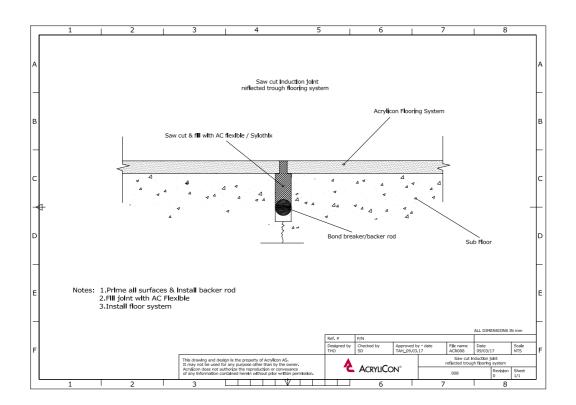
Install the Acrylicon Flooring System starting with the primer coat.

Once the flooring system has fully cured, make a saw cut 15-20mm wide and 30-40mm deep for the joint between the marks previously made on the walls.

Tape off around the joint and fill it with Acrylicon Flexible resin to which pigment and Sylothix have been added. The Sylothix is to create the correct viscosity to be able to fill the joint nicely. Remember to remove the tape while the resin is still wet.

As this is a wide joint, you may need to repeat the step above to achieve a nice finish, as there may have been shrinkage.





New Drain Installation and Laying up to an Existing Drain

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming, Mixing, Fibreglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

New Drain Installation

Substrate Preparation Notes:

The concrete is to be ground with a diamond grinder. If you are installing a new drain it is not necessary to prepare its surface, but ensure it is clean.

Priming Notes:

The drain is to be primed with Acrylicon Metal Primer or Acrylicon Steel and Tile Primer. The concrete is to be primed with Acrylicon Standard Primer in which the Primer Additive can be increased up to a 50/50 mix with the resin to assist with moisture or contaminant concerns.

Installation:

It is important you start with the correct drain specification which is the Blucher Industry 600 series or similar. What you are looking for are the straight vertical edges that this model has to lay up against rather than a rounded profile.

Acrylicon recommends that you have the drain seated by a professional in that field. You should request that the drain is seated about 5mm below the level of the substrate so that you create a small local fall to ensure good drainage.

Ensure that the substrate is sealed off at the bottom so that you have something on which to lay the Acrylicon Levelling Screed.

Ensure the concrete you are laying into has a maximum of 95% relative humidity. If it is not dry enough, dry it out by means of flame-spalling, a hand-held dryer, blower or absorptive crystals.

Prime as detailed above.

Thoroughly inspect the primer coat before commencing with the infill to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Having ensured the priming is all up to standard, initially start pouring in the Acrylicon Levelling Screed using the 5mm mix i.e. just the Acrylicon Levelling Screed Resin, Acrylicon Levelling Screed Filler and the relevant BPO (see the section on Acrylicon Levelling Screed) to ensure the screed is viscous, until you have passed the bottom of the drain. This is to ensure that the screed has fully filled the area below the drain and the drain is seated properly without gaps. You can then adjust your mix with aggregates for the relevant depth and fill in the sides.

The top needs to be finished off with a triangle extending 12.5cm out from the drain and 2.5cm down. This can be achieved by either laying level to the height which accounts for the thickness of the Acrylicon Decor that will be laid and then grinding the triangle out with a diamond grinder or adding some Sylothix to the mix when you reach that point so that you can trowel the fall of the triangle in. Ensure that the corner away from the drain is rounded off.

Acrylicon Drain Flexible Barrier Batch

1L Acrylicon Flexible Resin

1.57L Quartz (0.8 - 1.2mm)

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° I	F 40g/L	40g/L	33ml/L
15° C/59° I	F 20g/L	20g/L	17ml/L
20° C/68° I	F 15g/L	15g/L	12ml/L
30° C/86° I	F 15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Trowel the Acrylicon Drain Flexible Barrier into the triangle you have created. The purpose of this is to create a flexible barrier underneath the Acrylicon Decor so that if the integrity of the joint between that and the drain is breached, any liquid will be prevented from reaching the substrate.

When this has fully cured, lay the Acrylicon Décor System starting with its primer coat.

If the drain is subject to large temperature variations, make a cut of 6-8mm around the drain and fill it with Acrylicon Flexible resin to which pigment and Sylothix have been added to create the correct viscosity for shaping and colour.

Acrylicon Flexible Joint Batch

1L Acrylicon Flexible Resin

Sylothix as required

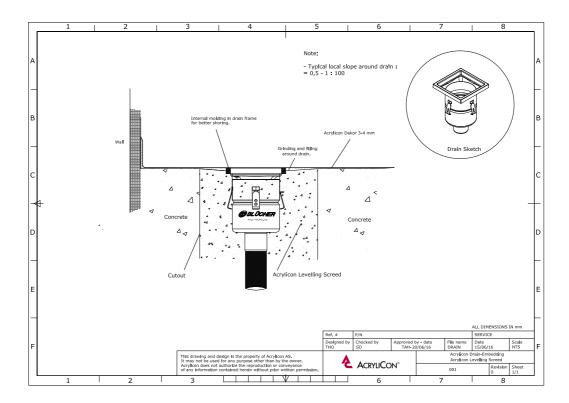
25ml Liquid Pigment

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	20g/L	20g/L	17ml/L
20° C/68° F	15g/L	15g/L	12ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

This system is applicable to both channel and pot drains.

If you were to imbed the drain with concrete instead of Acrylicon Levelling Screed, use a similar method as above but additionally install a strip of Fibreglass arming (see the section on Fibreglass Arming) over where the new concrete joins the substrate to deal with any cracking that may arise from shrinkage of the concrete.



Laying up to an Existing Drain

Substrate Preparation Notes:

Remove the substrate from around the drain by chisel or with a diamond grinder to insure that any damaged concrete is removed as well as creating a good toe-in around the drain for the Acrylicon Flooring System to secure itself into. Vacuum to ensure all loose particles have been removed.

Priming Notes:

The drain is to be primed with Acrylicon Metal Primer or Acrylicon Steel and Tile Primer. The concrete is to be primed with Acrylicon Standard Primer in which the Primer Additive can be increased up to a 50/50 mix with the resin to assist with moisture or contaminant concerns.

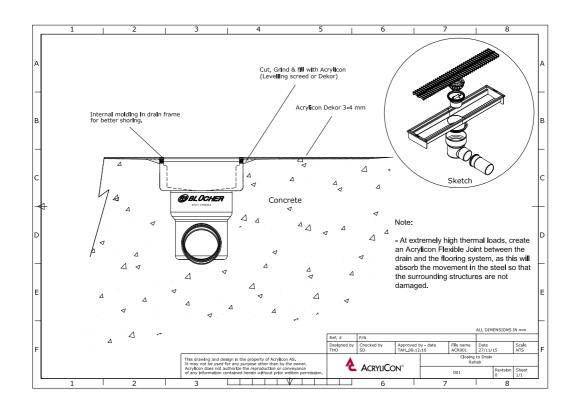
Installation:

If a large amount of substrate has needed to be removed around the drain, this can be filled with Acrylicon Levelling Screed (see the chapter on Levelling Screed) to a depth that will allow installation of the flooring system up to the lip of the drain and then lay the flooring system from primer layer up. If not, the Acrylicon Décor body coat can be trowelled up to the drain while installing the flooring system to fill the toe-in.

While laying up to the drain, be sure to tape off the edge for every layer of the flooring system to avoid overruns, remembering to remove the tape while the resin is still wet.

Acrylicon Flexible Joint Batch 1L Acrylicon Flexible Resin Sylothix as required 25ml Liquid Pigment **Liquid Catalyst BPO Powder Catalyst BPO** 0° C/32° F 50ml/L 60g/L 60g/L 33ml/L 10° C/50° F 40g/L 40g/L 17ml/L 15° C/59° F 20g/L 20g/L 12ml/L 20° C/68° F 15g/L 15g/L 12ml/L 30° C/86° F 15g/L 15g/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

If the drain is subject to large temperature variations, make a cut of 6-8mm around the drain and fill it with Acrylicon Flexible resin to which pigment and Sylothix added to create the correct viscosity for shaping and colour. If this method is being used, ensure you have a liberal toe-in so that the structural integrity of laying up to the drain is not compromised.



Low and High Temperature Installation

Acrylicon Arctic Additive:

Acrylicon Arctic Additive assists the hardening of Acrylicon resins in all layers of the flooring system in the temperature range from 0°C/32°F to -25°C/-13°F when used in combination with Acrylicon Catalysts.

Acrylicon Arctic Additive is to be added to the mix after the Catalyst has been added and dispersed and prior to any fillers or pigments. It is an accelerator which assists with the hardening of the resins down to a lowest temperature of -25°C/-13°F when used in conjunction with the Catalyst dosages below. In must never be used in temperatures above 10°C/50°F as this can lead to an overreaction, which restricts the mechanical properties of the flooring system. Application in the correct low temperature window has very little effect on the mechanical properties, as there is sufficient heat dissipation into the surroundings. All resins and aggregates must be cooled down to the ambient installation temperature before installation begins to ensure the correct curing times.

Use of this additive causes a yellowing in the resin, so should only be used in darkly pigmented systems that include a pigmented seal coat, or systems that are naturally yellow of colour. If there is uncertainty as to the effect, create a test sample.

Acrylicon Arctic additive is subject to strict safety regulations with regards to transportation, so please follow the relevant product safety data sheet.

Acrylicon Arctic Additive must never come in direct contact with the Catalyst as an uncontrollable explosion might occur. It is therefore of utmost importance to ensure these two components are mixed into the resin separately.

Acrylicon Arctic Additive and Catalyst Dosages per Litre of Resin				
Temp	Arctic Additive	Powder Catalyst BPO	Liquid Catalyst BPO	
"+5°C to "-5°C	5ml	60g	60g/50ml	
"-5°C to "-10°C	10ml	60g	60g/50ml	
"-10°C to "-15°C	15ml	60g	60g/50ml	
"-15°C to "-20°C	20ml	60g	60g/50ml	
"-20°C to "-25°C	25ml to 30 ml	60g	60g/50ml	

Acrylicon Tropical Series:

Acrylicon Resins are available in a Tropical Series to deal with mixing and application difficulties in environments where the installation temperature in the substrate exceeds 25°C/77°F. This series is not a substitute for correct storage of materials at elevated temperatures. Every possible attempt must be made to keep the material cool for as long as possible before mixing. The Tropical Series must not be used below 20°C/68°F under any circumstances as there is a high risk of insufficient cure. The Tropical Series does not affect the physical properties of the system if the above dosage and mixing recommendations are strictly adhered to.

It is recommended that a pot life measurement is carried out on site on the day of application to ascertain the exact working life before commencing with the work.

For additional information on handling and storage of Tropical Series, the relevant Safety Data Sheet must be consulted.

Termination

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Fiberglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

When terminating an Acrylicon Flooring System a saw cut is to be made to a depth of twice the thickness of the system being installed where the floors are to join. The substrate is then ground with a diamond grinder from 50mm to 75mm back from zero to this depth in the area where the Acrylicon Flooring System will be installed.

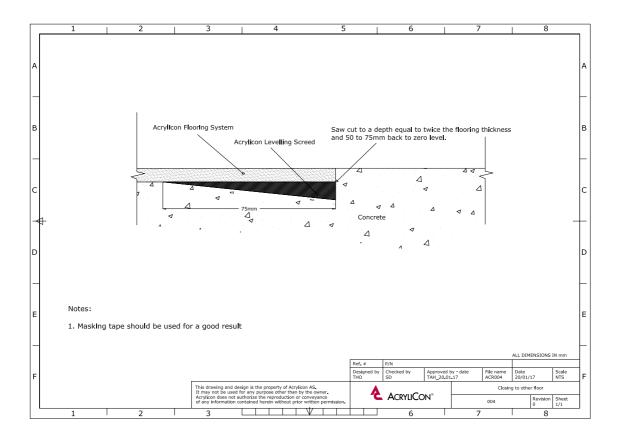
Priming Notes:

A priming coat is installed in line with what is required for the Acrylicon Flooring System that is being installed. **Thoroughly inspect** the primer coat before commencing with the Acrylicon Levelling Screed layer to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Levelling Screed:

Install Acrylicon Levelling Screed into the ground-out area to a depth below the floor you are terminating against that will allow for the depth of the Acrylicon Flooring System being installed so that the end result will be the two floors being flush.

Install the Acrylicon Flooring System of choice from Primer Stage onwards. It is important to tape off the join during each layer of the installation and remove the tape while the resin is still wet to ensure a neat termination.



Acrylicon 4mm Décor and Décor Plus Systems

The Acrylicon Décor System is a 4mm quartz filled, hand trowel applied coating with excellent slip resistance, longevity and cleanability qualities. Coved skirting can also be created in this system, allowing a chemical bond for a truly seamless floor and with a curing time of less than two hours, any downtime can be reduced to a minimum.

The Acrylicon Décor System is designed for wet areas and heavy industry and as such is suitable for use in food production areas, heavy engineering industry, commercial kitchens, dairies etc.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming, Mixing, Fibreglass Arming, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation notes:

In a wet area, cross-scarification is required. This is to ensure a larger relative surface area so that if the integrity of the flooring system was ever breached by liquid, it remains localised and does not create a bow wave, for example when forklift trucks drive over it. This can be followed up by a light grind with a multi-head contra-rotating diamond grinder to remove the tips of the laitance to ensure a good surface for the primer to bond to, especially if contamination is present.

Should it not be a wet area, a shot blast or grind with a multi-head contra-rotating grinder with tearing segments would also be appropriate.

Priming notes:

As you will more than likely be operating in a wet area, the Acrylicon Standard Primer Batch is to be used at a consumption of $0.35L/m^2$ ($33ml/ft^2$) to assist against dampness and contamination. The primer will also need a light quartz scatter broadcast into it while wet to assist with the trowelling of the bodycoat.

Coving:

This is to be installed prior to the trowelled floor.

Acrylicon Coving Batch

1L Acrylicon Bodycoat 1061 SW

33g Sylothix

2L Quartz (0.8 - 1.2mm)

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	30g/L	30g/L	25ml/L
25° C/77° F	25g/L	25g/L	21ml/L
30° C/86° F	20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Roller apply Primer Additive with a radiator roller to both the wall and floor areas that the coving will cover and leave to dry for a minimum of an hour and a half, but ensure that it has completely cured in the conditions it has been applied in. It is often good to do this just before a lunch break. If it can be done just before breaking for the day and leaving till the next day, all the better. This is to assist you with both damp and contaminants, as areas to be coved are likely suspects for these.

Prime with Acrylicon Standard Primer applied with a radiator roller. Broadcast a light quartz scatter into the wet resin to assist with trowelling and leave to cure completely.

With a coving trowel apply the Acrylicon coving mix to the area with the specified method of top finishing. This for example could be laying into bird's beak coving, up against something existing or using a top-angled coving trowel. If you are using the top-angled coving trowel method, you lay to a laser line at the top and if you have an uneven floor surface, adjust your coving radius with a spoon and leave to fully cure.

The Sylothix in the mix can be adjusted in small increments to ensure you are achieving the correct consistency for coving.

Seal with a single coat of Acrylicon Sealer applied with a radiator brush. Inspect and once fully cured you can lay your floor up to the coving.

The coving will also require the two Sealer Coats as they are laid on the flooring system to create a uniform surface and compensate for the lightening of colour from the Sylothix.

Bodycoat:

Acrylicon Décor Body Coat Batch

1L Acrylicon Bodycoat 1061 SW

1.57L Quartz (0.8 - 1.2mm)

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	30g/L	30g/L	25ml/L
25° C/77° F	25g/L	25g/L	21ml/L
30° C/86° F	20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The mixing of the Décor Body Coat Batch is to be adjusted from the batch guide to an optimal **Wet Mix** by an experienced, trained Mixer. Factors that will influence this are that there is a variation in the quartz size, which is not always evenly distributed and that the pigmenting of different colours of the quartz create slightly different surface profiles which affects the resin to quartz ratio. It is imperative that the Mixer understands this and can deliver mixes that after they have been trowelled, exhibit a layer of resin that settles on the surface giving the appearance of a film or lacquer sheen. This is what allows the Body Coat to achieve a chemical bond with the seal coat that follows and thus ensure the integrity of the system.

When mixing a Body Coat Batch, a metal bucket (normally 30L) is recommended. This is because if the quartz is mixed in plastic, it can shear off bits from the bucket and contaminate the mix.

Thoroughly inspect the primer coat before commencing with the body coat to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming Chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate. It is imperative to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers. See priming guideline for cure and bond tests.

Gauge rake the Acrylicon Décor Bodycoat mix out with a rake set to 3.8mm. Ensure that the mixture is evenly raked to ensure the correct thickness throughout the coat. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials. Having a well raked out mix also makes it easier to achieve high quality results when trowelling.

Lightly trowel the mix to smooth and close the surface, ensuring that it is nice and even and that there are no trowel marks. It should have a resin sheen that has risen to the surface which ensures that a correct wet mix has been installed.

To help you see any trowel marks, have a floodlight on the floor behind you so that it will cast shadows in uneven floor laying.

Inspect the body coat to ensure it has cured completely before commencing with the seal coats.

Seal Coats:

Acrylicon Sealer Batch 1L Acrylicon Sealer				
Po	wder Catalyst BPO	Liquid Ca	atalyst BPO	
0° C/32° F	40g/L	40g/L	33ml/L	
10° C/50° F	30g/L	30g/L	25ml/L	
20° C/68° F	20g/L	20g/L	17ml/L	
30° C/86° F	15g/L	15g/L	12ml/L	
30° C/86° F 15g/L 15g/L 12ml/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.				

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

The first Seal Coat is roller applied at a consumption of $0.3L/m^2$ (28ml/ft²) , so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. Inspect to ensure the resin has fully cured.

The second Seal Coat is installed in the same manner as the first, but thinner with a consumption of $0.2 - 0.25 L/m^2 (19-23 ml/ft^2)$.

Inspect to ensure the resin has fully cured.

Should you be installing the **Décor Plus System** and require slip resistance added to your floor, scatter the desired quantity and grade of Aluminium Oxide on top of the cured first seal coat. Then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant.

For heavy slip resistance use a 50/50 mix of either F24 and F36 or F36 and F60. This is fully broadcast into the wet second seal coat to saturation. Once cured, all the excess is to be vacuumed off. A third "tight" seal coat is then applied so that the top of the aluminium oxide is exposed at the surface, but the resin supports it.

For very heavily trafficked areas with high impact or chemical loading, a full Broadcast system can be used. Depending on the level of slip resistance required, either 0.3-0.7mm or 0.7-1.2mm quartz can be used. With this method, quartz of the same colour/blend as the flooring, can be broadcast into the WET body coat to saturation. Once cured, excess to be swept and vacuumed off. Please note, it is vital that the body coat is laid "wet" and we recommend setting the rake to 3mm, without changing the mix ratio to ensure a wet film of resin is on the surface prior to broadcasting. Then when sealing, ensure a long nap roller is used, and the first sealer resin coat is "pushed" into the aggregate. Consumption for this first seal will be increased slightly to 0.4L/m². Second seal applied as normal.

Acrylicon 4mm Décor ESD System

The Acrylicon Décor ESD System is a 4mm quartz filled, hand trowel applied, electrostatic dissipative coating with good longevity and cleanability qualities. Coved skirting can also be created in this system, allowing a chemical bond for a truly seamless floor and with a curing time of less than two hours, any downtime can be reduced to a minimum.

The Acrylicon Décor ESD System is designed for industrial areas requiring anti-static protection and and as such is suitable for use in heavy engineering industry, pharmaceutical facilities, aerospace engineering, laboratories etc.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation notes:

The preferred method for preparation is shot blast or grind with a multi-head contra-rotating grinder with aggressive segments.

Priming notes:

Ensure that you have comprehensively done curing and bond testing as detailed in the Priming Section for this system. Prior to priming, ensure a copper grid (using copper self-adhesive tape) has been placed at no more than 4m intervals in a grid system, connected to one or more clean earthing points (depending on area size). Copper tape must also be placed either side of day joints or expansion joints.

The Décor ESD System requires the Acrylicon Standard Primer Batch to be used at a consumption of $0.4\text{-}0.5\text{L/m}^2$ (37-46ml/ft²) to allow a good film to be left on the surface, being careful not to allow pooling. Prior to cure, fully scatter the Conductive Filler to over saturation. This is at a consumption of 1.5kg per m2 (140g/ft^2) (Pre-mixed bag containing - 1kg 0.1mm-0.3mm, 0.5kg 0.7mm-1.2mm). It is important that the scatter sits on top of the primer resin and resin does not float up or grin through, in which case the resin must be rolled away and more scatter applied. Once fully cured, sweep and vacuum the excess aggregate so that no loose particles remain. Test the surface to ensure full conductivity.

Coving:

This is to be installed prior to the trowelled floor. Be aware that due to the thickness of coving, ESD properties can not be achieved in it.

Acrylicon Décor ESD Coving Batch

1L Acrylicon Bodycoat 1061 SW

33g Sylothix

2L Quartz Mix to match the ESD Floor (0.8 - 1.2mm)

Powder Catalyst BPO		Liquid Catalyst BPO
0° C/32° F	60g/L	
10° C/50° F	40g/L	
20° C/68° F	30g/L	
25° C/77° F	25g/L	
30° C/86° F	20g/L	

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Roller apply Primer Additive with a radiator roller to both the wall and floor areas that the coving will cover and leave to dry for a minimum of an hour and a half, but ensure that it has completely cured in the conditions it has been applied in. It is often good to do this just before a lunch break. If it can be done just before breaking for the day and leaving till the next day, all the better. This is to assist you with both damp and contaminants, as areas to be coved are likely suspects for these.

Prime with Acrylicon Standard Primer applied with a radiator roller. Broadcast a light quartz scatter into the wet resin to assist with trowelling and leave to cure completely.

With a coving trowel apply the Acrylicon coving mix to the area with the specified method of top finishing. This for example could be laying into bird's beak coving, up against something existing or using a top-angled coving trowel. If you are using the top-angled coving trowel method, you lay to a laser line at the top and if you have an uneven floor surface, adjust your coving radius with a spoon and leave to fully cure.

The Sylothix in the mix can be adjusted in small increments to ensure you are achieving the correct consistency for coving.

Seal with a single coat of Acrylicon sealer applied with a radiator brush. Inspect and once fully cured you can lay your floor up to the coving.

The coving will also require the two sealer coats as they are laid on the floor to create a uniform surface.

Bodycoat:

Acrylicon Décor ESD Body Coat Batch

1L Acrylicon Bodycoat 1061 SW
0.85L Light Grey ESD Quartz (0.7-1.2mm) approx
0.85L Quartz (0.7 - 1.2mm) approx.

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	30g/L	30g/L	25ml/L
25° C/77° F	25g/L	25g/L	21ml/L
30° C/86° F	20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The mixing of the Décor ESD Body Coat Batch is to be adjusted from the batch guide to an optimal **Wet Mix** by an experienced, trained Mixer. Factors that will influence this are that there is a variation in the quartz size, which is not always evenly distributed and that the pigmenting of different colours

of the quartz create slightly different surface profiles that affects the resin to quartz ratio. It is imperative that the Mixer understands this and can deliver mixes that after they have been trowelled, exhibit a layer of resin that settles on the surface giving the appearance of a film or lacquer sheen. This is what allows the body coat to achieve a chemical bond with the seal coat that follows and thus ensure the integrity of the system.

Pre-blend the quartz using 50% Light Grey ESD Quartz and 50% standard Quartz of any other colour/colours.

When mixing a Body Coat Batch, a metal bucket (normally 30L) is recommended. This is because if the quartz is mixed in plastic, it can shear off bits from the bucket and contaminate the mix.

Thoroughly inspect the primer coat before commencing with the bodycoat to ensure that all areas are completely cured and that the area has no loose particles. Push a sharp tool into any suspect areas to ensure they are fully cured. Once cured, test the area to prove full conductivity to earth. Any areas found not to be fully conductive at this stage must be re-laid and re-tested. It is imperative to ensure that you have a properly cured, fully conductive, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

Gauge rake the Acrylicon Décor ESD Body Coat mix out with a rake set to 3.8mm. Ensure that the mixture is evenly raked to ensure the correct thickness throughout the coat. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials. Having a well raked out mix also makes it easier to achieve high quality results when trowelling.

Lightly trowel the mix to smooth and close the surface, ensuring that it is nice and even and that there are no trowel marks. It should have a resin sheen that has risen to the surface which ensures that a correct wet mix has been installed.

It is also important that there is not too much resin on the surface, as any increase of resin above the quartz will increase the electrical resistance. Ensure there is no pooling of resin on the bodycoat layer.

To help you see any trowel marks, have a floodlight on the floor behind you so that it will cast shadows in uneven floor laying.

Inspect the body coat to ensure it has cured completely before commencing with the seal coats.

Conduct ESD testing. The readings should indicate slightly too conductive at this stage. Any dead spots or fully conductive areas must be re-laid.

Seal Coats:

Acrylicon Sealer Batch

1L Acrylicon Sealer

BPO

0° C/32° F 40g/L 10° C/50° F 30g/L 20° C/68° F 20g/L 30° C/86° F 15g/L

The BPO dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

The first Seal Coat is roller applied at a consumption of $0.2L/m^2$ ($19ml/ft^2$), so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

Inspect to ensure the resin has fully cured.

The second Seal Coat is installed in the same manner as the first, with a consumption of $0.2L/m^2$ (19ml/ft²).

Inspect to ensure the resin has fully cured.

Please note that the use of Aluminium Oxide has not been tested and should be avoided, however most areas requiring ESD are dry areas and should not need the "plus" system.

Conduct final electrical testing to earth prior to hand over.

Acrylicon Lacquer and Lacquer Plus Systems

The Acrylicon Lacquer System is a dust-binder that consists of a pigmented Primer Coat and a pigmented Seal Coat. This can also be used as an initial system when customer budgets are tight, as it forms a good base for further Acrylicon Systems to be laid on to at a later date.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation Notes:

The preferred method of preparation for this system is to grind with a multi-head, contra-rotating diamond grinder. Bear in mind that this is a very thin system and the preparation therefore needs to be as smooth as possible for the system to look good. If you are dealing with polluted concrete, first shot-blast the substrate and then grind with the multi-head, contra-rotating diamond grinder. If you are dealing with a large area, for purposes of speed you can also initially shot-blast and then follow that with a multi-head, contra-rotating diamond grinder to remove the peaks and overlaps created by shot-blasting.

Priming Notes:

For Priming, the Acrylicon Lacquer System Pigmented Primer as detailed in the Priming Section is to be used at a consumption of $0.45-0.5 L/m^2$ (42-46ml/ft²) and should have a glass-like appearance when cured. The reason this primer is used is that this is a thin system and the high Primer Additive content allows the primer to deal with contaminants and moisture better as well as being easier to inspect for areas that require further priming due to the primer being absorbed into the substrate. Due to this high Primer Additive content, ensure you have good airflow over the surface with your fans due to air drying.

Pigmented Seal Coat:

Thoroughly inspect the primer coat before commencing with the Pigmented Seal Coat to ensure that all areas are completely cured and that the area has a uniform and glass like appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glass like appearance need further priming as the primer has been absorbed into the substrate. It is imperative to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

Acrylicon Pigmented Sealer Batch			
1L Acrylico	on Sealer		
25ml Liqui	id Pigment		
	Powder Catalyst BPO	Liquid C	atalyst BPO
0° C/32° F	40g/L	40g/L	33ml/L
10° C/50° I	30g/L	30g/L	25ml/L
20° C/68° I	F 20g/L	20g/L	17ml/L
30° C/86° I	F 15g/L	15g/L	12ml/L
The Catalyst d	osage is always calculated in relatic	on to the substra	ate temperature

which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

The Seal Coat is roller applied at a consumption of 0.25L/m² (23ml/ft²), so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

Should you be installing the **Acrylicon Lacquer Plus System** and require slip resistance added to your floor, scatter the desired quantity and grade of Aluminium Oxide on top of the cured primer. Then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant.

Inspect to ensure the resin has fully cured.

One or two extra seal coats can be installed as above to deal with light forklift traffic in a warehouse environment.

Acrylicon Variant Paint, Variant Paint Plus and Variant Paint Flake Systems

The Acrylicon Variant Paint System is our entry level coating system. It consists of the same primer and seal as our other systems, with a pigmented "paint coat" as the body. This gives a long lasting coloured coating for the concrete that provides dust proofing, waterproofing, chemical protection and good aesthetics.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation Notes:

The preferred method of preparation for this system is to grind with a multi-head, contra-rotating diamond grinder. Bear in mind that this is a very thin system and the preparation therefore needs to be as smooth as possible for the system to look good. If you are dealing with polluted concrete, first shot-blast the substrate and then grind with the multi-head, contra-rotating diamond grinder. If you are dealing with a large area, for purposes of speed you can also initially shot-blast and then follow that with a multi-head, contra-rotating grinder to remove peaks and overlaps created by shot-blasting.

Priming Notes:

For Priming, the Acrylicon Standard Primer for Thin Systems as detailed in the Priming Section is to be used at a consumption of $0.45-0.5 L/m^2$ (42-46ml/ft²) and should have a glass-like appearance when cured. The reason this primer is used is that this is a thin system and the high Primer Additive content allows the primer to deal with contaminants and moisture better as well as being easier to inspect for areas that require further priming due to the primer being absorbed into the substrate. Due to this high Primer Additive content, ensure you have good airflow over the surface with your fans to assist with the curing.

Body Coat:

Acrylicon Variant Paint Body Coat Batch

1L Acrylicon Bodycoat 1061 SW 25ml Pigment 0.05L to 0.35L Acrylicon Fine Filler (Millisill)

Powder Catalyst BPO		Liquid C	atalyst BP
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50°	40g/L	40g/L	33ml/L
20° C/68°	F 25g/L	25g/L	21ml/L
30° C/86° I	F 15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

When mixing the Mixer will need to adjust the filler quantity to take into account the thickness of the coat being installed and the temperature that the system is being installed at, as in colder temperatures the resin will have less viscosity and in higher temperatures more and you need to ensure a nice, even coating. Check the thickness of your first mix and then adjust accordingly in small increments until the desired thickness and consistency has been achieved. The filler in this system acts as "ball bearings" to assist with an even distribution of resin and needs to be balanced with the viscosity to achieve the desired result. For the thinnest bodycoats, 0.05L Acrylicon Fine Filler per litre of resin is used going up to 0.35L Acrylicon Fine Filler per litre of resin which will achieve a coat thickness of around 0.45mm – 0.5mm.

The Variant Paint Body Coat is roller applied by cross rolling to achieve a nice even surface at the desired thickness. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

Seal Coat:

Acrylicon Pigmented Sealer Batch 1L Acrylicon Sealer 25ml Liquid Pigment **Powder Catalyst BPO Liquid Catalyst BPO** 0° C/32° F 40g/L 40g/L 33ml/L 10° C/50° F 30g/L 30g/L 25ml/L 20° C/68° F 20g/L 20g/L 17ml/L 30° C/86° F 15g/L 12ml/L 15g/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

The single Pigmented Seal Coat is roller applied at a consumption of 0.30-0.35L/m² (28-33ml/ft²), so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. Due to the wax in the resin it is conceivable that a small edge mark from the rolling occurs. This is however wax and will clean/be worn off in a matter of weeks, but should not be confused with roller marks resulting from poor installation.

Acrylicon Variant Paint Flake System:

For a Variant Paint Flake System you need to lightly scatter/toss some flake into the wet body coat and then leave to cure. Ensure the flake is thrown UP into the air before falling down onto the surface. This ensures a good even scatter and distribution. This is then followed by the single thick seal coat at $0.35 - 0.45 \text{L/m}^2$ (33-42ml/ft²), but this needs to be un-pigmented and as such installed by

an installer of the appropriate skill level. The transparent sealcoat must be cross rolled and evenly distributed. Do not allow any "puddles" to form, as variations in the thickness of the seal coat will cause uneven colour.

Acrylicon Variant Paint Plus System:

Should you have areas that require slip resistance, it is preferable to identify the specific areas, for example near the doors and tape them off and install a second seal coat at a consumption of $0.2L/m^2$ (19ml/ft²). Scatter the desired quantity and grade of Aluminium Oxide on top of the cured seal coat, then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant. Should you require complete slip resistance you would need to do a complete second seal coat in this manner. For the slip resistance where you have heavy loads, for example forklift trucks, it is preferable to use a finer grade and more of it than less of a courser grade, as it will be more crush resistant.

Inspect to ensure the resin has fully cured.

Acrylicon 2-3mm Variant, 2-3mm Variant Plus and 2-3mm Variant Flake Systems

The Acrylicon Variant System is an industrial grade, mono colour self-levelling system which can be installed with or without sparsely scattered flakes or slip resistance. It has a high compressive strength and is therefore extremely easy to clean, even if exposed to heavy traffic.

The Acrylicon Variant System is suited for use in Engineering Facilities, Parking Garages, Automotive Service Centres, Paper Processing Plants, Stadiums, Conference Centres, Pharmaceutical Industry, Laboratories, Hospitals, Power Plants, Schools and Hangars.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation Notes:

The preferred method of preparation for this system is to grind with a multi-head, contra-rotating diamond grinder. Bear in mind that this is a thin-ish system and the preparation therefore needs to be as smooth as possible for the system to look good. If you are dealing with polluted concrete, first shot-blast the substrate and then grind with the multi-head, contra-rotating diamond grinder. If you are dealing with a large area, for purposes of speed you can also initially shot-blast and then follow that with a multi-head, contra-rotating diamond grinder to remove peaks and overlaps created by shot-blasting.

Priming Notes:

For Priming, the Acrylicon Standard Primer for Thin Systems as detailed in the Priming Section is to be used at a consumption of $0.45-0.5 L/m^2$ ($42-46 ml/ft^2$) and should have a glass-like appearance when cured. The reason this primer is used is that this is a thin system and the high Primer Additive content allows the primer to deal with contaminants and moisture better, as well as being easier to inspect for areas that require further priming due to the primer being absorbed into the substrate. Due to this high Primer Additive content, ensure you have good airflow over the surface with your fans to assist with the curing.

Body Coat:

Acrylicon Variant 2-3mm Body Coat Batch

1L Acrylicon Bodycoat 1061 SW

25ml Pigment

0.4 - 0.6L Acrylicon Standard Filler SV

Powder Catalyst BPO		Liquid Ca	atalyst BPC
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° F	40g/L	40g/L	33ml/L
20° C/68° F	25g/L	25g/L	21ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The Bodycoat is raked out with sharp tooth metal rake and then lightly back rolled to ensure it is nice and smooth. The thickness of the first batches should be measured and the filler adjusted up or down by 0.05L per litre of resin in your mix until the required thickness and self-levelling properties are achieved. The adjustment of pressure on the roller is also important in this equation. The viscosity of the resin will vary depending on the temperature it is being installed in, so the mix should be adjusted accordingly. The filler is used in this system to create depth. The sharp tooth rake should have a tooth depth of roughly twice the coat thickness that is to be achieved, bearing in mind that if you for example wanted to lay the 2mm system, your primer will have a thickness of about 0.5mm, your sealer about 0.4mm and so you are therefore trying to lay about a 1.1mm to 1.5mm body coat. Consumption is approximately 1L (2kg) of mix per 1mm thickness per m² of the body coat. This is however a rough guide as factors like the temperature will have an impact.

Seal Coat:

Acrylicon Pigmented Sealer Batch				
1L Acrylicon S	Sealer			
25ml Liquid P	igment			
Po	wder Catalyst BPO	Liquid Ca	atalyst BPO	
0° C/32° F	40g/L	40g/L	33ml/L	
10° C/50° F	30g/L	30g/L	25ml/L	
20° C/68° F	20g/L	20g/L	17ml/L	
30° C/86° F	15g/L	15g/L	12ml/L	
The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.				

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

If installing a single Pigmented Seal Coat, it is roller applied at a consumption of $0.35-0.5 \text{L/m}^2$ (33-46ml/ft²) Leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. Due to the wax in the resin it is conceivable that a small edge mark from the rolling occurs. This is however wax and will clean/be worn off in a matter of weeks, but should not be confused with roller marks resulting from poor installation.

If installing two seal coats, these should be done as above but at consumptions of $0.3L/m^2$ ($28ml/ft^2$) on the first seal coat and $0.2-0.25L/m^2$ ($19-23ml/ft^2$) on the second coat.

Acrylicon Variant 2-3mm Flake System:

For a Variant 2-3mm Flake System you need to lightly scatter/toss some flake into the wet body coat in an upwards motion to ensure an even scatter and then leave to cure. This is then followed by a single thick seal coat at 0.35 - 0.5L/m²(33-46ml/ft²), but this needs to be un-pigmented and as such

installed by an installer of the appropriate skill level, leaving no "puddles" and ensuring the seal coat is distributed very evenly in order to create a uniform colour.

If installing two seal coats, these should be done as above but at consumptions of $0.3L/m^2$ ($28ml/ft^2$) on the first seal coat and $0.2-0.25L/m^2$ ($19-23ml/ft^2$) on the second coat.

Acrylicon Variant 2-3mm Plus System:

Should you have areas that require slip resistance, it is preferable to identify the specific areas, for example near the doors and tape them off and install a second seal coat at a consumption of $0.2L/m^2$ (19ml/ft²) over a single thick seal coat. Scatter the desired quantity and grade of Aluminium Oxide on top of the cured seal coat, then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant. Should you require complete slip resistance you will need to do a complete second seal coat in this manner. For the slip resistance where you have loads, for example forklift trucks, it is preferable to use a finer grade and more of it than less of a courser grade, as it will be more crush resistant.

Inspect to ensure the resin has fully cured.

For heavy slip resistance use a 50/50 mix of either F24 and F36 or F36 and F60. This is fully broadcast into the wet second seal coat to saturation. Once cured, all the excess is to be vacuumed off. A third "tight" seal coat is then applied so that the top of the aluminium oxide is exposed at the surface, but the resin supports it.

Acrylicon Flake and Flake Plus Systems

The Acrylicon Flake System is a 2mm-3mm chemically bonded coating system that contains decorative flakes to look like Granite or Marble style floors, but can be installed in a fraction of the time.

It is suited to installation in areas with heavy foot traffic and medium industry such as supermarkets, shopping centres, retail display areas, hospitals, stadiums, schools, train and bus stations and bathrooms.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation Notes:

The preferred method of preparation for this system is to grind with a multi-head, contra-rotating diamond grinder. Bear in mind that this is a thin-ish system which is built up layer-by-layer and the preparation therefore needs to be as smooth as possible for the system to look good. If you are dealing with a large area, for purposes of speed you can also initially shot-blast and then follow that with the multi-head, contra-rotating diamond grinder to remove peaks and overlaps created by shot-blasting.

Priming Notes:

For Priming, the Acrylicon Standard Primer for Thin Systems as detailed in the Priming Section is to be used at a consumption of 0.45-0.5L/m² (42-46ml/ft²) and should have a glass-like appearance when cured. The reason this primer is used is that this is a thin system and the high Primer Additive content allows the primer to deal with contaminants and moisture better, as well as being easier to inspect for areas that require further priming due to the primer being absorbed into the substrate. Due to this high Primer Additive content, ensure you have good airflow over the surface with your fans to assist with the curing.

Flake Coving Notes:

Flake Coving can be achieved in two ways.

The first option is to prime and then install Acrylicon Décor Coving without the seal coats. This is followed by a radiator roller applied coat of the pigmented Flake Body Coat onto which you scatter a full broadcast of flakes about 2-3 minutes after it has been applied. Ensure this has fully cured and then back scrape with a coving iron and lightly sand by hand. This is followed by the application of Acrylicon Flake Topcoat with a radiator roller. The two seal coats are then applied at the same time you apply them to the floor.

The second option is to prime and then create a corner radius with Acrylicon Flexible Resin to which Sylothix has been added to create the correct consistency to be able to mould. This is applied with the coving iron and a second installer follows with a radiator brush and MMA Cleaner to smooth out the transitions to the floor and wall. This is followed by a radiator roller applied coat of the pigmented flake bodycoat onto which you scatter a full broadcast of flakes about 2-3 minutes after it has been applied. Ensure this has fully cured, then back scrape with a coving iron followed by lightly sanding by hand. This is followed by the application of Acrylicon Flake Topcoat with a radiator roller. The two seal coats are then applied at the same time you apply them to the floor.

With both of these options tape off as you go along and use a scrape or a knife to get a nice straight edge to the flake, removing the tape before the resin coat cures.

Bodycoat:

Acrylicon Flake Body Coat Batch

1L Acrylicon Flake Bodycoat

25ml Liquid Pigment

0.3L Acrylicon Standard Filler SV

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50° I	40g/L	40g/L	33ml/L
20° C/68° I	F 25g/L	25g/L	21ml/L
30° C/86° I	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Thoroughly inspect the primer coat before commencing with the body coat to ensure that all areas are completely cured and that the area has a uniform glass-like appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glass-like appearance need further priming until they are as the primer has been absorbed into the substrate. It is imperative to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

For the pigment that is used in this coat, select one that is as close to the dominant colour in the flake as possible as this will hide any potential gaps in the flake well.

There are two options with which to install the body coat.

Method 1:

The body coat is roller applied by method of cross-rolling at an approximate thickness of 1mm.

A member of the installation team should be wearing spiked shoes so that they can be beyond the immediate area of body coat being installed and broadcast a full broadcast of flake onto the wet resin about 2-3 minutes after it has been applied while ensuring that their broadcast does not affect the body coat installation, leaving the resin comprehensively covered with the flake and no wet spots. The reason for leaving this time is that the heavier aggregates settle to the bottom and if the flakes are scattered immediately they will be pulled down with them.

It is essential to ensure that the resin has completely cured before commencing to the next phase.

Method 2:

For this method you will have needed to do a light scatter of 0.7mm-1.2mm quartz into the primer coat while it is still wet. Pour the mix on the floor and scrape out at a consumption rate of $0.75-0.95\text{L/m}^2$ (70-88ml/ft²) with a wide steel scrape, using the quartz scatter to give you the level for distribution. Back roll to ensure an even thickness. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials.

A member of the installation team should be wearing spiked shoes so that they can be beyond the immediate area of body coat being installed and broadcast a full broadcast of flake onto the wet resin about 2-3 minutes after it has been applied while ensuring that their broadcast does not affect the body coat installation, leaving the resin comprehensively covered with the flake and no wet spots. The reason for this is that the heavier aggregates settle to the bottom and if the flakes are scattered immediately they will be pulled down with them.

It is essential to ensure that the resin has completely cured before commencing to the next phase.

Topcoat:

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Acrylicon Flake Top Coat Batch 1L Acrylicon Flake Topcoat				
P	owder Catalyst BPO	Liquid Ca	atalyst BPO	
0° C/32° F	60g/L	60g/L	50ml/L	
10° C/50° F	40g/L	40g/L	33ml/L	
15° C/59° F	35g/L	35g/L	29ml/L	
20° C/68° F	20g/L	20g/L	17ml/L	
30° C/86° F	20g/L	20g/L	17ml/L	
The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.				

There are two options with which to install the Flake Topcoat:

Method 1:

Use a leaf blower or broom to collect the excess flake that has not adhered to the resin. This can be re-used. Back scrape the flake at perpendicular angles to break off the protruding bits and flatten the flake and then sand using 80 grit sandpaper on a STR Sander on its slowest setting to ensure that the flakes are completely smooth. To assist with this, you can use some flake or F60 Aluminium Oxide scattered on top to act as a "sanding compound" to reduce heat build-up. Be careful to keep the sander moving swiftly as you need to not to let the sander burn the flakes or sand through the flakes. If you have laid the floor up to cove, hand sand the transition to ensure the flake is smooth. Vacuum the floor at perpendicular angles to ensure all the excess flake has been removed.

Cross-Roller apply the Flake Topcoat at 0.4-0.6L/m² thick to encapsulate the flake and allow to cure.

Once fully cured, this coat requires sanding with an STR Sander with 60-80 grit sandpaper on its slowest setting until it has achieved a glass like appearance. This will generally take 2-3 passes in perpendicular directions and F60 Aluminium Oxide can be scattered to act as a "sanding compound" to reduce heat build-up. The floor is then to be vacuumed in perpendicular directions to ensure all the dust and aluminium oxide has been removed.

Should this coat have not fully encapsulated the flake, install a second coat and sand and vacuum as before. It is important that the flakes are fully encapsulated, as they themselves have no inherent strength.

It is important that you have achieved the smooth glass like finish to the floor at the end of this layer as if you have not, you will not be able to achieve it in the layers that follow.

If the area you are installing in needs to take heavy loads, for example pallet trucks in the wine and spirits isle of a supermarket, it is preferable to use this method as by sanding the flake flat and then fully encapsulating it in the topcoat, you are minimising the effects of the flake's lack of strength.

Method 2:

Use a leaf blower or broom to collect the excess flake that has not adhered to the resin. This can be re-used. Back scrape the flake at perpendicular angles to break off the protruding bits and flatten it out. Vacuum the floor at perpendicular angles to ensure all the excess flake has been removed.

Cross-Roller apply the Flake Topcoat at 0.4-0.6L/m² thick to encapsulate the flake and allow to cure.

Once fully cured, this coat requires sanding with an STR Sander with 60-80 grit sandpaper on its slowest setting until it has achieved a glass like appearance. This will generally take 3-4 passes in perpendicular directions and F60 Aluminium Oxide can be scattered to act as a "sanding compound" to reduce heat build-up. This method will take more sanding than method 1 as the flakes were not sanded. The floor is then to be vacuumed in perpendicular directions to ensure all the dust and aluminium oxide has been removed.

Should this coat have not fully encapsulated the flake, install a second coat and sand and vacuum as before. It is important that the flakes are fully encapsulated, as they themselves have no inherent strength.

It is important that you have achieved the smooth glass like finish to the floor at the end of this layer as if you have not, you will not be able to achieve it in the layers that follow.

Seal Coat:

Acrylicon Sealer Batch				
1L Acrylicon	Sealer			
Pe	owder Catalyst BPO	Liquid Ca	atalyst BPO	
0° C/32° F	40g/L	40g/L	33ml/L	
10° C/50° F	30g/L	30g/L	25ml/L	
20° C/68° F	20g/L	20g/L	17ml/L	
30° C/86° F	15g/L	15g/L	12ml/L	
The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.				

When sealing, ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

The first Seal Coat is roller applied at a consumption of 0.25L-0.3L/m²(46ml/ft²), so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be

done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

Inspect to ensure the resin has fully cured.

The second Seal Coat is installed in the same manner as the first, but thinner with a consumption of $0.2-0.25 L/m^2$ (19-23ml/ft²).

Inspect to ensure the resin has fully cured.

Should you be installing the **Flake Plus System** and require slip resistance added to your floor, scatter the desired quantity and grade of Aluminium Oxide on top of the cured first seal coat. Then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant.

Acrylicon Multi-Grip System

Acrylicon Multi-Grip is an industrial grade, mono-colour system which is elasticised for zones with high thermal and mechanical stresses, as well as outdoor applications. It has a thickness of 2-4mm.

Acrylicon Multi-Grip is designed for use in temperature stressed and outdoor applications where the elasticity and good low temperature flexibility improves it's performance in areas such as Parking Decks, Exterior Walkways (Airports, Vestibule Walk-off areas where salt is often used), metal gantries and mezzanine decks and Safety Marking Zones. The built-in slip resistance assists in keeping the walkways safe for both vehicles and pedestrians.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Fibreglass Arming, Low and High Temperature Installation and Termination which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation notes:

The concrete must be shot-blasted and then ground with a multi-head contra-rotating diamond grinder to ensure the concrete has the correct profile for the amount of traffic that the system needs to endure. The heavier the loads and trafficking, the more aggressive the preparation needs to be. For heavier trafficked areas and in turning areas, create additional anchoring points in the substrate by cutting a grid with a diamond blade disk cutter that are 0.5-1.5mm deep and 10-30cm apart. These need to be filled with Primer during the priming coat. For installation on other substrates please see the chapter on their standard preparation.

Primer Notes:

Acrylicon Multigrip Primer is a mixture of 80% Steel and Tile Primer and 20% Primer Additive installed at a consumption of $0.35L/m^2(33ml/ft^2)$. If there is no Fibreglass Arming being installed, then broadcast 0.7-1.2mm quartz similar to that of an Acrylicon Décor System Primer scatter into it while still wet. If Fibreglass Arming is being installed there should be no broadcast at this stage as a further Acrylicon Standard Primer coat needs to be installed on top of the fibreglass at a consumption of $0.35L/m^2(33ml/ft^2)$ and the quartz is then scattered into that. The purpose of this scatter is to create the thickness for the scrape coat of Flexible that is to follow. If you have cut the additional anchoring grooves, be sure to fill them with the primer coat.

Fibreglass arming notes:

If this system is being installed on a top deck of a car park or similar area with a high likelihood of movement, a Fibreglass Arming layer is to be installed on top of the Primer coat. This utilises 150g/m² fibreglass and a pure Acrylicon Flexible Resin mix at a consumption of 1L/m² (93ml/ft²). If installing on multiple substrates, Fibreglass Arming will be required to re-enforce where they join and potentially over sections or all of the substrates.

Coving notes:

If coving is required, roller apply Primer Additive with a radiator roller to both the wall and floor areas that the coving will cover and leave to dry for a minimum of an hour and a half, but ensure that it has completely dried in the conditions it has been applied in. It is often good to do this just before a lunch break. If it can be done just before breaking for the day and leaving till the next day, all the better. This is to assist you with both damp and contaminants, as areas to be coved are likely suspects for these.

Prime with Acrylicon Multi-Grip Primer mix and allow to fully cure.

Create a radius in the corner using Acrylicon Flexible resin to which you have added Sylothix to obtain the correct consistency to be able to mould it correctly. Allow to fully cure.

Tape off to the height you are coving to and prime at the same time as the floor (excluding the initial prime and the Fibreglass Arming if that is being installed), broadcasting a quartz scatter into the wet resin.

Install the all layers of the system with a radiator roller at the same time as the floor, taping off after each one.

Flexible Scrape Coat:

Acrylicon Multi-Grip Flexible Scrape Coat Batch

1L Acrylicon Flexible Resin

0.33L Acrylicon Standard Filler SV

Powder Catalyst BPO		Liquid Ca	atalyst BPO
0° C/32° F	60g/L	60g/L	50ml/L
10° C/50°	F 40g/L	40g/L	33ml/l
15° C/59°	F 20g/L	20g/L	17ml/L
20° C/68°	F 15g/L	15g/L	12ml/L
30° C/86°	F 15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Thoroughly inspect the primer coat before commencing with the Flexible Scrape Coat to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate. It is imperative to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

Pour the mix on the floor and scrape out at a consumption rate of $0.75-0.95L/m^2$ (70-88ml/ft²) with a wide steel scrape, using the quartz scatter to give you the level for distribution. Back roll to ensure an even thickness. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials. While the resin is still wet, broadcast a full saturation of 0.7-1.2mm quartz at a consumption rate of 2kgs $(1.28L)/m^2$ (119ml/ft²) Should you require a smoother surface finish, a 50/50 mix of the 0.7-1.2mm quartz and 0.4-0.8mm quartz can be used.

Ensure the resin is fully cured and then sweep the floor to remove the loose quartz. This is followed by two passes with a vacuum at perpendicular angles to ensure that all the loose quartz and dust is removed.

Body Coat:

Acrylicon Multi-Grip Body Coat Batch

1L Acrylicon Bodycoat 1061 SW 0.11L Acrylicon Flexible Resin 28ml Liquid Pigment

Powder Catalyst BPO		Liquid Ca	atalyst BPO
5° C/41° F	50g/L	50g/L	42ml/L
10° C/50° F	40g/L	40g/L	33ml/L
15° C/59° F	30g/L	30g/L	25ml/L
20° C/68° F	20g/L	20g/L	17ml/L
25° C/77° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials ashured always be added to the mix as detailed in the chapter on Mixing.

Distribute the mix evenly at consumption $0.6-0.95L/\ m^2(56ml/ft^2)$ depending on the size of quartz used, with a wide steel scrape and then back roll to ensure an evenness. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials.

Allow to fully cure.

Seal Coat:

When Sealing ensure that you have a separate pair of clean sealing shoes or wear overshoes to ensure you do not contaminate or bring dirt onto the flooring system as this will be visible in the final finish.

Acrylicon Pigmented Sealer Batch

1L Acrylicon Sealer 25ml Liquid Pigment

Powder Catalyst BPO		Liquid Catalyst BPO		
0° C/32° F	40g/L	40g/L	33ml/L	
10° C/50° I	30g/L	30g/L	25ml/L	
20° C/68° I	F 20g/L	20g/L	17ml/L	
30° C/86° I	F 15g/L	15g/L	12ml/L	

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Roller apply a final pigmented Seal Coat at a consumption rate of $0.2-0.25L//m^2(19-23ml/ft^2)$. Use a marker to indicate where you need to get to with each mix to ensure you are achieving the correct consumption of materials. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (40cm/18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

A second seal coat can be roller applied similar to the first to deal with areas of high wear, heavily trafficked or traffic turning areas or if slip resistance is required. Should you be installing slip resistance in your floor, scatter the desired quantity and grade of Aluminium Oxide on top of the cured first seal coat. Then cross roll the second seal coat as per normal, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant.

Ensure the system has fully cured.

Acrylicon Wall System

The Acrylicon Wall System is an extremely durable, hygienic and long-lasting wall covering system which can be installed in three options, a flat pigmented colour, with decorative flake or with decorative quartz. It is easy to apply and with its 2 hour cure can be installed in a fraction of the time of traditional wall cladding and tiled systems. Due to its ability to chemically bond it can be fused with an Acrylicon flooring system to create a truly monolithic floor to wall interface.

The Acrylicon Wall System is designed to be used on walls in changing rooms, showers and wet rooms, food processing areas, hospitals, pharmaceutical industry, abattoirs, breweries, bakeries, kitchens and many other areas that require a hygienic and easy to clean wall surface.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Fiberglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

To install the Acrylicon Wall System the wall surface must demonstrate sufficient consistency of strength and quality. The wall surface must be dry, homogeneous, even, free from loose particles, dust and contamination prior to installation. Acrylicon recommends trial applications before installation to check for bond, substrate contamination, surface hardness, porosity and substrate preparation effectiveness.

Substrate Preparation Notes:

The Acrylicon Wallsystem can be applied on various substrates which need to be prepared as follows:

- Tiles These need to be plastered over and the plaster then sanded flat to achieve the required surface.
- Concrete This needs to either be ground flat or to be plastered over and the plaster then sanded flat to achieve the required surface.
- Boards for wet areas All cracks need to be filled in with the Acrylicon Crack Filler mix of
 Flexible resin and Sylothix. This is then to be ground down and sanded flat to achieve the
 required surface. These however need to be tested on a type by type basis.

If there are concerns over contamination, the thinking should be about creating a barrier between the substrate and the Wall System. Useful products for this are Acrylicon Shield Coat, Ardex P82 Primer and plaster. If you are unsure of the correct way to proceed, consult your Acrylicon representative.

What is imperative is to pay exacting attention to the preparation of the substrate, as this is what will ensure a successful installation. What you want to achieve is a smooth surface similar to that which a skilled commercial painter would spend their time on achieving before they apply the paint.

As with painting, you have to tape and cover up anything you may not want to apply the coating to (for example light sockets) and any edging, but remember to always remove the tape while the resin for that coat is still wet and then re-apply and remove for each coating.

The mixes will need to be poured into a suitable roller trough and the roller dipped and the coating applied.

Priming Notes:

The different wall systems on the market can contain different components that inhibit a good cure. If uncertain, create a barrier between the Acrylicon Wall System and substrate by using either a pure layer of Primer Additive or Acrylicon Water Based Primer.

Roller apply Primer Additive to the wall and leave to dry with adequate ventilation until totally dry. It is even better if you are able apply it at the end of a shift and leave till the following day. This is to assist with any potential contamination.

While the neat Primer Additive coat is an integral part of the system, the Acrylicon Wallsystem has been designed so that a primer is not necessary if installing on a substrate where there are no concerns regarding curing. However, ensure that you have tested the substrate for curing and bond before proceeding. Should you have the remotest concerns, install a primer coat as if there is an issue, it is a lot easier to remove a primer coat than a bodycoat containing quartz or flake.

Apply the Acrylicon Water Based or Standard Primer by cross rolling it onto the wall at a consumption of approximately 0.25L/m² (23ml/ft²) ensuring you have good even coverage of the wall and re-prime any areas where the finish is not glossy and there are any dry spots. It is useful to use a 23 cm/9 inch long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. Depending on the installation area, a telescopic handle on the roller can be useful.

Thoroughly inspect the primer coat before commencing with the body coat to ensure that all areas are completely cured and that the wall has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If there are any runs, ensure they are sanded flat.

Body Coat:

There are three variations of the body coat, pigmented, flake and quartz but they all start with a Wall System Pigmented Body Coat. If installing the straight pigmented option, use a colour of the customers choosing. If you are doing a flake or quartz Wall System, match the base colour in the Flake or the quartz so that if any of it becomes visible, it blends in. This is extremely important to ensure the wall does not look patchy. The Acrylicon Wall Bodycoat resin comes pre-pigmented with RAL 7035 to blend in the fillers in the resin, so factor this into your thinking if an alternative colour is required. It can be ordered pre-pigmented in an alternative colour, but only in quantities over 400kg.

Acrylicon Wall System Body Coat Batch

1L Acrylicon Wall Bodycoat

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	50g/L	50g/L	42ml/L
10° C/50°	F 40g/L	40g/L	33ml/L
20° C/68°	F 30g/L	30g/L	25ml/L
30° C/86°	F 25g/L	25g/L	21ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Apply the Acrylicon Wall System Body Coat at a consumption of $0.3L-0.35L/m^2$ 28-33ml/ft²) by cross-rolling it onto the wall. It is useful to use a 23 cm/9 inch long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller. Leave a marker at where you should get to with each batch to monitor that you are installing to the required thickness. Depending on the installation area, a telescopic handle on the roller can be useful. Ensure that your rolling achieves a smooth, even finish similar to that of a paint finish.

Pigmented Option:

Bear in mind that the Acrylicon Wall Bodycoat resin comes pre-pigmented with RAL7035, so while other pigments can be added, it will never be an exact match to the added RAL colour. The thinness of the coat also has an impact on the colour. Pigment your seal coats with the added RAL colour to get as close as possible. A sanding of the body coat prior to sealing can be done to assist with smoothness. Ensure there are no runs on any of the coats and if there are, ensure they are sanded or diamond ground back before applying the next coat.

Quartz Option:

While the resin is still wet, broadcast to saturation 0.4 mm - 0.8 mm quartz with a backpack aggregate broadcasting machine to ensure the wall has a good even coating of quartz with no gaps. Consumption should approximately be $0.2-0.3 \text{L/m}^2 (19-28 \text{ml/ft}^2)$. If you are using a petrol broadcasting machine, factor that into your air extraction and face mask requirements.

Ensure that the coating has fully cured and then scrape it in perpendicular directions with a large metal scrape to remove any loose quartz.

This is then followed by a Wall System Top Coat (consisting of Acrylicon Bodycoat 1061 SW with 5-15grames/liter of Sylothix) at 0.2-0.3 L/m2 (19-28ml/ft²) to saturate the quartz. After cure, sand the base to remove any particles and continue with sealing.

Flake Option:

For best results, use the medium or small size flake option. While the resin is still wet, broadcast a full broadcast of flake into it with a backpack aggregate broadcasting machine. You need to ensure the resin is fully coated with no gaps. Flake that does not adhere can be collected and re-used. If you are using a petrol broadcasting machine, factor that into your air extraction and face mask requirements.

Ensure that the coating has fully cured and then scrape it in perpendicular directions with a large metal scrape to remove any loose flake and to flatten it.

Seal Coat:

For Quartz and Flake systems:

Acrylicon Wall System Sealer Batch 1L Acrylicon Wall Sealer Powder Catalyst BPO **Liquid Catalyst BPO** 0° C/32° F 50g/L 50g/L 42ml/L 10° C/50° F 40g/L 40g/L 33ml/L 20° C/68° F 30g/L 30g/L 25ml/L 30° C/86° F 25g/L 25g/L 21ml/L The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

A first seal coat is cross-rolled on at a consumption of about $0.3L/m^2$ (28ml/ft²). On the flake option you want to ensure that you have completely saturated the flake. Leave a marker at where you should get to with each batch to monitor that you are installing to the required thickness. Ensure that the resin has fully cured and then sand the surface smooth with a flexible drywall sander with 80 grit sandpaper connected to your vacuum to get a smooth finish.

This is followed by a second seal coat installed as above, but without the sanding at a consumption of about 0.3L/m²(28ml/ft²). If there is any evidence of any flake or quarts protruding and creating unevenness, you will need to sand the wall again and apply a third seal coat.

For the Pigmented System:

Acrylicon Pigmented Wall System Sealer Batch

1L Acrylicon Wall Sealer

25ml Liquid Pigment

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	50g/L	50g/L	42ml/L
10° C/50°	F 40g/L	40g/L	33ml/L
20° C/68°	F 30g/L	30g/L	25ml/L
30° C/86° I	F 25g/L	25g/L	21ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

A single pigmented seal coat is cross-rolled on at a consumption of $0.3L/m^2$ ($28ml/ft^2$). Ensure the system has fully cured.

Acrylicon Levelling Screed

Acrylicon Levelling Screed is a solvent-free, two-component methacrylic polymer mortar with a relatively high compressive strength and flexural strength in bending. It is an ideal product to replace cementitious mortars due to its rapid curing time and very low linear shrinkage.

It is ideal for usage in bedding in drains and spot repairs and as the thickness can be varied by additional aggregates, ramps, rail bedding, filler and screed mortars and casting bridge bearings.

Acrylicon Levelling Screed is a mortar and underlayment and should **not be thought of as a flooring system.**

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Fibreglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

Substrate Preparation Notes:

The substrate should be prepared in line with what the Acrylicon Levelling Screed is being used for and the system that is being laid on top of it i.e. if you are using it as a levelling screed for Acrylicon Décor in a wet area, the substrate preparation should be in line with what you would do for that. If you are bedding in a drain the substrate should be ground with a diamond grinder.

Priming Notes:

The priming coat should be in line with what the levelling screed is being laid onto and the system that is being laid on top of it. If you are using it to bed in a drain, prime the concrete with the Acrylicon Standard Primer Batch and the Drain with Acrylicon Metal Primer or Steel and Tile Primer. Thoroughly inspect the primer coat before commencing with the Acrylicon Levelling Screed to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate.

Installation

Acrylicon Levelling Screed Batch

2L Acrylicon Levelling Screed Resin

15kg Acrylicon Levelling Screed Filler

	Powder Catalyst BPO		atalyst BPO
minus 5° C/32° F	60g/L	60g/L	50ml/L
0° C/32° F	50g/L	50g/L	42ml/L
10° C/50°	F 40g/L	40g/L	33ml/L
20° C/68°	F 30g/L	30g/L	25ml/L
30° C/86°	F 20g/L	20g/L	17ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

Quantity Quantity Minimum Quantity in Litres as Material in Litres as thickness in kg cured loose pour in mm volume Acrylicon Levelling Screed Filler 15 11.5 6.5 Acrylicon Levelling Screed Resin 1.85 2 2 5 13.5 8.5 Total 16.85 Acrylicon Levelling Screed Filler 15 11.5 6.5 Acrylicon Levelling Screed Resin 1.85 2 2 25 Quartz Filler 2-8mm 5 3.1 8 24.85 18.5 11.6 Total Acrylicon Levelling Screed Filler 11.5 6.5 15

1.85

3

12

31.85

15

1.85

4.8

6.4

8

36.05

2

1.9

7.5

22.9

11.5 2

3

4

5

25.5

2

1.15

4.6 **14.25**

6.5

2

1.85

2.45

3.1

15.9

50

120

Acrylicon Levelling Screed mixing table for added aggregates

It is important that none of the courser aggregates are added to the mix before the Acrylicon Levelling Screed Resin, BPO and Acrylicon Levelling Screed Filler have been mixed together.

Consumption Calculation:

Acrylicon Levelling Screed Resin

Acrylicon Levelling Screed Filler

Acrylicon Levelling Screed Resin

Quartz Filler 2-8mm

Quartz Filler 8-16mm

Quartz Filler 2-8mm

Quartz Filler 8-16mm

Quartz Filler 16-32mm

Total

Total

1L cured volume gives you 1m.sq at 1mm. Calculate the Nominal (nom) thickness and area size. For example, 7m.sq. at 40mm(nom) thickness will require 280L of cured volume.

Then use the table above to select the correct mix. Laying at 40mm you can use the 25mm minimum thickness mix.

You can see that the batch for this mix yields 11.6L of cured product. Therefore, 280 divided by 11.6 equals **24.2 mixes** required.

Looking back across the table above, you can see that this mix consists of 15kg Levelling Screed Filler, 1.85kg(2L) Levelling Screed Resin and 8kgs 2-8mm Quartz Filler.

Therefore:

Levelling Screed Filler is 15kg x 24.2 so 363kgs required.

Levelling Screed is 1.85kg(2L) x 24.2 so 44.7kg(48.4L) required.

Quartz Filler 2-8mm is 8kg x 24.2 so 193.6kg required.

Installation as a screed:

On the primed substrate rake out the Acrylicon Levelling Screed mix at a minimum of 5mm and then trowel to smooth off. The system that is to be overlaid needs to be installed starting with the primer

layer. Consumption for Acrylicon Levelling Screed is roughly 2kg of material which will yield 1L cured volume will give you 1m² at 1mm thick.

Ensure the Acrylicon Levelling Screed has fully cured before proceeding with any overlayment.

Installing Falls to Drains:

To the standard mix (2L Acrylicon Levelling Screed Resin, 15 KG Acrylicon Levelling Screed Filler and relevant BPO) you can add 1-3L of 0.7-1.2mm quartz and Sylothix to achieve the correct viscosity to be able to create the falls as well as any additional aggregates as detailed in the table for thicker areas.

It is important to remember that 5mm is the minimum thickness for the Acrylicon Levelling Screed, so if you wish to lay down to a perceived zero, you need to grind the substrate down so that the minimum thickness is always maintained.

You then put your chosen height measurement system in place, be that guides or height markers that you have installed with laser guides or another preferred method and scrape the Acrylicon Levelling Screed out with a suitable straight edge to achieve the correct fall. This in then smoothed over with a trowel. It is important to be aware of the height you are currently at in the fall and ensure you are using the correct aggregate mix for that height.

Ensure the Acrylicon Levelling Screed has fully cured before proceeding with any overlayment.

Bedding in Drains:

This is to be used in conjunction with the section on drains as it only covers the Acrylicon Levelling Screed Component of it.

Having ensured the priming is all up to standard, initially start pouring in the 5mm mix i.e. just the Acrylicon Levelling Screed Resin, Acrylicon Levelling Screed Filler and the relevant BPO to ensure the screed is viscous, until you have passed the bottom of the drain. This is to ensure that the screed has fully filled the area below the drain and the drain is seated properly without gaps. You can then adjust your mix with aggregates for the relevant depth and fill in the sides.

Ensure the Acrylicon Levelling Screed has fully cured before proceeding with any overlayment.

NB! Acrylicon Levelling Screed must be primed prior to any Acrylicon system being installed over it.

Acrylicon Industry System

The Acrylicon Industry System is a trowel applied mortar system with excellent compressive strength and tensile strength in bending with low linear shrinkage and excellent wear-ability and longevity.

The Acrylicon Industry System is designed for use both interiorly and exteriorly in areas with heavy mechanical stress such as the Mining Industry, Heavy Engineering, Car Parks and the Offshore Industry. It can also be used as a screed onto which other Acrylicon Systems can be laid.

Please refer to the chapters on Ventilation, Storage and Handling, Substrate Preparation, Priming (paying particular attention to curing and bond tests), Mixing, Fibreglass Arming and Low and High Temperature Installation, which are to be used in conjunction with this guide as well as local Project Management procedures and Health and Safety regulation.

For Offshore use, please contact Acrylicon Polymers GmbH.

Substrate Preparation Notes:

The substrate can be ground, scabbled or shot-blasted, depending on the needs of the specific installation situation.

Priming Notes:

The primer used should be in accordance with the substrate onto which the Acrylicon Industry System is being laid. The bulk of installations will either be on concrete where the Acrylicon Standard Primer is used or metal where Acrylicon Metal Primer or Steel and Tile Primer is used at a consumption of $0.35L/m^2(33ml/ft^2)$. If you are installing the low temperature Industry C option, Arctic Additive should be added to the primer, but not the Industry itself. The primer gets a light quartz scatter into the wet resin to assist with the application of the Acrylicon Industry.

Bodycoat:

Acrylicon Industry Batch

2L Acrylicon Industry Resin

15kg Acrylicon Industry Filler

Catalyst

The Catalyst is contained within the product and as such normally further Catalyst must not be added. Similarly, no temperature additives should be added and either standard Industry or the Industry C low temperature option should be used, depending on the installation temperature. The only exception is that if the product is over a year old, 30g of Powder or Liquid Catalyst BPO (25ml Liquid Catalyst BPO) per Litre of resin must be added to compensate for expiration of the BPO within the product.

If further catalyst is added, it needs to be mixed into the resin before adding the filler.

Thoroughly inspect the primer coat before commencing with the Acrylicon Industry to ensure that all areas are completely cured and that the area has a uniform and glossy appearance. Push a sharp tool into any suspect areas to ensure they are fully cured. If not, you can attempt local shocking as detailed in the Priming chapter. Any areas that lack a glossy appearance need further priming until glossy as the primer has been absorbed into the substrate. It is imperative to ensure that you have a properly cured, well-coated primer layer as this is the foundation for your entire flooring system and any issue with it will be reflected through subsequent layers.

It is important to check the mix has the correct viscosity and vary the resin accordingly, but this should not fall outside of 1.7L to 2.2L as this covers the usable range and ensures the floor achieves it's designed technical properties.

The Acrylicon Industry mix is raked out at a minimum thickness of 5mm and then trowelled to ensure a nice smooth surface. Cleaning the trowel with Industry Resin as you go along will assist in obtaining the correct degree of smoothness. It is important to get this as good as possible as the coat will need to be ground afterwards and some of the aggregates are very course.

When the floor has cured to the point it can be walked on, it is to be ground with a multi-head, contra-rotating diamond grinder to achieve a nice smooth finish.

Vacuum the floor at perpendicular angles to ensure all the dust particles from the grinding have been removed.

Should you require a thicker system, additional aggregate can be added according to the following table:

Acrylicon Industry mixing table for added aggregates				
Material	Quantity in kg	Quantity in Litres as loose pour	Quantity in Litres as cured volume	Minimum thickness in mm
Acrylicon Industry Filler	15	11.5	6.5	
Acrylicon Industry Resin	1.85	2	2	5
Total	16.85	13.5	8.5	
Acrylicon Industry Filler	15	11.5	6.5	
Acrylicon Industry Resin	1.85	2	2	25
Quartz Filler 2-8mm	8	5	3.1	23
Total	24.85	18.5	11.6	
Acrylicon Industry Filler	15	11.5	6.5	
Acrylicon Industry Resin	1.85	2	2	
Quartz Filler 2-8mm	3	1.9	1.15	50
Quartz Filler 8-16mm	12	7.5	4.6	
Total	31.85	22.9	14.25	
Acrylicon Industry Filler	15	11.5	6.5	
Acrylicon Industry Resin	1.85	2	2	
Quartz Filler 2-8mm	4.8	3	1.85	120
Quartz Filler 8-16mm	6.4	4	2.45	120
Quartz Filler 16-32mm	8	5	3.1	
Total	36.05	25.5	15.9	

Seal Coat:

Acrylicon Industry Pigmented First Sealer Batch

1L Acrylicon Sealer

25ml Liquid Pigment

0.33L Acrylicon Primer Additive

Powder Catalyst BPO		Liquid C	atalyst BPO
0° C/32° F	40g/L	40g/L	33ml/L
10° C/50°	F 30g/L	30g/L	25ml/L
20° C/68°	F 20g/L	20g/L	17ml/L
30° C/86°	F 15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The first Seal Coat is roller applied at a consumption of $0.3L/m^2$ (28ml/ft²) so leave a marker so that you know the area each mix needs to cover so that your consumption is correct. This needs to be done by manner of cross rolling to ensure there are no roller marks in the resin. It is useful to use a broad (43cm or 18inch) long pile roller and ensure you clean the curing resin out of it every now and then as you go along so that you always have fresh resin in the roller.

Inspect to ensure the resin has fully cured.

Acrylicon Sealer Batch

1L Acrylicon Sealer

Powder Catalyst BPO		Liquid Catalyst BPO	
0° C/32° F	40g/L	40g/L	33ml/L
10° C/50° F	30g/L	30g/L	25ml/L
20° C/68° F	20g/L	20g/L	17ml/L
30° C/86° F	15g/L	15g/L	12ml/L

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The second Seal Coat is installed in the same manner as the first, but thinner with a consumption of $0.2-0.25 L/m^2 (19-23 ml/ft^2)$. Should you wish you can also pigment this coat adding 25ml of liquid pigment per litre of resin.

Inspect to ensure the resin has fully cured.

Should you require slip resistance added to your floor, scatter the desired quantity and grade of Aluminium Oxide on top of the cured first seal coat. Then cross roll the second seal coat as per the first, ensuring you are fully encapsulating the Aluminium Oxide within the resin as this will make it more crush resistant.

Acrylicon Terrazzo Repair System

The Acrylicon Terrazzo Repair System is a resin-based grout that can repair or replace traditional Cement based grouts within tiled Terrazzo systems. It has been designed to cope with heavy traffic and has extremely good chemical and wear resistance. With a cure time of just 60 minutes, and no solvents or VOC's, repairs and installation can be carried out quickly, without the need for costly shutdowns.

The Acrylicon Terrazzo Repair System is designed for repairing existing Terrazzo Tile Grout, or for new installation grouting. It is suitable for use on Retail, Commercial and Industrial Terrazzo Floors.

Substrate Preparation Notes:

The failed grout is to be ground out with a diamond grinder to a depth of about 5mm or more, depending on the severity of the failure, as it needs to be sound enough to be used as the substrate.

Priming Notes:

The Acrylicon Terrazzo Repair system does not require priming.

Installation:

Acrylicon Terrazzo Repair Batch

1L Acrylicon Terrazzo Repair Resin

2.5kg Omya Calcium Carbonate

	Powder Catalyst BPO		Liquid Catalyst BPO	
0° C/32° F	50g/L	50g/L	42ml/L	
10° C/50° F	40g/L	40g/L	33ml/L	
20° C/68° F	20g/L	20g/L	17ml/L	
30° C/86° F	15g/L	15g/L	12ml/L	

The Catalyst dosage is always calculated in relation to the substrate temperature which must be measured with an infrared thermometer and against the Litre measurement of Resin only and not include Additives or Aggregates. Materials should always be added to the mix as detailed in the chapter on Mixing.

The mix is applied into the grouting areas with a paint scraper and left to cure. It is important that sufficient product is applied so that it has achieved a convex meniscus as this will then end up nice and flat after the next phase. These are then ground flat with a diamond grinder. The ground area may look slightly different, but this will be remedied after a few passes of the normal polishing maintenance regime. A Twister Pad (green for normal maintenance) or similar is recommended unless the tiles are in poor condition in which case you need to go through grades. This can also be done as part of the installation regime. The pot life varies between 12 minutes at 30° C/86° F and 30 minutes at 0° C/32° F.