

Sika Engineering Silicons - Elastosil®

Last year Sika AG acquired from Wacker Silicons the exclusive rights to the Elastosil® IG, Elastosil® SG and Ventotec® product lines. The newly acquired division is now appropriately named Sika Engineering Silicons. Elastosil silicone sealants are specially developed for challenging applications in glass, metal, and natural stone facades. The products include weatherseals, products for structural glazing and sealants for double-glazing units. This new product line allows Sika to provide a full product range of facade adhesives and sealants to all of Sika's customers.

As a result of this acquisition, Sika Australia is introducing to Australia the weatherseal range of silicons, Elastosil® 305. Elastosil® 305 is a high performance silicone sealant designed for sealing, bonding and mending tasks in glazing applications. It is particularly suitable for use as a weatherseal for structural glazing and curtain walling. Elastosil® 305 is available in a range of colours including Black, Grey, White, Transparent and Beige.

The Elastosil® 305 is a neutral curing, matt finish silicon, which can be used on a wide range of substrates including glass, metals, concrete and mortar to name a few. Elastosil® 305 meets a number of Standards/ Approvals for the Construction Industry in relation to glazing and joint sealants. It is highly abrasion resistant, has



excellent non-sag properties and has a long shelf life making it ideal for the Glazing Applicator.

Seelite Windows in Victoria has been using the Elastosil® 305 silicone on the Bayshores Apartments Project in Port Melbourne for their weather sealing requirements. Seelite Windows has worked on various projects including many infrastructure projects, multi storey office and apartment buildings and large commercial developments. They specialise in designing, manufacturing and supplying quality commercial aluminium windows and doors. Seelite Windows have chosen to use Elastosil® 305 due to its excellent application properties and superior finish.

For further information in relation to the Sika Engineering Silicon Range and Elastosil® 305, please contact your nearest Sika office on 1800 007 452 or email Sika at marketing@sika.com.au.

Sika at Work

Sika®

► Sika Echo's at Lake Echo Spillway



Spillway with previous Sika repairs on walls

After Tasmanian Hydro successfully repaired the walls with Sika concrete repair materials at Lake Echo Spillway located two hours west of Hobart, it was now time to focus on the most difficult part of the rehabilitation project; the reinstatement of the floors and several weir walls. To make the project even more difficult, the concrete had to be transported from Hobart on steep winding roads pumped over 50 metres and endure waiting times of 1 to 2 hours.



Pumping concrete with snow in the background

Compounding the problem, daily temperatures were only slightly above freezing as can be seen with the snow covered slopes in the background. The rehabilitated area needed to be returned to service within 7 days.

The concrete specification required minimum 40 MPa compressive strength and to be placed at minimum

120 mm slump. The concrete was also required to set in 5-7 hours in order to be finished in the same day to minimize the cost of returning to the site. With these difficult conditions, Derwent Valley Concrete required a unique concrete admixture solution and strong supplier support with local representation to overcome these difficult conditions.



Pumping and screeding of the concrete

Sika's Tasmanian representative Andrew Wilkie with support from our mainland technical team, was able to present an admixture solution that would meet all the requirements using Sika's ViscoCrete® and Sika Rapid® Technology. The combination of Sika ViscoCrete 5-500 and SikaRapid® AF provided the client Derwent Valley Concrete with the chemistry to ensure that all difficult parameters were met, including the early and ultimate strength characteristics. Additionally, as can be seen in the photo, the concrete was placed at much higher level of workability than thought imaginable without jeopardizing set times or early strengths with slumps generally in excess of 200 mm.

Test Report			
		Results	
7 Days	37.0MPa		
28 Days	63.0MPa		
		0"	21"
20/08/2004	18/08/2004	18/08/2004	
7	28	28	
190.2	100.6	100.4	
198	203	198	
2420	2440	2420	
37.0	63.0	62.6	

Independent Test Report

▶ Government House - Adelaide



The flexible nature of **SikaFast® 5215** has proved to be successful at Government House in Adelaide. The application involves bonding of Brass Buttons onto concrete as markers for the visually impaired. Previously a rigid epoxy had been used and the Brass Markers had fallen off due to the movement of the markers in varying temperatures. **SikaFast® 5215** has the advantage of having high mechanical strength, while still having some flexibility to cope with movement from thermal expansion.

Brass pieces adhered with SikaFast® 5215

▶ All Silent at Soldiers Point



Acoubond® Silent Layer Matt

Designers of a luxury two storey residential house at the picturesque Soldiers Point in the Port Stephens region, had the challenge of meeting the clients desire to have the visual effect of solid timber flooring both upstairs and down, without excessive noise interfering with daily life.

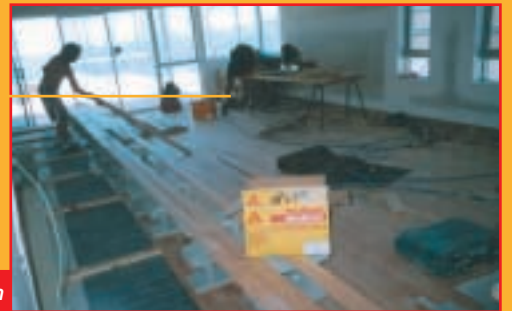
The answer for the company The Outlook Boat Harbour, who were given this responsibility, was the **Sika® AcouBond System** for timber floors.

The system consisting of the **Silent Layer Matt** and the **SikaBond® T53** adhesive combines to not only permanently adhere most types of engineered or solid timber, in this case Blackbutt, but also reduces footfall noise up to 18 decibels and improve the

overall acoustic insulation of a room.

The end result is a timber floor that looks great and is free from any nails or visible fixings, while providing excellent sound dampening qualities both from within the room and from above.

The **Sika® Acoubond System** is part of the full range of flooring products available to meet your building requirements.



Sika® Acoubond System

▶ Sirromet Wines



The Sirromet Vineyard

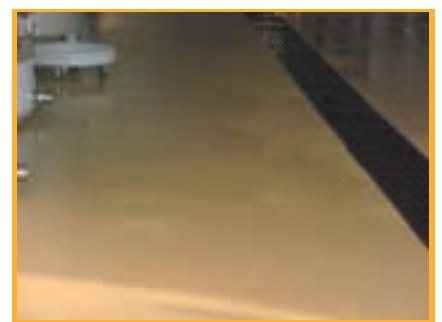
Sirromet Wines at Mount Cotton in Queensland, required a new floor system for their production area. The old floor had gradually degraded due to grape and wine spills, as well as wear and tear over time.

The vineyard required a system that would provide a high mechanical resistance, as well as good chemical resistance. The flooring applicators Multiblast were contracted to place the new floor system that comprised of:

Sikafloor®-156 - 2-part epoxy resin prime coat

Sikafloor®-261 - a 3-part self-leveling epoxy floor surface.

The final surface was left with an anti-slip finish, broadcasting quartz sand into the **Sikafloor®-261**. As a result, the vineyard was left with a durable surface finish on the floor, as well as a system that satisfies the general day to day requirements.



The finished Sikafloor-261®

▶ Sika Multiseal®

If you need to seal cracks or joints on roofs, gutters, walls or balconies to ensure they are waterproof, use **Sika Multiseal®**. **Sika Multiseal®** is a self adhesive tape that is easy to use, resistant to UV and other atmospheric agents, can be painted and is highly puncture proof.

The excellent adhesion to concrete, stone, mortar, wood, glass, zinc and aluminum with **Sika Multiseal®**, makes it suitable for most building surfaces ensuring a fast and easy repair using a few simple tools. As there is no heating or adhesives to be used, it is designed to be used by the non-professional to create a watertight seal.

Just unroll, cut and stick to say goodbye to leaks.



Sikafloor-Diamondhard: Concrete Surface Hardener and Sealer



Sikafloor® Diamondhard is an excellent surface hardener for factories and warehouses

Sika is pleased to announce the release of a high performance one component surface hardener and concrete sealer that can act as a water barrier in up to 2 hours. The material is based on silicate polymers,

which reacts chemically with the calcium hydroxide in the concrete to produce a durable, abrasion resistant,

low sheen, hardened finish.

A number of concrete floors such as warehouse floors, commercial floors, manufacturing facilities, garages, basements, interior and exterior substrates require a sealer that reacts quickly as well as creating a durable, hardened finish. The advantages of **Sikafloor®-Diamondhard** include its' ability to be applied to fresh, new and existing concrete, fast penetration and reaction time, low sheen, and improved chemical and abrasion resistance to meet your needs.

For further details on **Sikafloor®-Diamondhard** contact your local **Sika** representative.

▶ Sika® Tite-RC

As part of the **Sika® Tite** liquid membrane range, **Sika® Tite-RC** is a 2 part water based material that provides a seamless seal over building substrates and surfaces before tiling or topping. **Sika® Tite-RC** is designed to cure quickly, as well as providing a durable waterproof membrane.

Sika® Tite-RC can be used in commercial and residential applications to provide a waterproof barrier that withstands wet and moist environments, including areas that are continuously immersed. These areas include: wet areas, balconies, decks, bathrooms, shower recesses and laundries. The liquid membrane is suitable to be applied over concrete, render, mortar, masonry, and many other building materials.

For further information on **Sika® Tite-RC**, contact your local **Sika** Technical Representative.



Sika® Tite-RC can be used under tiles for large areas

▶ SikaBond®-T2

Sika® SikaBond®-T2

The real multipurpose, High-strength, elastic Adhesive

For very high loads!

- Powerful initial grab in all positions, also overhead
- For heavy duty uses
- Inside and outside use
- Water resistant
- Vibration and shock resistant
- Non contraction
- Avoids corrosion when bonding of different metals

The SikaBond® -T2

SikaBond®-T2 is a high performance, one-component polyurethane adhesive developed as a result of long term experience gained by Sika as a global leader for sealing and elastic bonding in construction and industrial applications.

Due to its elastic behavior, SikaBond®-T2 has many great characteristics and benefits, it allows different building materials such as concrete, ceramic, wood, plastic and metal to be joined, and it also gives an even stress distribution across the substrate which reduces noise and shock.

SikaBond®-T2 can be used both for inside and outside applications. Some of its uses include bonding of window sills, thresholds, stair steps, skirting boards, base boards, crash protection, covering boards, sign boards, and prefabricated elements.

SikaBond®-T2 is ideal for heavy duty use due to its powerful initial grab. If you need to use SikaBond®-T2 for overhead surfaces, no problem! SikaBond®-T2 can be used in all positions, including overhead which saves a lot of time and money. SikaBond®-T2 replaces the need for screws, nails, welding etc again saving a lot of time and money.

These are just some of SikaBond®-T2's unique characteristics. For further information contact your local Sika Representative or log on to our website www.sika.com.au.

SikaGrout®-212FS

SikaGrout®-212FS is a ready mixed, high quality grout that sets rapidly, and gains high early strengths.

The cementitious grout achieves an initial set, at 20°C, after 1 hour, and a final set after 1 hour and 50 minutes. At 3 hours, the grout can achieve in excess of 1.5 MPa.

As a result, SikaGrout®-212FS can be used in a wide range of applications where rapid set is required. This grouting can be required to take place under machine plates, for bearing pads, in cavities, gaps and recesses, and for anchor bolts.

SikaGrout®-212FS is part of a range of Sika speciality cementitious grouts, designed to meet the demands of many sensitive areas on a typical job site.



SikaGrout® -212FS in action

► Panel Bonding in Darwin



*Darwin Health House
Alucobond Bonding*

The Health House in Mitchell Street, Darwin has just been re-cladded and a verandah installed using Alucobond cladding. Sunbuild Pty Ltd is a locally owned and operated building company, who were contracted to install the Alucobond to the building to improve the cooling costs and reduce the heat absorption of the building.

In particular, Sunbuild was instrumental in recommending and installing the Alucobond panels on the Verandah with **Sika's Adhesive System** as the only fixing means. The process involved preparing the Alucobond panels and metal frames by abrading and cleaning the surface and then priming the

materials with **Sika® Primer 206G+P**. When all parts were prepared, **Sikaflex® 252** was applied and the parts were put into place. **Sikaflex® 252** is a high strength, one component polyurethane designed for bonding heavy parts without the need for mechanical fastenings.



Applying Sikaflex® 252

► The Edments Building

Despite being the driest capital city in Australia, even buildings in Adelaide need waterproofing! The Edments



The existing bituminous membrane

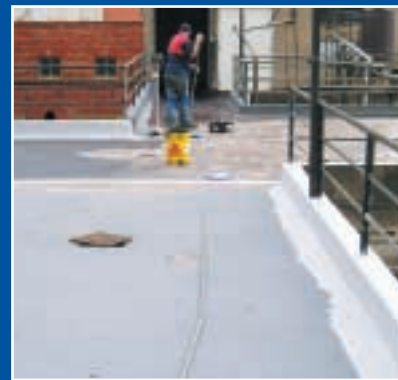
Building in the Adelaide CBD was in urgent need of a watertight system on the roof to ensure that it stayed dry on the inside.

D & V Waterproofing was asked to apply a liquid acrylic membrane over the existing bitumen based membrane to meet the criteria. **Sika® Tite-WB**

was chosen as the liquid membrane for this project, but

to ensure it met the durability conditions, the substrate was first primed using the bituminous liquid acrylic membrane **Sika® Tite-BE**, and was reinforced using the polyester mesh **Sika Fabric**. The added bonus with the **Sika® Tite-WB** is it's ability to improve it's performance when exposed to UV light.

The liquid acrylic membrane was easily applied by the applicators, and has left a durable waterproof coating in place.



The application of Sika® Tite-WB

► Trespa Panel Bonding



Trespa Panels for the home

Panel Bonding with **Sikaflex® Adhesives** is becoming an excellent alternative to traditional mechanical fastenings. It allows designers and architects to provide a smooth, clean finish, without any visually obvious fasteners protruding

from the application. The applications shown involve bonding Trespa Panels to the framework. The product

we recommend is **Sikaflex® 252**, in combination with **Sika® Activator** and **Sika® Primer 206G+P**.

Trespa has a range of various panel designs available. Archiclad supplied the Trespa Panels used in these applications and the associated **Sika** products. For further information on these applications you can contact Archiclad on 03 9460 1144.



*David Jones Trespa
wood panel bonding*

► The Pines



Before (left) and after (right) application of Sikafloor®-400N

Sikafloor-400N Elastic, the flexible, UV resistant, polyurethane membrane, was the ideal choice of material for this project, particularly with the exposure of the coating to the sun. D & V Waterproofing applied the material, ensuring that correct surface preparation took place to ensure maximum adhesion.

The stadium now has an excellent waterproof coating that is also aesthetically pleasing, and capable of handling the many noisy spectators expected in the future!

The Pines Hockey Stadium in Adelaide has been used extensively for hockey tournaments in South Australia for some time. The grandstand seating area and the surrounding walkways were in need of some urgent waterproofing, due to the failure of the existing coating.



The freshly coated Grandstand at The Pines

► Lupara Motor Homes

Lupara Motor Homes began building motor homes two years ago in Devonport, Tasmania with the idea of revolutionizing the motor home market. The revolutionary type of motor home produced by Lupara allows the owner to detach the home unit from the vehicle when it is not required. This allows the owner the freedom to use the vehicle for other uses when the home unit is not required.



Lupara Motor Home

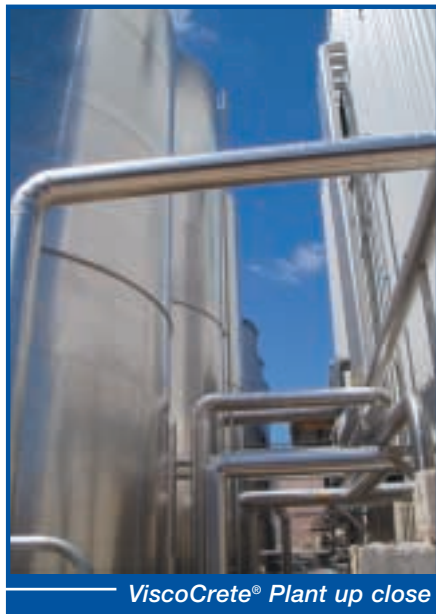
Lupara make use of a range of **Sikaflex®** products for all their bonding and sealing applications. In particular, they use **Sikaflex® 295UV**, **Sikaflex® 221** and **Sikaflex® 252**. Lupara also use **Sikagard® 552 Black Stone Chip Protection** on the underbody of their motor homes.



Bonding components with Sikaflex®

► Sika's New ViscoCrete® Polymer Reactor Starts Up

In the last **Sika at Work** we reported the finalisation of the construction of Australia's only dedicated polycarboxylate reactor for producing admixtures such as our ViscoCrete® Technology. We now have the great pleasure in announcing that the plant has now been commissioned successfully, and is producing product for both the domestic and export markets.



ViscoCrete® Plant up close



Hanson Victoria using ViscoCrete® technology

concrete admixture customers to higher prices through exchange rate fluctuations, and supply fears for critical projects as those countries would obviously prioritise their local customers first. With local production, Sika customers will now be sheltered from these effects and begin to benefit even further as new developments roll through our state of the art facilities in Sydney.

The construction and commissioning of this plant continues to demonstrate Sika's global and local commitment to be the world's most technically advanced and largest admixture producer.

Having this technology available in Australia will strongly advantage Sika Australia's admixture customers, with assured deliveries of leading edge admixtures and the lowest possible prices. Prior to the construction of this reactor, the Australian market was reliant on the importation of polymers from Northern Europe, Japan, Korea or USA. This subjected Australian



ViscoCrete® at work

► Tsunami Appeal Donation

With operations throughout Asia including the affected areas, Sika Asia Pacific has announced a combined donation to the rebuilding efforts of CHF 200,000 or approximately 220,000 Australian dollars. Sika Australia's contribution to the donation was \$30,000.



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