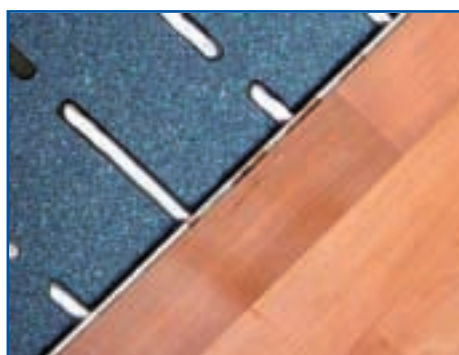


The Sika AcouBond® System: Silence is Golden

The growing demand for timber flooring in the Australian home has increased significantly. Statistically, in more than 1 in 5 houses built today, timber flooring will be the preferred floor covering, compared to other floor coverings such as carpet or tiles. Added to this, timber flooring is as popular in the office and in industrial buildings as it is in residential properties.



The Sika AcouBond® System

Timber flooring has become a major part of today's floor covering systems due to its aesthetical appearance as well as its longevity. As most people would prefer quiet and peaceful living, noise transmission is unacceptable. Timber flooring needs to address noise transmission issues to be considered a suitable covering system in high-density residential apartments.



Testing the Sika AcouBond® System

Sika Australia has taken the first steps to addressing the noise issue by introducing the Sika AcouBond® System.

The Sika AcouBond® System is a sound insulating system for timber flooring. It consists of the one component timber bonding adhesive, SikaBond® T53, and a sound dampening mat, SikaLayer®-05 foam.

The advantages of using the Sika AcouBond® System are:

- ▲ Footfall sound can be reduced by up to 18dB
- ▲ Excellent sound dampening qualities
- ▲ Can be walked on during installation
- ▲ Easy and safe to install
- ▲ Excellent adhesion to most timbers.



Finished timber floors

Noise/sound is measured in decibels (dB) and a reduction of 10dB means halving the noise level.

A recent independent study completed in Western Australia by Gabriels Environmental Design compared the different timber floor dampening systems offered in the Australian market. The testing showed that the Sika AcouBond® System achieved a noise reduction of 16dB versus the standard timber flooring adhesive. The Sika AcouBond® System proved to be the best solution for timber flooring as compared to other sound dampening systems used in the marketplace. For a copy of the independent test report please contact Sika Australia Pty Ltd at marketing@sika.com.au



Finished timber floors

The Sika AcouBond® System, compliments the SikaBond®-T55 adhesive used for floating floor systems, and the Sika® Primer MB, used on porous concrete substrates as a moisture barrier. This means Sika offers a comprehensive range of timber flooring application products and systems.

Sika at Work

► Bombardier Transport

Bombardier Transportation is currently manufacturing the V'Locity Train in their Dandenong facility. The V'Locity train contract, being manufactured for V'Line, involves 38 trains to be constructed with the first deliveries to take place in 2005.

Among one of the more interesting Sika® applications on the V'Locity Train is the bonding of the nose cone to the train structure. The nose cone is made from Fibreglass and weighs approximately 280kg. It is bonded to the Stainless Steel Structure using Sika®

252. The Stainless Steel and the Fibreglass is prepared by abrading the bond area, activating the surface with Sika® Activator and priming with

Sika® Primer 206G+P.

The Nose Cone is located to the frame using two large pins, which also hold the part in place while the Sika® 252 cures. Sika® 252 is commonly used in applications where a high strength adhesive is required.

Other Sika® applications at Bombardier include Side Window and Windscreen Bonding, Floor and Panel Bonding, as well as Sealing Applications.



Coldroom Flooring with PurCem

Sikafloor®-PurCem, the new polyurethane floor screed, was recently used for a cold room application at the Streets Ice Cream facility at Minto, located in the outer south western suburbs of Sydney.

The facility required a new freezer, which in turn, required a durable floor finish that could be applied under cold room conditions. The temperature was a constant 5°C throughout the application procedure.

Clifford Flooring were contracted by the project manager for the site, Austrak, to remove any high spots left in the concrete following the construction of the freezer, and re-leveling using the Sikafloor®-20 PurCem, a water dispersed polyurethane based floor screed. The material was put down at 6mm thickness and was ideal for application in such cold conditions, leaving a durable finish.



► Orange City Council STP

The Orange City Council decided to repair the main digester tank located at the Orange Sewage Treatment Plant (STP). After several discussions with the STP management and the contractor (Jeff Hort Engineering) Sika products were specified for the repair and grouting that was required in the digester tank.

To begin with the roof and walls of the tank were grit blasted, and the steel was cleaned and coated using the SikaTop®-110 EpoCem. The substrate was then primed using Sikadur®-32 epoxy adhesive, and it was then lined with a 6mm thick bed of Sikadur®-41. The sides and walls of the tank were then protected using Sikagard®-720 EpoCem, before a final application of three coats of Sikagard®-62 protective coating.

The openings for the pipes and valves were then grouted using Sikadur®-42 in a very unique approach. The grouting works were completed in winter and the

temperature was around 3°C. The openings in the tank were one metre deep and 500mm in diameter.

Sikadur®-42 was used in stages with a 30 minute time gap in order to remove the thermal heat generated in the epoxy grout.

Sikadur®-51, the flexible epoxy sealant was then applied around the openings of the pipes and valves in order to accommodate any movement due to vibration and provide water tightness around the openings in the tank.



► Darlot Shotcrete



— In the Darlot mine

Earlier this year Jetcrete Australia commenced in cycle shotcreting at the Darlot Gold Mine for Barrick Gold of Australia. The mine is situated about 300km north of Kalgoorlie in Western Australia, and the work is being carried out every day to achieve the requirements set out by the client.

Nominal thickness for the shotcrete is between 50mm and 75mm depending on the area being sprayed. The areas sprayed are predominantly development sections of the mine, with minor works such as rehabilitation to previously meshed areas also being carried out.

It is common knowledge in the shotcrete and mining industry that Shotcrete is around 2.5% more costly than conventional bolt and mesh. However, with the correct admixtures such as Sika accelerator, **Sigunit®-L50 AF**, Jetcrete can re-enter a heading in 1.5 hours and significantly increase both development metres and ore tonnes. This is currently happening in the case of the Darlot Gold Mine at present. Jetcrete acknowledge that the client on site is totally convinced that well managed processes such as in-cycle Shotcrete, using Sika's shotcrete admixtures are the way of the future.



— Spraying in-cycle Shotcrete

► Southern Cross Trailers

Southern Cross Trailers were established in 1976 and since then have specialised in Refrigerated Vans, Curtain Siders, and Flat Tops. Based in Dry Creek, South Australia they are yet another company which has been able to take advantage of the **SikaFast®** range of adhesives. The **SikaFast®** range of adhesives are high



— Interior of the Southern Cross van

strength, fast curing products designed for quick assembly and fast production times.

Southern Cross Trailers have used the **SikaFast® 5221** to bond

aluminium floor planks together in their refrigerated vans.

Traditionally, this application involved welding each plank together,

however, the labour time has now been reduced using the **SikaFast® Adhesives**. There are approximately 13 planks per van each secured to each other with **SikaFast® 5221**. **SikaFast® 5221** is a nine-minute open time adhesive, which achieves 80% of its strength in 30 minutes. The final strength of **SikaFast® 5221** is 10MPa.

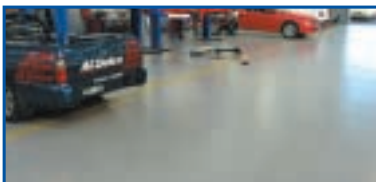


— Applying SikaFast® inside the van

► Ron Poyser Motors

Sika Australia has a long history with **Sikafloor®** systems being used in automotive workshops. This experience led to the specification of a **Sikafloor®** system for a maintenance program at Ron Poyser Motors in Bendigo, Victoria.

Able Industrial Flooring was selected to apply the system, with a wealth of experience in these types of projects. The **Sikafloor®-261T**, a high build coating, was



— The Ron Poyser Motors workshop

the choice of epoxy flooring system, for application in the truck and car workshops, as well as the Mercedes dealership room at the site.

An important criterion of the car workshop environment is for the floor system to be

impervious, easy to clean and slip resistant. Aesthetics



— The finished Sikafloor®-261T floor

for client viewing is now also very important for automotive dealers. The **Sikafloor® 261T** system has delivered all of these requirements to the client for this important project!

▶ SikaColl-4600AU



Applying SikaColl

SikaColl-4600AU is a sprayable contact adhesive formulated to meet the varied laminating applications found in all types of industries. It is characterised by fast drying times, high green strength and a strong heat and water resistant bond. SikaColl-4600AU

has a very broad adhesion range for all materials used in the laminating trade. Common substrates include metals, carpets, PVC floor linings, fabrics, timber and rubber. SikaColl-4600AU can be sprayed, brushed or roller applied to the substrates.



Finished bus treated with SikaColl

Sika BlackSeal®

Sika BlackSeal®-1 is a ready to use bituminous joint sealer for roofing. Unlike many sealants it can be in contact with bituminous sheets and emulsions, and it can even be applied over non-porous substrates when it is raining.

Due to the excellent adhesion to mortar, concrete, stone, metals, wood and bituminous surfaces, all without priming, Sika BlackSeal®-1 is ideal for repairing bituminous membranes, sealing around pipes and skylights, and sealing cracks in planter boxes.

The good resistance to both temperature and weathering ensure excellent quality over a long period of time. Sika BlackSeal®-1 is available through D.I.Y stores or direct from your local Sika office.

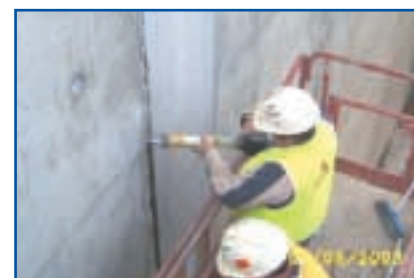


▶ Sikaflex®-Tank

Sikaflex®-Tank is a polyurethane based joint sealant with excellent chemical resistance. It is non-corrosive, has a high tear resistance, excellent mechanical strength and movement capabilities.

Areas of application:

- ▲ Floor and perimeter joints in areas exposed to chemicals
- ▲ Facilities for storage, filling and handling of contaminated water and other liquids in filling stations, handling areas/yards, storage tanks and bunds, barrel stores
- ▲ Floor joints in petrol stations
- ▲ Floor and connection joints (workshops, car parks etc)
- ▲ Precast panel in STP (Sewage Treatment Plant)
- ▲ Driveways
- ▲ Any other joint area that may have direct contact with chemicals.



Applying Sikaflex®-Tank



Sikaflex®-Tank can be used to fill joints in tanks

▶ Polyurethane Coatings



Sikafloor®-400N Elastic on commercial building

Sika is introducing two polyurethane coatings: **Sikafloor®-400N Elastic**, is a one-component, UV resistant, highly elastic, moisture curing polyurethane coating for balconies, roofs, decks and terraces. Having superb mechanical and thermal resistant properties with

good crack bridging ability, **Sikafloor®-400N Elastic** will provide a non-yellowing coating that allows constant exposure to UV-light.

It can be used as a flexible coating and as a waterproof membrane. These characteristics make the polyurethane based material suitable in areas subjected to pedestrian traffic, light wheeled transport,

and indoor and outdoor furniture.

To compliment the **Sikafloor®-400N Elastic** system, Sika has also released a one-component, moisture curing polyurethane membrane **Sikalastic®-450**. This system is ideal for residential and light commercial applications, where UV resistance is not required. The material exhibits excellent elasticity, and can be applied by brush or roller.

So, whether the application be residential or commercial, Sika's polyurethane coatings can be applied easily and efficiently. For further information, on Sika's flexible polyurethane coating systems, please contact your local Sika office.



Sikafloor®-400N Elastic at 'home'

Sikafloor®-Level 25

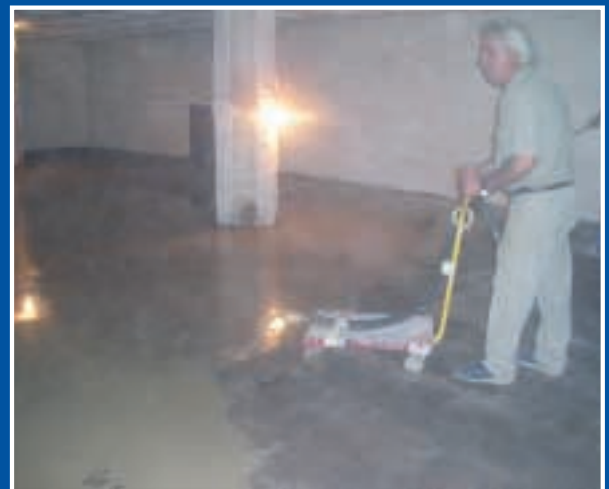
Sikafloor®-Level 25 is a cementitious levelling screed that can be applied up to 25mm in depth. The material is a self levelling compound that can be pumped or poured into place, and then finished off using a squeegee, a spiked roller or a trowel.

The **Sikafloor®-Level 25** offers a number of advantages that include:

- ▲ Self smoothing and levelling properties
- ▲ Sub floor cementitious screed for use as an underlayment for other floor finishes



Mixing Sikafloor®-Level 25



Applying Sikafloor®-Level 25

- ▲ Can be overcoated with **Sikafloor®** epoxy systems
- ▲ Rapid drying and quick turn-around times
- ▲ Can be walked on after 4 hours at 20°C.

Using the **SikaSet Primer** to ensure good adhesion is achieved, the **Sikafloor®-Level 25** is ideal for rapid, flat and economic substrates prior to the application of the required floor finish. The material can achieve 50 MPa after 28 days, and can be feathered edged with the aid of rubbing stones.

► Sika helps 'make a stand'

The massive new Northern Stand Re-Development project for the Melbourne Cricket Ground is still under construction, and nearing completion. Daryl Jackson Architects, Grocon constructions and the Melbourne Cricket Club expressed requirements for epoxy floor surfaces in many sections of the development including areas for food preparation, waste storage, public walkways and platform seating areas.

For the seating areas in particular a solution was required to address problems associated with cleaning and staining which creates an unsightly appearance. The texture had to meet R10 wet area slip co-efficient as per the Australian Standards. As such, **Sikafloor®-2530** was selected in a stone grey colour with a very fine texture in the final coat. Placed by Surface Management Group **Sikafloor®-2530** is a water based epoxy coating that provides protection against ingress of contaminants whilst providing a uniformed grey appearance.



Sika helps 'make a stand' at the MCG

'Coat Hanger' Repairs



The Sydney Harbour Bridge

The Department of Commerce, the Department of Heritage and the RTA required a specification for concrete repair. Not just for any old structure, but for the Sydney Harbour Bridge! Cracks and spalled sections of the concrete pillars on the southern side, required repair, whilst a sealing system for any damp sections was also necessary. The clients enlisted

Delahunti Constructions as the contractors.

The specification on the first repair section involved using **SikaTop®-110 EpoCem**, a bonding bridge and protective coating for steel



Before the repair

reinforcement, that can be used on damp concrete. This allowed the **Sika MonoTop®-615HB** high build



After the repair

repair mortar to be applied, without the adverse affect of moisture. Following this, **Sikagard®-720 EpoCem**, a temporary moisture barrier, was applied as a fairing coat. Another challenge of the repair was matching the colour of the existing render on site. By using various pigments and additives to the repair materials, trials were conducted on site and the colour was matched. Thus the Sydney icon was left looking like it was built only yesterday!

► Strengthening Campbelltown Hospital

Recently Management at Campbelltown Hospital, in Sydney's west, made the decision to upgrade the facilities at the institution.

The appointed engineers, Taylor Thomson Whitting identified that the weight from the shelves and books in the library would place the concrete floors under added stress. To counter this, they specified **Sika® CarboDur S812** carbon fibre strips to strengthen and reinforce the concrete surface.

The builders, A.W.Edward, selected Remedial Building Services to perform the application of the **Sika®**

CarboDur. The contractor prepared the surface and applied the carbon strips, using the **Sikadur®-30** adhesive, as per specification for this stage of the rectification operations.

Sika® CarboDur S812 being prepared



Karls “Good Stuff” Bakery

The new factory section of Karls Bakery, located near the Gold Coast in Queensland, required a heavy duty, durable, and slip resistant flooring system that could withstand chemical attack as well as displaying high mechanical strengths to ensure smooth operation. More importantly the floor had to comply with regulatory (AQIS) standards.

The client decided to employ a Sikafloor® system, and contracted Pratt Applicators, to ensure the floor was placed efficiently and effectively. Initially, Sikafloor®-94 epoxy primer was applied on the concrete slab (over an area of 5000 m²). The self-levelling epoxy coating, Sikafloor®-261SL, was then applied, followed by a top coat of Sikafloor®-261T to produce a decorative beige finish, as well as an abrasion resistant and durable floor to combat any liquid spills or waste that may be found in the baking industry.



The Sikafloor®-261 being applied

Carlton United Brewery



SikaTite-BE covered by cool room panels

Carlton United Brewery in Abbotsford, Melbourne, required the block walls of one of their cold rooms to be waterproofed. The existing bitumen coating was peeling away, and the client required a new coating to prevent the ingress of moisture through water vapour transmission. The problem confronted by the specifier, Beca Simons, was the constant temperature of 0°C, and the necessary curing requirement of 24 hours, to allow a short down-time.

Sika Tite-BE, the acrylic based bitumen emulsion, was chosen as the waterproof coating for the block walls. To ensure that the material met the strict requirements, a specially designed filler was added, so that the material could cure in the specified time, but also retain a degree of flexibility. The specialist contractor, Action Blast, sprayed the material into place and cool room panelling then covered the waterproof coating.

► Outback Sleepers Pty Ltd

Outback Sleepers of Lonsdale in South Australia have built a solid reputation for supplying a range of high quality concrete sleepers that are not only visually attractive but are also considered to be one of the most durable products on the market today.



The panels before application

Sika was asked to supply an economical answer to solve the increased demand problem without compromising the existing high quality of the product and avoiding any increased cost of having to install expensive steam curing equipment.

Sika ViscoCrete 20HE a high performance high range water reducer designed specifically for precasting operations. **Sika ViscoCrete 20HE** provides very high workability with exceptional high early strength and

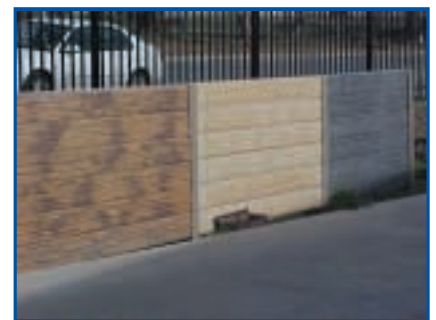
excellent set characteristics.

These characteristics are ideal to give Precasters the opportunity to either reduce cement dramatically (in some cases up

to 20 per cent), stop steaming, or provide a low cost alternative to increasing accelerators and cement requirements to get through problems, such as Outback Sleepers problems of increased demand and difficult concreting situations. This economical solution helps provide high de-moulding strengths for the concrete sleepers within 18-20 hours.

This task normally would be done using low workability concrete (80 mm) with a low water cement ratio, high dose rates of accelerators and in many cases steam.

Outback Sleepers can now continue to produce a high quality product at maximum output despite the winter cold weather conditions in Southern Adelaide.



The panels in position

► Sanctuary Cove Boat Show

Sika attended its fourth Sanctuary Cove Boat show on the 20th to the 23rd May. The show attracted more than 40,000 visitors who were keen to see the wide range of leisure craft and associated products and trades on display.

Sika's range of **Sikaflex® Marine Products** are widely accepted in the Marine Industry due to their ability to withstand the harsh marine environment. Suitable for above and below the waterline, there is a Sika product for any boating application.



The Sanctuary Boat Show and the Sika Stand

► Sika Retail Stands



A limited number of new purpose built and designed retail display stands are available to distributors of Sika products. Retail, D.I.Y and hardware stores looking to expand their existing product range, or attempting to highlight the extensive range of Sika products currently being sold in their stores, would benefit greatly from these stands.

The new stands have been designed to not only hold the standard cartridges of **Sikaflex®**, **SikaBond®** and **SikaSii®**, but also to accommodate the **Sika Boom®** spray cans in two sizes, as well as the timber flooring range of **SikaBond®-T55 (J)** sausages (both 2kg and 600ml) and 16kg pails.

This versatility along with ample allocated areas to hold literature and brochures, added with the distinctive Sika branding, make the stand an excellent 'silent salesman'.

The Sika Retail Stand

► Sikafloor® at Work



Sika is committed to making specifications easier, and the large array of product and system choices more understandable. This is further emphasised with

the introduction of a number of specification guides released this year in the industrial and architectural flooring fields.

The **Sikafloor® Architectural Finishes** brochure is aimed at making flooring specification easier for architects. This is

complimented by the **Sikafloor® Colour Chart**, to choose the right colour for the particular system. To tie all this up, the **Sikafloor® At Work** is now released every two months to inform contractors, architects and specifiers, of any updates and the latest in market trends.

If you wish to receive any of these documents, please contact your local Sika office!

Correction

Echuca Waste Water Plant

In the March 2004 edition of Sika At Work, it was incorrectly stated that the Echuca Waste Water Plant required concrete repair work. The work was in fact new construction to increase the capacity of the plant, and Sika's materials were used as part of the project. Sika apologises to specifier Earth Tech for any embarrassment caused by the article.



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For further information on the enclosed topics, or any other product contact your local Sika Office.