



## Worldwide Projects



## Architectural Glazing

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- Aberdeen Airport Control Tower
- Al Faisaliah Tower
- Al Salam Avenue Tower
- Alejandro Otero Museum
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- Cross Towers
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### Glass Panels / Decorative Glass

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### Automotive Glass

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# ABC Retail Department Store and Shopping Mall

Dbayeh, Lebanon

On-site applications in 2000 and 2015



Since its inception in 1936, ABC Retail has been right at the forefront of the retail sector in Lebanon, continually pioneering and taking the industry and the customer experience to greater heights. In 1979, ABC opened what it claimed to be the first true modern department store in Dbayeh, the first of its type in the whole of the Middle East.

The store's location however was in a highly polluted area, being adjacent to a major highway and sea-facing, so harsh chemicals were needed to clean the glass. Despite this, the glass would quickly become dirty again so a long-term solution was sought.

Official Marketing Partner in the country, ClearShield Glass Technology Lebanon, had the answer with the ClearShield System® in 2000. First, all existing contaminants were removed with specialist Ritec products. Next, the glass was protected with liquid ClearShield® treatment, upgrading them with 'non-stick', easy-clean performance. This made the treated glass look pristine long after curing as well as saving time and money when it came to maintenance.

Other areas, such as main the glass façade of a newer mall, were later treated with the ClearShield System® too in 2015.



# Aberdeen Airport Control Tower

Aberdeen, UK

On-site application in 2019



A Ritec on-site team travelled to Aberdeen Airport to renovate and protect the glass on the control tower with the unique ClearShield Eco-System®. The result was glass looking as good as new, and having award-winning durable ClearShield® ‘non-stick’, easy-clean protection helped to maintain the clear view for longer. This resulted in air traffic controllers benefiting from optimal clarity while maintenance units require less time to clean the glass.

For over 30 years, Ritec have been specified by NATS (National Air Traffic Services, provider of air traffic services to 14 UK airports including Aberdeen) to

renovate and protect several control towers throughout the UK. This is testimony to ClearShield’s excellent durability and performance in these kind of conditions where it resists unburnt hydrocarbons, pollution and staining that can cling onto ordinary unprotected glass, potentially compromising the safety of aircraft movements if controllers have difficulty seeing out of dirty glass.



# Al Faisaliah Tower

Riyadh, Saudi Arabia

On-site application in 2012



This pyramid-shaped commercial skyscraper and mixed-use complex is named after King Faisal bin Abdulaziz. Completed in 2000, it is notable for being the first skyscraper built in Saudi Arabia.

ClearShield Glass Technology (CSGT) Lebanon, an Official Ritec Marketing Partner, were invited to carry out a long-term demonstration of ClearShield® 'non-stick', easy-clean glass technology in 2007. Five years later, with the protection still working as expected (and testament to its durability claims), CSGT were given the go-ahead to treat glass located in the Tower's main entrance and bridge.

With the work complete, ClearShield® treatment will resist all kinds of contamination including weathering, moisture, dirt and pollution. The reduced build-up of these contaminants means cleaning is made a lot easier, saving time and money, and the glass looks pristine for longer. The client was very happy with the results.





# Al Salam Avenue Tower

Abu Dhabi, United Arab Emirates

On-site application in 2012



The glass façade of this 26 storey-building was suffering from the problem of concrete slurry run-off that proved impossible to remove using conventional means.

Ritec International came to the rescue. An On-Site Team travelled to Abu Dhabi to carry out remedial treatment. The ClearShield System® was the ideal cure, restoring the glass to its original 'as-new' appearance using the company's specialist renovation products. After this phase, the application of Ritec's proven ClearShield® easy-clean surface protection ensured an effective preventative measure, providing

an invisible 'non-stick' barrier to stop run-off and dirt from sticking to the glass in the future.



# Alejandro Otero Museum

Caracas, Venezuela

On-site application in 2024



The Alejandro Otero Museum is a cultural centre that includes a contemporary art museum, a plaza, gardens and an amphitheatre. Inaugurated in 1990, the Museum is dedicated to the memory of Venezuela's prominent artist and sculptor Alejandro Otero, housing his personal archive consisting of written documents and photographic material.

Sadly, the Museum's reflective laminated glass façade had not been properly maintained for many years. As a result, over time, a combination of building run-off, moisture and weathering had created a cocktail of harsh contamination that not only made the glass

very difficult to clean effectively, it also ruined the building's appearance. The museum's management needed a cost-effective solution and eventually came across the ClearShield Eco-System®.

Licensed ClearShield® applicators in Venezuela, Glass Maniac, were contracted to renovate and protect the Museum's façade. A total of approximately 250m<sup>2</sup> (2,690 square feet) of glass was treated. The museum's management was extremely impressed by the results of Glass Maniac's work as well as the performance of the ClearShield Eco-System®.





# Anytime Fitness Gym

Choubey Colony, India

Factory application in 2020



Roshnak Surface Care Systems is the official Ritec Marketing Partner in India and is fully-trained to apply the unique ClearShield Eco-System® for the renovation, 'non-stick' protection and maintenance of glass. The System was used to upgrade ordinary glass to superior easy-clean ClearShield Eco-Glass® prior to installation at this gym. Roshnak carried out the factory application to 150m<sup>2</sup> (1,615 ft<sup>2</sup>) of façade glass as well as internal glass, including mirrors.

When utilised for internal glass, ClearShield® resists fingermarks and general dirt for a pristine look that is easy to maintain. ClearShield® is also independently

proven to resist the adhesion of bacteria to promote a more hygienic environment, a very important consideration nowadays.

The gym's owner, Mr Yash Khatri, said: "The gym is at the top floor of the building and cleaning the façade is a menace that needed dealing with. We asked for ClearShield Glass and got it installed during construction so that it is protected from paint, silicone run-off, cement marks, etc. as well. I am also glad to see how pristine my shower glass and mirrors look. I recommend this easy-clean glass for any project with exterior or interior glass."



## B&Q Store

Great Yarmouth, UK

On-site application in 2005



The DIY (Do-It-Yourself) retail giant's new store located at the Pasteur Retail Park in Great Yarmouth is double-glazed throughout, with the application of ClearShield® converting what would have been high maintenance, unprotected glass into 'non-stick', easy-clean glass.

CAP Aluminium Systems, specialist contractors to the aluminium glazing and fenestration industry, was awarded the contract to supply and install Kawneer curtain walling and automatic sliding doors for this store. ClearShield® was then applied on-site to all 700m<sup>2</sup> (7,535 ft<sup>2</sup>) of glazing.

Ian Lord, CAP's Design & Business Development Director, said: "Applying ClearShield to glass ensures it keeps its pristine state, and that creates a better environment for shoppers as well as saving the retailer money as the glass needs to be cleaned less often. Everybody benefits."



# Bosque Real Country Club

Mexico City, Mexico

On-site application in 2019



Before



After

Bosque Real Country Club is a picturesque complex that includes 9- and 18-hole golf courses, shopping mall, hospital and many luxury villas and high-rise apartments. From 2005-09, Bosque Real was the venue for the annual MasterCard Classic tournament for professional female golfers on the LPGA Tour.

For such a prestigious location, a pristine appearance had to be maintained at all times. Unfortunately, keeping the glass looking like new was difficult: rain, pollution and dirt all combined to ruin the visibility and appearance of glass. Water from the sprinkler systems also landed on the glass, further adding to

the problem as over time, this left unsightly water marks. With glass cleaning becoming less and less effective, Transparencia en Servicios – Ritec's Marketing Partner in Mexico – stepped in to resolve the problem.

Transparencia en Servicios provided an on-site service to renovate, protect and maintain glass with Ritec's unique ClearShield Eco-System®, restoring the glass to an 'as-new' appearance and protecting it from future contamination.





# Citigroup Centre

Sydney, Australia

Factory application in 2000



The 243-metre (797 ft) high Citigroup Centre was built by Multiplex Constructions and was completed just a week before the Sydney 2000 Olympic Games. It was the country's 8th tallest building at the time and the second-tallest in the city when measured to its spire.

Ritec ClearShield® 'non-stick' easy-clean glass surface protection was specified prior to construction. This was factory-applied in Brisbane by G. James Glass and Aluminium while quality assurance was carried out by Hi-Tec, a local glass structure specialist.

ClearShield® application prior to installation proved to be a masterstroke as the rest of the façade was made of exfoliated granite and any rainwater run-off was removed with minimum effort during the construction clean-down, also carried out by Hi-Tec. This saved time and helped to reduce delays. Beyond 'day one', ClearShield® helps to save time during cleaning and the glass looks like new between cleaning cycles.



# Cross Towers

Amsterdam, Netherlands

Factory application in 2006



Cross Towers is a state-of-the-art 24-storey building designed by renowned architects Foster + Partners and opened in 2008. Situated at the gateway to the Vivaldi Park area of the Zuidas business district in southern Amsterdam, it is the Dutch headquarters of professional services giant Ernst & Young.

The 87m tall (285 ft) building utilises a series of environmentally progressive measures and is 10% more energy efficient than the national requirements. The blocks are staggered in plan to let in as much natural light as possible. The northern façade is fully glazed, while partial 30% glazing to the east, west and

south limits solar gain. Combined with ground water storage to further save on energy for cooling, the overall environmental strategy is highly efficient.

Adding to the green credentials is Ritec ClearShield® glass surface treatment, applied in the factory prior to installation. Thanks to its 'non-stick' easy-clean performance, this ensures all glazing retains its high photometric properties by resisting staining and weathering. Moreover, ClearShield® reduces the frequency of cleaning, helping to lower the carbon footprint as, for example, the need for window cleaning vehicles travelling to site is reduced.



# Den National Scene

Bergen, Norway

On-site application in 2020



Over the decades, this historic theatre has undergone major changes, extensions, renovation, restoration and technical modernisation of the stage. More recently, after a year and a half of renovation work on the roofing and façades, the glass was left in a poor state. Despite much time and effort, workers found it impossible to remove the concrete dust, pollution and tree sap that had all firmly bonded to the glass.

Rather than having to replace the glass at massive expense and inconvenience, they discovered OverflateXperten ('surface specialists'), who had the

perfect, proven solution. They could get the glass back to an 'as-new' appearance in little time and at a substantially lower cost.

OverflateXperten is Ritec's Marketing Partner in Norway. They renovated and protected glass surfaces with the ClearShield Eco-System® and the results delighted the client. The theatre's Operations Manager, Dagfinn Eldøy said: "The windows got very dirty during all the renovation work and were [for us] impossible to clean, but OverflateXperten got them completely clean. We can safely recommend OverflateXperten!"





# Edinburgh Airport Control Tower

Edinburgh, UK

On-site application in 2005



Edinburgh Airport is the UK's sixth busiest airport and its control tower was newly-built in 2005. At the time, the lead contractor was recommended by a control tower design and build specialist to specify award-winning Ritec ClearShield® durable 'non-stick' glass surface treatment. ClearShield® treatment is proven to resist dirt and moisture build-up, improving visibility for air traffic controllers as well as reducing maintenance needs.

Ritec's On-Site Application Team carried out the application of ClearShield® on the distinctive 57m / 187 ft high tower. Not only does glass protected with

ClearShield® look cleaner for longer and maximises clarity for air traffic controllers, cleaning time is also reduced.



# Grand Hotel Tijuana

Tijuana, Mexico

On-site application in 2015



This hotel, consisting of two towers, was looking forward to celebrate its forthcoming 30th anniversary. To mark the event, major works were carried out to ensure the appearance inside and out looked pristine. Although the interiors were restored to a high standard, the exterior glass looked opaque and tired. Various products were used to try and clean the glass but all were unsuccessful.

The hotel subsequently found out about the ClearShield Eco-System® and requested a test treatment. Ritec International's Marketing Partner in Mexico, Transparencia en Servicios, was invited to

provide a demonstration on what the System could do to renovate and protect the glass. Impressed with the results, the System was specified to both of the towers.

“The results are outstanding”, said the hotel’s Operations Manager, “It is our privilege to highly recommend their product and service, we are now proudly celebrating our 30th anniversary with beautiful shining buildings.”





# GuocoLand Development

Central Area, Singapore

Factory application in 2019



Photo: Waldyrious (CC BY-SA 4.0)

Ritec's ClearShield® 'non-stick', easy-clean glass surface treatment is well-known internationally and was specified for this major property development project in Singapore. Locally-based Parmis Pte Ltd, Ritec's Marketing Partner in the area and distributor of ClearShield® to many countries in Southeast Asia, was heavily involved in this project.

In 2019, leading property developer GuocoLand secured a mixed-use master development in the Beach Road district consisting of a 30-storey office tower, three concept retail clusters and two condominiums named Midtown Bay and Midtown

Modern. ClearShield® was selected as the low maintenance glass surface treatment by two different façade contractors, with approximately 39,000m<sup>2</sup> (420,000 ft<sup>2</sup>) of glass treated in the factory prior to installation.

Many buildings around the world have award-winning ClearShield® specified because of its proven low maintenance benefits. Additionally, ClearShield® has been awarded Singapore Green Building Council (SGBC) Green Mark certification so helps to promote more sustainable building practices.





# Heerhugowaard City Hall

Heerhugowaard, Netherlands

On-site application in 2018



Ritec Services, a subsidiary of Ritec International, are based in The Netherlands. They have decades of experience upgrading ordinary glass to 'non-stick', easy-clean ClearShield Eco-Glass®. In addition, they are experienced in applying the Ritecoat System®, developed for the renovation, 'non-stick' protection and maintenance of metals and paintwork. Both Systems were used at Heerhugowaard City Hall in the northwest of the country, bringing the treated surfaces back to new.

significantly helped the building to look pristine for longer, with reduced maintenance compared to ordinary glass.

In total, 450m<sup>2</sup> (4,850 ft<sup>2</sup>) of glass and 81m<sup>2</sup> (870 ft<sup>2</sup>) of stainless steel were renovated and protected. This



# Hugin (Raven's Nest) Treehouse

Kaupanger, Norway

On-site application in 2021



This unique and lavish treehouse, located by the shore of the Sognefjord (nicknamed the 'King of the Fjords'), is designed for guests to rent, and features outstanding levels of quality and comfort.

Hugin has taken more than 25,000 man hours to build over an 8-year period. About 8,000 man hours of this total alone was spent on its intricate artistic decoration (designing, carvings and milling). The result of this painstaking labour of love is an unforgettable and indulgent experience intimately close to nature with stunning views, described by some guests as 'A Norse luxury oasis'.

All glass surfaces were treated with ClearShield® 'non-stick', easy-clean surface treatment. This made it stain-resistant and easy to clean and keep clean in the future, maximising clarity, visibility and cleanliness.

Jardar Falck Husum, one of Hugin's builders, stated: "For our guests to be able to enjoy the views – the Fjord, forest and the stars – there was never any doubt. For glass protection, only ClearShield meets Hugin's highest standards and demands. Anything that lands on the treated glass, such as bird lime, tree sap and moisture, are all easy to clean off the glass, always leaving the perfect view."





# Integer Hong Kong Pavilion

Admiralty, Hong Kong

On-site application in 2001



The Pavilion is a research and educational project promoting better performance in housing by combining intelligent and environmental technologies with innovative construction techniques. It was designed with modular prefabricated elements that can be dismantled and with movable partitions and systems to allow flexibility. Low energy systems including passive systems, shading, insulation, wind turbines, photovoltaic panels, solar panels, central air conditioning with local control have been integrated, targeting 25% energy saving. Efficient water systems, including spray taps, dual flush toilets, rainwater harvesting and grey-water recycling targeted 50%

water saving. Other features such as improved air quality systems, waste separation refuse systems, planted sky gardens, atria, balconies, recyclable building materials including the Pavilion which can be recycled, or dismantled and re-erected in another location.

ClearShield® 'non-stick', easy-clean glass surface protection was specified as this too has green credentials. For example, because ClearShield® reduces frequency of cleaning, this means less water is required for this process. Approximately 250m<sup>2</sup> (2,700ft<sup>2</sup>) of glass was treated on-site.





# International Commerce Centre

Kowloon, Hong Kong

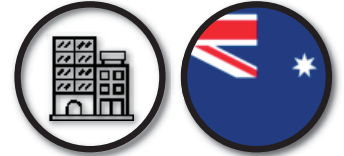
Factory application in 2010



The International Commerce Centre (ICC) is Hong Kong's tallest building with a height of 484 metres (1,588 ft). The tower was designed by the American architectural firm Kohn Pedersen Fox Associates (KPF) in association with local architectural and engineering practice Wong & Ouyang. As well as the Elements shopping mall on the lower floors and offices and restaurants, the building also incorporates The Ritz-Carlton, Hong Kong hotel and the Sky100 observation deck.

The ICC was completed in phases from 2007 to 2010. Factory-application of ClearShield® was

specified beforehand to help protect the glass during the construction. This meant any concrete splatter, cement dust, building run-off and other harsh contaminants were not able to bond to the glass thanks to its 'non-stick', easy-clean properties. Therefore ClearShield® helped to reduce potential costly delays during construction, providing a significantly lower-cost alternative to replacing the glass due to surface damage.



# International Towers Sydney

Sydney, Australia

Factory application in 2016



Photo: MDRX (CC BY-SA 4.0)

The International Towers Sydney (ITS) are three commercial skyscrapers in the Barangaroo area in central Sydney. The ITS development delivers 283,900m<sup>2</sup> (3.06 million ft<sup>2</sup>) of commercial office space, approximately 800 residential apartments, up to 90 retail outlets and a landmark international hotel, Crown Sydney.

The three office skyscrapers are individually known as International Tower 1, 2 and 3, and were designed by Rogers Stirk Harbour + Partners.

Hi-Tec is a fully-trained ClearShield® applicator for

architectural glazing in Australia. They factory-applied ClearShield® 'non-stick', easy-clean glass surface treatment to 115,000m<sup>2</sup> (1.24 million ft<sup>2</sup>) of glass, upgrading it to ClearShield Eco Glass®, prior to installation. This helped prevent surface damage during construction of the towers as well as ensure easy maintenance in the future.



# Jurys Inn Hotel Heathrow

London, UK

On-site application in 2004



When there was a problem with some contaminated glass during the hotel's construction, the main contractor sought the help of specialist window cleaners to clean the glass. However, after this was unsuccessful and with time running out, Ritec was invited to demonstrate the ClearShield System®. Not only was this successful, it was impressive. This resulted in Ritec being awarded a contract to renovate and protect most of the hotel's glass, not just those stained during construction.

In the end, almost 400 windows covering the hotel's seven stores, and an additional 200m<sup>2</sup> (2,150 ft<sup>2</sup>) of

curtain walling were treated in total. The main contractor was delighted with the result as ClearShield® negated the problem of costly glass replacement.





# Lev Ha'lr Quarter

Tel Aviv, Israel

Factory application in 2001



Lev Ha'lr (Hebrew for 'Heart of the City') is the downtown district of Tel Aviv and has become a hub for intellectuals, artists, and bohemians.

There are many landmarks and cultural attractions in this vibrant neighbourhood including theatres and museums. It is also home to a variety of restaurants, bars, and nightclubs, as well as shopping districts and parks, making it a popular destination for tourists and locals alike.

Situated within this neighbourhood is Lev Ha'lr Quarter, a prestigious apartment block consisting of

176 apartments. The architects and developers specified 'non-stick' ClearShield® protection to 7,000m<sup>2</sup> (75,300 ft<sup>2</sup>) of glass which was applied in the factory prior to installation. This ensures less dirt build-up and easier maintenance.



# Liikola Club House

Saint Petersburg, Russia

On-site application in 2022



Described as a 'unique eco-village in the forest, on the shore of a Lake Nakhimovskoye', Liikola Club is a cottage community located approximately 75km (47 miles) northwest of St Petersburg. The beautiful development in serene surroundings consists of almost 50 premium half-timbered homes with glass walls. These glass walls are made up of double-chamber double-glazed windows with low-emission, energy-saving, solar-protective tempered glass with increased light transmittance.

One of Liikola Club's property owners wanted their window and balustrade glass to perform even better

and so specified the ClearShield Eco-System® to make those surfaces 'non-stick' and easy to clean. Ritec International's official Marketing Partner in the region, Ritec Rusland, carried out the glass upgrade on-site.

In the end, almost 300m<sup>2</sup> (3,230ft<sup>2</sup>) of window glass and 80m<sup>2</sup> (860ft<sup>2</sup>) of balustrade glass were treated. Additionally, the balustrade's metal handrails were treated with the Ritecoat System® to make the metal surface 'non-stick' and easy clean too.



# Lloyd's Building

London, UK

On-site application in 1991



During routine inspections in the early 1990s, the owners of this distinctive building found that paint on the frame around the barrel vaulted atrium was shedding and plating onto the glass. This adhered to the surface, making effective cleaning extremely difficult.

Ritec were called in and successfully renovated and protected the atrium glass with the ClearShield System®, making the glass 'non-stick' and easy to clean. Any paint flakes landing on the protected glass became easier to wipe off and conventional cleaning methods were still sufficient to maintain the pristine

appearance of the glass. ClearShield® protection was so successful that other glass areas of the building were treated, including façade areas and glazing to the external wallclimber lifts.

The building's Facilities Manager said: "We are very impressed with the ClearShield System, it has been extremely beneficial to our facilities management operation and we intend to carry on with the after-care regime".





# London Heathrow Airport Control Tower

London, UK

On-site application in 1987



The UK's London Heathrow Airport is one of the world's busiest, a major hub of the aviation world.

Historically, the glass of the VCR (Visual Control Room) required daily cleaning to remove dirt in an attempt to maintain good visibility for air traffic controllers. This was however deemed as high maintenance and a better solution was sought.

In 1987, Ritec was called in to renovate and protect the glass on-site with the award-winning ClearShield System®, upgrading the glass to make it 'non-stick' and easier to clean. After treatment, ClearShield®

protection proved its worth: the maintenance team only felt the need to clean the glass just once a week instead of daily, so cleaning frequency was reduced dramatically by 85%. Not only did the glass require less effort to clean, clarity was optimised for the air traffic controllers.



# Los Angeles Airport Control Tower

Los Angeles, USA

On-site application in 1995



Photo: Moto "Club4AG" Miwa (CC BY 2.0)

Commonly known as LAX, this is USA's second busiest airport in terms of total passenger traffic.

The external glass surfaces of the control tower were renovated and protected with the ClearShield System®, upgrading them to 'non-stick', easy-clean glass. This optimised clarity for air traffic controllers as well as reduce maintenance requirements.

Contaminants such as unburned hydrocarbons can create a very aggressive environment for ordinary, unprotected glass in airports. The corrosion of the glass caused by such contamination and atmospheric

attack makes cleaning much more difficult and can hamper day-to-day operations, even potentially jeopardising safety. But thanks to the 'non-stick', easy-clean action of ClearShield®, award-winning glass surface treatment, these problems are mitigated.



# Luton Airport Parkway Railway Station

Luton, UK

On-site application in 2004

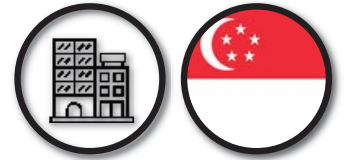


The station's exterior glass had not been properly cleaned since it opened in 1999 so there was a significant amount of dirt build-up that proved impossible to remove. Thameslink Rail, the company responsible for the station, had to find an effective long-lasting solution.

Ritec's On-Site Application Team subsequently treated most of the glass at the station with the ClearShield System®. The System was used to renovate and protect glass throughout the station, including the entrance façade and platform shelters.

With the glass looking literally as good as new, this provided a cleaner and more comfortable environment for passengers and staff alike.





# Marina Bay Financial Centre

Marina Bay, Singapore

Factory application in 2012



Photo: Erwin Soo (CC BY 2.0)

The Marina Bay Financial Centre (MBFC) is a mixed-use development located along Marina Boulevard and Central Boulevard at the Downtown Core of Singapore. It consists of three office towers, two residential towers and retail space at Marina Bay Link Mall.

Approximately 260,000m<sup>2</sup> (2.8 million ft<sup>2</sup>) of glass was treated with ClearShield® 'non-stick' glass surface treatment in the factory for this major development prior to installation. This was specified to protect the glass from harsh contaminants during construction. In turn, this helped to reduce delays as

removing aggressive contaminants such as cement dust and concrete run-off from glass surfaces was made much easier.



# Museo Enzo Ferrari

Modena, Italy

On-site application in 2011



Photo: Morio (CC BY-SA 3.0)

One of the most famous names to come out of Italy is of course Ferrari. The legendary name simply encapsulates prestige, passion, performance and success at the highest level. It is no surprise therefore that the ClearShield System<sup>®</sup>, with its own track record of proven performance, was specified to protect the glass façade of the Museo Enzo Ferrari.

The on-site application was carried out by Ritec's official Marketing Partner for Italy AST (Advanced Surface Technologies). AST have many years of experience applying the ClearShield System<sup>®</sup> to upgrade ordinary unprotected glass to 'non-stick',

easy-clean ClearShield Glass<sup>®</sup>.

Almost 500m<sup>2</sup> (5,380 ft<sup>2</sup>) of glass was treated during the museum's construction. ClearShield<sup>®</sup> not only made the glass easier to clean, it helped to maintain the general pristine appearance too.

Because ClearShield<sup>®</sup> keeps glass looking like new for longer, this special 'non-stick' protection is perfect for use in museums and showrooms.



# Omega Tower

Indore, India

On-site application in 2011



With some 1,000m<sup>2</sup> (10,765 ft<sup>2</sup>) of high performance Saint Gobain sealed units forming the impressive façade, it was essential to provide protection during construction to minimise any damage from silicone sealants, paint and general dirt stirred up during the build process. Therefore ClearShield® was specified.

After the building was constructed, ClearShield's 'non-stick', easy-clean properties reduced cleaning frequency and maintained the original visibility and sparkling appearance of glass.





# Outram Community Hospital

Bukit Merah, Singapore

Factory application in 2019



The 19-storey Outram Community Hospital (OCH) comprises of 550 beds. It is the first community hospital that provides step-down care in southern Singapore where government figures show there is a higher proportion of patients aged 65 years and older. It is located adjacent to, and complements, the Singapore General Hospital (SGH).

OCH has been designed and furnished to resemble a public estate so patients can learn how to adapt after they return home. For example, the hospital has facilities that resemble the interiors of buses and trains so patients can learn to navigate the public

transport system using a wheelchair more easily.

Approximately 20,700m<sup>2</sup> (223,000 ft<sup>2</sup>) of glass was factory-applied with award-winning ClearShield<sup>®</sup> glass surface treatment by two different façade contractors. ClearShield<sup>®</sup> upgraded the ordinary glass surface to 'non-stick', easy-clean ClearShield Eco-Glass<sup>®</sup> which offers many benefits. This includes resistance to staining and discolouration; typically halving the frequency of cleaning, saving time and costs; and the glass looks cleaner for longer, promoting a more pristine image.



# Parliament of Georgia

Kutaisi, Georgia

On-site application in 2013



This futuristic building was the pet project of the country's architecture-loving president at the time, Mikhail Saakashvili. It symbolised democratic openness and transparency in a country which, until 1991, was part of the Soviet Union.

Kozmos Cam, Ritec's representative in neighbouring Turkey, was commissioned to treat all 11,500m<sup>2</sup> (123,800 ft<sup>2</sup>) of the building's glass with the Ritec ClearShield System®. Early into its construction, the glass was installed into its aluminium frame. However, ongoing building work led to contamination of the newly installed glass with silicone and concrete

run-off. Kozmos first renovated the glass back to its original 'as-new' state before protecting the glass from future moisture, alkaline and dirt with ClearShield® 'non-stick' glass surface treatment. This made the Parliament's glass easier to clean and provide resistance to staining and discolouration in the future.



# Royal Hotel

Beirut, Lebanon

On-site application in 2009



Close to a major highway and the coast, the unprotected glass façade of the Royal Hotel was looking dull from both traffic pollution and sea salt spray, as well as general dirt and fingermarks.

ClearShield Glass Technology Lebanon is the region's official Marketing Partner. They were commissioned to apply the Ritec ClearShield System® to some 1,400m<sup>2</sup> (15,070 ft<sup>2</sup>) of the hotel's glass on-site. All treated glass was renovated back to its original pristine appearance and then future protection provided by applying durable and proven Ritec ClearShield® 'non-stick', easy-clean treatment.





# Santander SA Offices

Sante Fe and Querétaro, Mexico

On-site applications in 2002, 2005 and 2008



Transparencia en Servicios is Ritec International's Marketing Partner in Mexico. One of the company's most prestigious contracts was managing the renovation, protection and maintenance of glass with the ClearShield System® at three Banco Santander SA office buildings in Mexico, one in Sante Fe and the other two in Querétaro. Work started in 2002 and the contract covered interior and exterior glass with some 51,000m<sup>2</sup> (549,000 ft<sup>2</sup>) treated on-site in total.

The proven Ritec ClearShield® 'non-stick' glass surface treatment resists staining and discolouration for a pristine look. The newly upgraded easy-clean

surface made glass cleaning quicker too.

This is a great example of how the ClearShield System® is the only complete solution for durable glass surface protection.



# Shanghai World Finance Center

Shanghai, China

Factory application in 2006

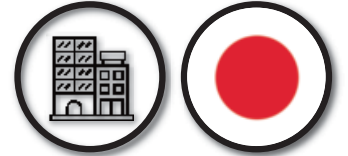


With a height of 492 metres (1,614 ft), the Shanghai World Financial Center is one of the tallest buildings in China. It was designed by renowned American architectural firm Kohn Pedersen Fox (KPF) and developed by the Mori Building Company of Japan. The Center is a mixed-use supertall skyscraper, consisting of offices, hotels, conference rooms, observation decks and ground-floor shopping malls.

Approximately 100,000m<sup>2</sup> (1.08 million ft<sup>2</sup>) of glass was treated with 'non-stick', easy-clean ClearShield® in the factory prior to installation in 2006. This meant any harsh inorganic contaminants on the glass,

such as concrete splatter and cement dust, was easier to remove during construction. Therefore ClearShield® reduced potential costly delays during construction and provided a significantly lower-cost alternative to replacing the glass due to any surface damage.





# Shin-Hakodate-Hokuto Station

Hokuto, Japan

Factory application in 2015



Photo: MaedaAkihiko (CC BY-SA 4.0)

All 1,800m<sup>2</sup> / 19,375 ft<sup>2</sup> of the external glass surfaces of this prestigious Shinkansen ('bullet train') station was protected with 'non-stick', easy-clean Ritec ClearShield®, applied in the factory.

Hokkaido Railway Company (JR Hokkaido) previously specified photocatalytic coatings ('self-cleaning' glass) for exterior glass of many new stations. However, the company was becoming increasingly aware that they were not performing as well as expected, particularly under wet and / or salty conditions, like those close to the sea. In fact, this type of coating has never been used for glass in

marine vessels or shower enclosures, nor was it recommended for buildings near the sea. Because Japan consists of large and small islands and many railway stations are located on the coast, an alternative technology had to be found.

In contrast, ClearShield® works in all conditions and environments. It was specified for a number of stations including Numanohata (350m<sup>2</sup> / 3,770 ft<sup>2</sup>) and Ainosato-Kyoikudai (small area) in 2007, then Shiroishi (1,300m<sup>2</sup> / 14,000 ft<sup>2</sup>) in 2010, all with excellent results. These successful experiences led JR Hokkaido to specify ClearShield® for this station.

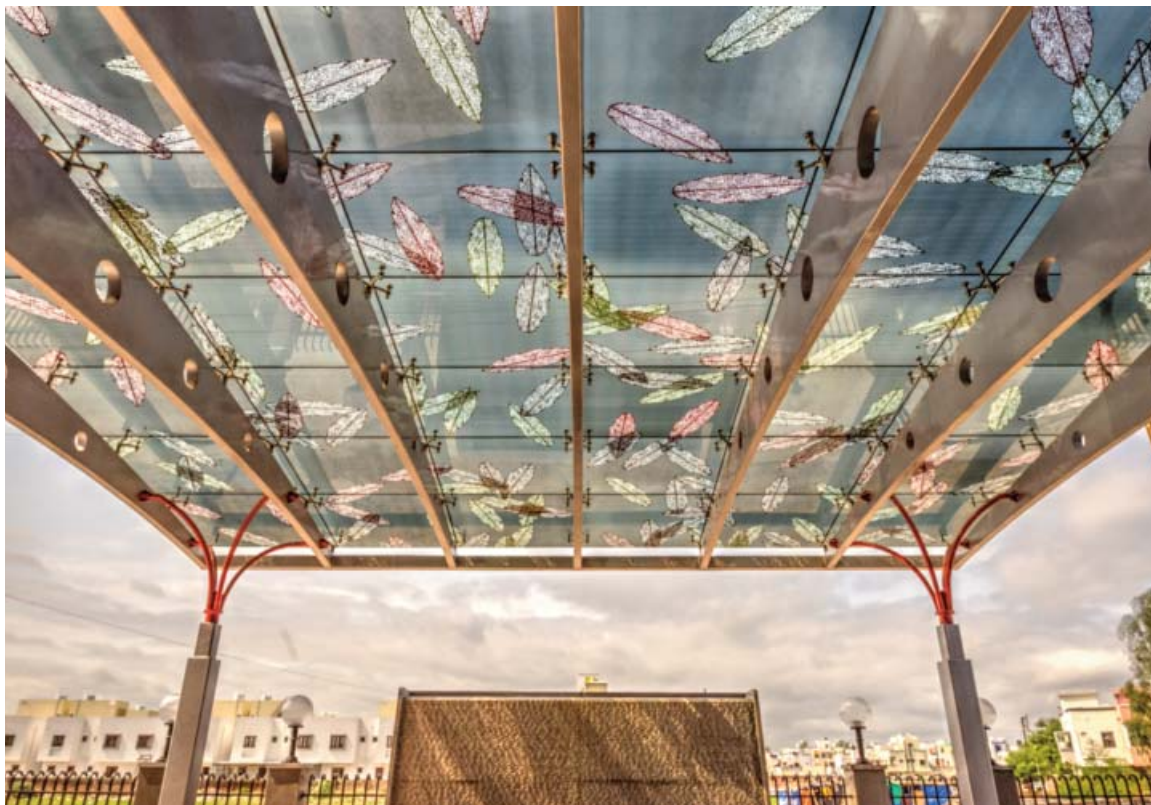




# Solace Hospital

Vadodara, India

Factory application in 2015



A beautiful glass canopy, dressed in autumn leaves, greets visitors at this hospital. Embracing the notion of physical space being vital to a patient's healing process, the canopy signifies renewal, the start of a new phase.

The leaves are rendered with intricate details in warm colours of the fall. This design is integrated with a special dot-frit pattern that is black when viewed from below but completely white when viewed from above. All the panels on the top surface were protected with ClearShield® 'non-stick' glass surface treatment to resist water staining and dirt

from airborne pollutants and ultimately preserve a longer-lasting pristine appearance.



# Suvarnabhumi Airport

Bangkok, Thailand

Factory application in 2005



Suvarnabhumi Airport, unofficially referred to as Bangkok Airport, is one of the biggest international airports in Southeast Asia and a regional hub for aviation. It is the 17th busiest airport in the world, 11th busiest in Asia, and the busiest in the country. It also serves as a major air cargo hub.

Prior to the airport's opening in 2006, award-winning Ritec ClearShield® 'non-stick', easy-clean glass surface protection was specified.

ClearShield® is a unique glass surface treatment. It was applied to some 100,000m<sup>2</sup> (1.08 million ft<sup>2</sup>) of

glass prior to the airport's construction, helping to protect against harsh contaminants such as cement, concrete and construction dust as well as any run-off during installation. As the treated glass meant any contamination was easier to remove from the glass, it helped reduce costs and delays during construction.

As ClearShield® has proven durability, the treated glass resisted staining from jet exhaust fumes and other contaminants as well as remaining easier to clean for many years after the airport's opening.





# The Glass House

Tsuyama Green Hills, Japan

Factory application in 1998



Photo: Wolfgang at wts wikivoyage (CC BY-SA 4.0)



The Glass House is a water park complex completed in October 1998. A popular attraction, it was designed by Ken Yokogawa Architect & Associates and the building won the prestigious Architectural Institute of Japan for Design Award in 1999.

Surrounded by beautiful gardens and scenery, the complex contains an indoor swimming area that consists of the main swimming pool (featuring a 90-metre / 300 ft long water slide), relaxation pool and fitness pool.

To maintain the pristine appearance of The Glass

House, Ritec ClearShield® was specified for all external glass, totalling 5,000m<sup>2</sup> (54,000 ft<sup>2</sup>) of the barrel vault roof and exterior walls.

ClearShield® 'non-stick', easy-clean glass surface treatment was factory-applied prior to installation to resist staining and discolouration and reduce maintenance.





# Torre Unipol

Bologna, Italy

On-site application in 2013



Rising to a height of approximately 127 metres (417 feet), this 33-storey tower is the tallest in Bologna and serves as the new headquarters of Unipol Group, a banking and insurance giant.

Designed by local architectural firm OpenProject, Torre Unipol incorporates various environmental innovations that achieved the prestigious LEED (Leadership in Energy and Environmental Design) gold certification.

Although a number of low-maintenance glass surface treatments were initially considered, ultimately

durable 'non-stick' Ritec ClearShield® was selected because of its proven performance based on many years of track records.

Ritec's experienced official Marketing Partner in Italy AST (Advanced Surface Technologies), carried out the on-site renovation and protection work.



# Views Boutique Hotel and Spa

Wilderness, South Africa

On-site application in 2009



This hotel is located in Wilderness, a town in South Africa's Western Cape Province, on a coastal stretch known as the Garden Route.

ClearShield SA (PTY) Ltd, Ritec's official Marketing Partner for South Africa, carried out the on-site work to this highly-rated venue. They applied the ClearShield System® to renovate and protect internal and external glass surfaces including the roof area, balustrades, decorative glass and all shower doors, both clear and sandblasted. A total of 1,500m<sup>2</sup> (16,145 ft<sup>2</sup>) of glass was treated.

The hotel's General Manager was very happy with the results: "This ClearShield treatment has worked well to keep the glass clean as possible in between cleaning cycles. The coastal weather can be severe, and yet after good rain, our glass looks fantastic, enabling us to focus our resources and time on managing other priorities."



# Wellington Airport Control Tower

Wellington, New Zealand

On-site application in 2023



This control tower, managed by Airways, underwent a significant restoration project due to the adverse effects of the harsh environment it faced.

Opened in 2018, the distinctive tower is situated in close proximity to the coast so its glass is subjected to constant exposure to salt spray as well as jet fuel spray. These factors can cause significant surface damage to the tower's windows over time, leading to staining and corrosion, reducing visibility and raising health and safety concerns. A long-term solution was sought to revitalise and protect the glass surfaces. ClearShield Glass Auckland provided the solution as

an approved applicator of Ritec's ClearShield Eco-System® to renovate, protect and maintain glass. The System utilises ClearShield®, a unique and award-winning polymer-based glass surface treatment that bonds with the glass to form a durable and invisible protective barrier.

ClearShield® protects against the detrimental effects of jet fuel spray, salt spray and weathering. It resists the build-up of surface contamination, reducing the frequency of cleaning. This saves time and resources and also extends the lifespan of the glass, resulting in cost savings for airport maintenance in the long run.





# Windowist Tower

Istanbul, Turkey

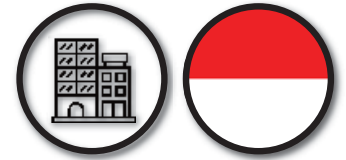
On-site application in 2010



For almost 15 years, the modern Windowist tower had been left unoccupied. Over the years, its glass and aluminium façade became heavily contaminated. This contamination was virtually impossible to remove with conventional washing, leaving the building looking dirty with little light entering it.

Under the supervision of Kozmos Cam, Ritec's Marketing Partner in Turkey, a specialist team of applicators restored all of the building's glass and aluminium panels back to new. After that, 2,850m<sup>2</sup> (30,700 ft<sup>2</sup>) of glass was treated with ClearShield® 'non-stick', easy-clean protection.

The results were, in the own words of the tower owner's Research and Development Manager, "honestly breathtaking". Not only the 'as-new' look of the façade was restored, but the ClearShield® protection ensures it stays that way in the future and will reduce maintenance requirements and costs.



# World Trade Center II (WTC II)

Jakarta, Indonesia

Factory application in 2012



Photo: Ya. saya inBaliTimur (CC BY-SA 2.0)

Designed by British architectural firm Aedas, and constructed by Balfour Beatty Sakti Indonesia (a joint venture between CCM and Balfour Beatty of the UK), which, together with HongKong Land, represents a unique partnership between Indonesian and UK companies.

surface protection from all kinds of contaminants before, during and after construction.

The building is made up of 28 storeys of Grade A world-class column-free office space to cope with Jakarta's ever expanding needs of its multinational tenants and business community. Some 34,500m<sup>2</sup> (371,400 ft<sup>2</sup>) of glass was applied with ClearShield® in the factory. This was specified to ensure effective



# Würth Museum

Künzelsau, Germany

Factory application in 2001

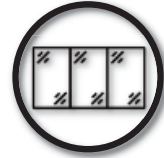


The Würth Museum opened in May 2001. Visionary Danish architect Henning Larsen of Copenhagen specified Ritec ClearShield® glass surface protection for the high quality glass supplied by Interpane. The glass used was 8mm special Ipasol Natura 6634 and a total of 2,100m<sup>2</sup> (22,600 ft<sup>2</sup>) was treated with ClearShield® in the factory. Factory application of ClearShield® means lower costs and ensures effective protection before, during and after installation.

Thanks to ClearShield® 'non-stick', easy-clean protection, any harsh contamination on the glass during construction phase such as cement splatter

and concrete dust was easily removed and helped to reduce delays.





# Balthazar Restaurant

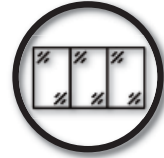
London, UK

Factory application in 2013



This second Balthazar restaurant was launched to great critical acclaim in Covent Garden and features stunning glass 'Art Deco' style interiors which are synonymous with the brand.

Having used Ritec's durable 'non-stick' glass surface treatment for many years, Go-Glass in Cambridge factory-applied ClearShield® to the special acoustic laminated glass, in which they had etched a sandblasted border design. Not only is the glass easier to clean and keep clean for a longer-lasting pristine appearance, it is also more hygienic thanks to ClearShield's anti-bacterial properties.



# Banham Zoo and Monkey Sanctuary

Norwich, UK

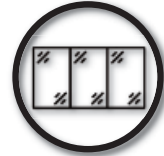
On-site application in 1998



The use of laminated glass in animal enclosures at this zoo provided better viewing facilities for visitors and made it more comfortable for the animals to live in. However, keeping the glass clean was a constant challenge so the Zoo looked for a long-term answer.

The Zoo subsequently commissioned Ritec to treat the public safety barrier glass surrounding its sea lion enclosure and also laminated panels in its snow leopard enclosure with the ClearShield System® to renovate and protect glass surfaces, making them 'non-stick' and easy-clean.

ClearShield® protection did its job, with Banham Zoo's Director commenting: "We can happily report that the benefits have not only been in our clean glass and clear viewing for our visitors but also in much less time being spent by our keepers on general cleaning".



# Bergen Central Station / Ulriken Tunnel

Bergen, Norway

On-site application in 2024



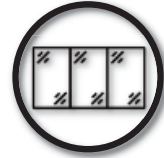
The newly-built glass fence consists of 129 individual panels approximately 1.15m x 2.35m. It runs about 150m alongside the railway track between Bergen Central Station and the Ulriken tunnel. Originally the railway infrastructure management company specified 'self-cleaning' glass for the side facing the railway track. However, the glass manufacturer felt this was unsuitable for this type of application so ClearShield® 'non-stick', easy-clean glass protection was given the green light instead.

With decades of glass renovation, protection and maintenance experience with ClearShield® 'non-stick'

technology, Stein Solli OverflateXperten carried out the application in-house prior to installation.

With the glass upgraded to superior ClearShield Eco-Glass®, this treatment resists both organic and inorganic contamination. Conversely, 'self-cleaning' glass unable to break down inorganic contamination such as brake dust from trains and pollution. In addition, unlike 'self-cleaning' glass, ClearShield Eco-Glass® is not reliant on sunlight or rainwater to perform; its surface is always easier to maintain and reduces the frequency of cleaning, thus saving time and money.





# Deniz Mall

Baku, Azerbaijan

Factory application in 2020

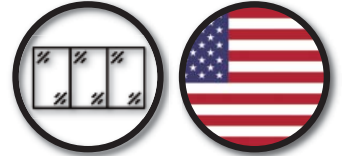


Deniz Mall, also known as Caspian Waterfront Mall or Baku Entertainment Centre, is a mixed-use entertainment, retail, leisure and dining destination.

Sinerji Insaat (Synergy Construction), based in Turkey with a branch office in Baku were subcontracted to build the elevator's impressive façade. They wanted to specify an easy-clean surface treatment on the glass so it would look pristine for longer as well as being easier to maintain. Kozmos Cam, Ritec International's Marketing Partner in Turkey, were invited to demonstrate ClearShield's many benefits and Sinerji were impressed.

Kozmos Cam were subsequently commissioned to carry out the ClearShield® application, upgrading the glass to ClearShield Eco-Glass®. Both sides of the glass façade were treated, so a total of 1,600m<sup>2</sup> (17,220 ft<sup>2</sup>) of glass was upgraded to ClearShield Eco-Glass® in their own Istanbul premises prior to the installation.

Thanks to ClearShield Eco-Glass®, a cleaner image is maintained, and provides a more welcoming and comfortable environment for visitors. As the glass requires less maintenance, it saves time too.



# First Church of Christ, Scientist

Washington DC, USA

On-site application in 2017



Although this creative glass design makes a big visual impact, like all ordinary, unprotected glass, it potentially presents a challenge to maintain. Dirt, building run-off and moisture can all be difficult, if not impossible, to remove.

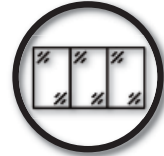
ClearShield® 'non-stick' glass surface treatment was specified to make cleaning significantly easier and to ensure an immaculate appearance in between cleaning cycles.

A two-man team used a cherry picker to carry out the ClearShield Eco-System® application on-site, first

removing any existing contamination then protecting it with award-winning ClearShield® protection, upgrading the glass to ClearShield Eco-Glass® .

In total, 380m<sup>2</sup> (4,100 ft<sup>2</sup>) of glass was treated.





# Johannesburg International Airport

Johannesburg, South Africa

On-site application in 2004

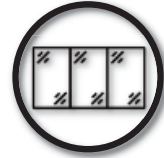


Since this airport was founded in 1952, it was known as Jan Smuts International Airport after the former South African Prime Minister. It was renamed Johannesburg International Airport in 1994, and subsequently on 27 October 2006, the airport was renamed after anti-apartheid politician Oliver Tambo. It is one of Africa's busiest airports, with the capacity to handle up to 28 million passengers annually.

Both clear and sandblasted glass surfaces in and around the airport were renovated and protected on-site with the ClearShield System®. This included glass balustrade panels, airline offices, viewing deck,

security doors and escalator areas. ClearShield 'non-stick', easy-clean surface protection helps keep glass looking like new for longer, with lower maintenance.





# King's College

Cambridge, UK

Factory application in 2020



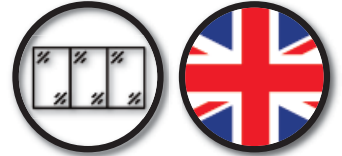
In a world where hygiene is more important than ever before, Go Glass were commissioned to design bespoke protective glass screens for King's College, a constituent college of the University of Cambridge. This historic college was founded in 1441 by King Henry VI.

Drawing on the experience of their Design Director and his team, and utilising specialist glass processes including UV bonding, Go Glass proudly supplied and installed these glass screens to the Porters' Lodge.

The screens incorporate the King's College logo,

etched onto Go Glass's toughened 'Hygiene Glass', powered by 'non-stick' easy-clean Ritec ClearShield® glass surface treatment. Not only is this special glass easier to maintain and looks pristine for longer, the ClearShield® treatment has been independently proven to resist the adhesion of bacteria.

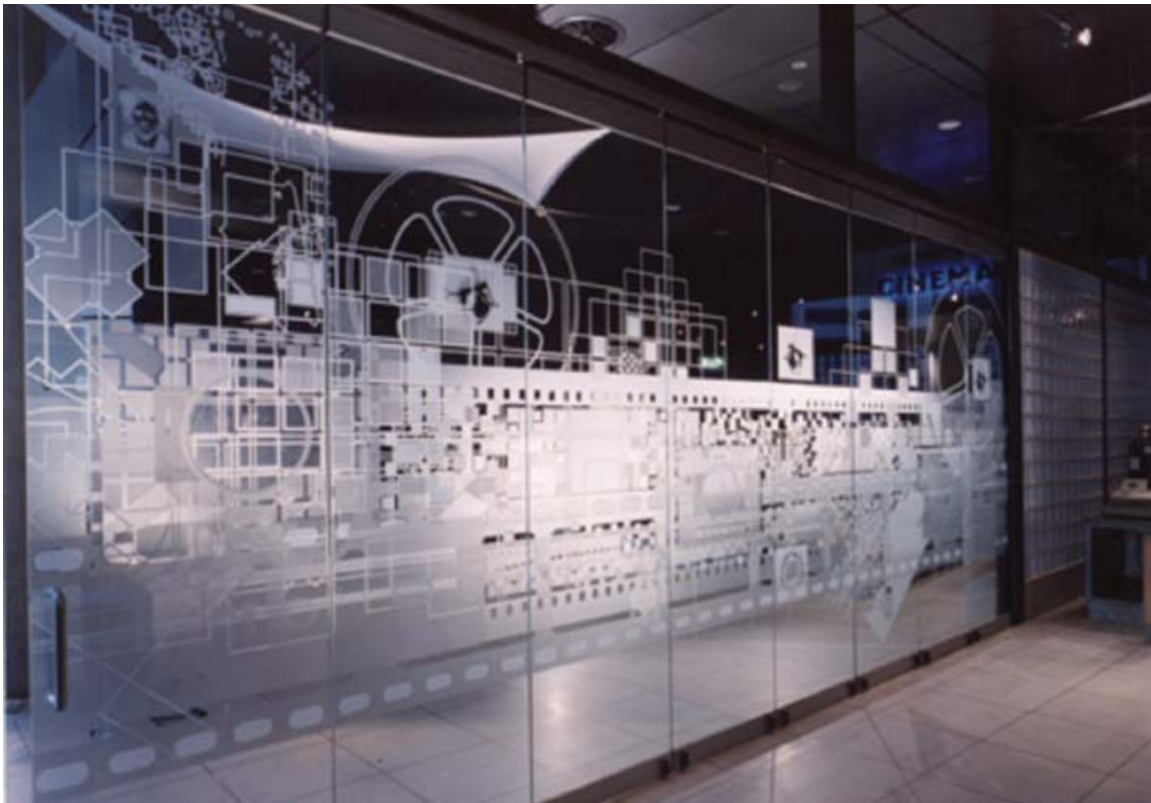
Porters' Lodge staff and visitors are now adequately protected from each other, and any germs on the screens will not adhere to the surface, so are easily removed during cleaning. These measures help to promote a more hygienic environment.



# National Museum of Photography, Film & Television

Bradford, UK

On-site application in 2002

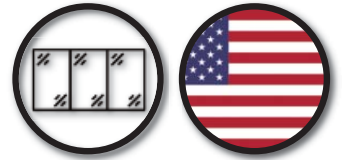


This museum first opened in 1983. It has since undergone two name changes, in 2007 it was re-launched as the National Media Museum and from 2017 to the present day, the National Science and Media Museum.

In 2002, well-established decorative glass company and long-time applicator of ClearShield®, Daedalian Glass Studios, were commissioned by the Museum to create a screen for the coffee shop.

The museum staff had the perceived problem of sticky fingers from users of the coffee shop that

would make their new sandblasted glass screen look dirty. However, this was not a problem as all glass supplied from Daedalian have 'non-stick', easy-clean ClearShield® treatment applied as standard to protect from fingermarks and dirt and ensure the glass looks as beautiful as originally intended.



# Rockefeller Center

New York, USA

On-site application in 2006

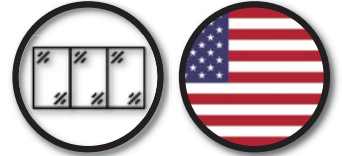


The Rockefeller Center building complex is owned and managed by Tishman Speyer, a large and well-known real estate investment company.

ClearShield® treatment was carried out by Surface-Care, a licensed Applicator based in New York on one of the building's elevator doors. Prior to treatment, Tishman Speyer was constantly frustrated with cleaning the acid-etched glass elevator doors and considered replacing them at great expense, even though the glass was relatively new. The ClearShield System® helped save money and gave them a long-term solution to keep the glass

doors looking like new with reduced maintenance requirements.





# The Modern Restaurant

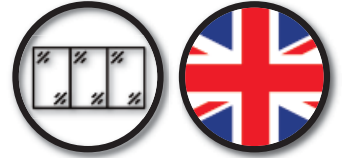
New York, USA

On-site application in 2007



The Modern, housed within the Museum of Modern Art (MoMA), is one of New York's finest restaurants. Its contemporary design, inspired by the Bauhaus movement, has earned considerable acclaim as well.

The fine dining experience there has been enhanced thanks to ClearShield®. Low iron sandblasted glass throughout the restaurant's interior was treated by SurfaceCare, a licensed applicator and specialist in glass restoration. This resulted in a fingerprint-free, pristine appearance that is easier to maintain compared to unprotected glass.



# The Savoy Hotel

London, UK

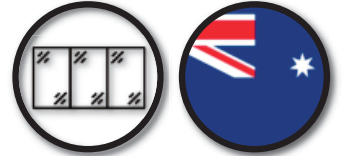
Factory application in 2010



The Savoy Hotel, one of London's best-known landmarks, reopened in October 2010 after a major £220m refit. The newly created Beaufort Bar, theatrically decorated in an Art Deco design of jet black and burnished gold, plays host to live entertainment, exclusive champagne and cocktails.

At the centre piece of the bar is a stunning glass panel which features an intricate vine pattern created by Daedalian Glass Studios, a licensed applicator of the ClearShield System®. Crafted from a pane of annealed glass laminated to a toughened backing panel and protected with ClearShield® to resist

fingermarking, the 3000mm x 675mm (10' x 2') design took the Daedalian team a month to complete.



# Underwood Street

Sydney, Australia

On-site application in 2019



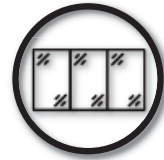
Glass structure specialists Hi Tec Glass are experienced licensed applicators of the ClearShield Eco-System®, developed to renovate, protect and maintain glass.

On this occasion, they treated glass on street-level historical picture framing in the heart of the city's CBD (Central Business District) with ClearShield® 'non-stick' easy-clean surface protection.

The beautiful glass displays showcase stories, historic photographs and maps of the site and a changing Sydney. Thanks to ClearShield® protection, the glass

resists staining from pollution and general dirt so it looks pristine for longer. Frequency of maintenance is also reduced.





# VTB Arena

Moscow, Russia

On-site application in 2019



The VTB Arena is a multi-purpose stadium built on the site of the demolished Dynamo Moscow stadium. The stadium, under one roof, unites two arenas: the Lev Yashin Dynamo Central Stadium, named after the club's legendary goalkeeper, and the multi-functional VTB Indoor Arena.

The first football match at the venue took place in May 2019. After the event, Bayerisches Haus, a specialist manufacturer of joinery products, was tasked with creating a pitchside fence. Many different options were considered and in the end, a tempered glass partition was the way to go. Immediately, the

question arose on how to protect the glass from staining and discolouration. Ritec Systems Russia – a partner of Bayerisches Haus – had the solution.

As the official Marketing Partner for the region, Ritec Systems Russia were well placed to treat the 500m<sup>2</sup> / 5,382 ft<sup>2</sup> glass partition on-site with ClearShield® durable 'non-stick', easy-clean protection. The glass now resists dirt and staining so fans enjoy optimal clarity, and it will also be easier to clean and keep clean plus maintain a sparkling appearance for longer.



# Cunard *Atlantic Conveyor* Container Ship

On-site application in 1987



Built in 1985, the Cunard-owned *Atlantic Conveyor* had a length of 234m (768 ft). The ship's exterior glass was later treated on-site with ClearShield® to improve visibility in harsh marine conditions.

Cunard's Chief Officer was very impressed with the performance of ClearShield®, singing its praises: "The improvement in visibility through our bridge windows, in rain and heavy weather, has to be seen to be believed... It is truly pleasing to see a product that really lives up to its marketing promises."



# Fullers Ferries

## On-site application in 2011



After experiencing disappointing and unsuccessful trials with what is sometimes referred to as 'nanotechnology' on glass, Fullers Ferries were approached by ClearShield Auckland in 2011 who presented the solution they had been looking for.

Over 4,000m<sup>2</sup> (43,050 ft<sup>2</sup>) of glass on their entire fleet of 15 vessels have since been renovated and protected with the award-winning ClearShield Eco-System<sup>®</sup>, upgrading it to durable 'non-stick', easy-clean ClearShield Eco-Glass<sup>®</sup>.

The highly-successful trial proved that not only did

the unique ClearShield Eco-System<sup>®</sup> restore the 'as-new' appearance of the glass without the need for costly replacement, but it kept it that way year after year to the great satisfaction of passengers, crew and owners alike. The result was uninterrupted clear views for the passengers, greater safety on-board for crew, lower maintenance costs and an improved image and presentation for the Fullers Fleet. In addition, maintaining ClearShield Eco-Glass<sup>®</sup> does not require harsh cleaning agents for a better environment.





# P&O *Britannia* Cruise Liner

On-site application in 2015



This £473m cruise liner is the largest addition to the P&O fleet and features a 94 metre (308 ft) long Union Flag on her bow, the biggest of its kind in the world.

Ritec Marine Services, specialists in the renovation, protection and maintenance of marine glass, handled the project. Approximately 14,700m<sup>2</sup> (158,230 ft<sup>2</sup>) of exterior glass was renovated and protected with the ClearShield Eco-System® to provide effective protection from sea spray and other corrosive elements. Areas that were treated included all windows, sliding doors, cabin glass and other aspects

of exterior glass, resulting a sparkling appearance and optimal vision for greater viewing pleasure. In addition, the ship's bridge was treated to provide optimal clarity and enhance safety, especially in inclement weather and high sea states.



# Princess Cruises *Discovery Princess* Cruise Liner

## On-site application in 2021



Photo: Blake Handley (CC BY-SA 2.0)

Ritec Marine Services (RMS) in the Netherlands are the world's specialists in the renovation, 'non-stick' protection and maintenance of marine glass. They used the ClearShield Eco-System® to ensure the glass was treated prior to *Discovery Princess's* maiden voyage in Spring 2022.

RMS staff renovated the glass during the ship's construction stage. They first removed contaminants such as paint splatter, silicone, protective foil from the glass, then gave it a deep clean with specialist Ritec renovation products. With the glass chemically cleaned, they then sealed it with durable ClearShield®

'non-stick' protection. This upgraded the glass to ClearShield Eco-Glass® which resists staining from harsh sea salts and other contaminants whilst in service. As a result, crew have a better view from the bridge (maximising visibility and therefore safety) and passengers enjoy unspoilt views from their cabins.

A total of 17,500m<sup>2</sup> (188,400 ft<sup>2</sup>) of exterior glass was treated on the *Discovery Princess*, the 19th Princess Cruises ship overall to have ClearShield® protection, such is its proven performance in harsh marine conditions.



# Stena Ferries *Stena Explorer* High Speed Ferry

## On-site application in 2003



Photo: Benjamin.nagel (CC BY-SA 2.0)

Stena Ferries, owners of the *Stena Explorer*, specified ClearShield® to stop stains developing on the glass and reduce the frequency of cleaning.

Woburn Windows are trained on-site applicators of the ClearShield System® and operate from Northern Ireland. They were commissioned to carry out the application.

In just one week, Woburn Windows' team renovated and treated all of the glass onboard the *Stena Explorer*. Over 400m<sup>2</sup> (4,300 ft<sup>2</sup>) of glass in total was treated. The ferry was in dry dock which meant they

were able to use cherry pickers and finish the work to a very tight deadline.





# Virgin Atlantic Challenger II Speedboat

Factory application in 1986

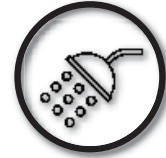


In August 1985, British entrepreneur Richard Branson attempted to cross the Atlantic in record time in his powerboat, *Virgin Atlantic Challenger*. However this attempt failed but he geared up for a second attempt less than a year later. During trials, one of the major difficulties encountered by Branson and his crew on the *Virgin Atlantic Challenger II* was the encrustation of heavy salt deposits on the vessel's windscreens. Valuable time and effort was wasted when they were forced to stop and scrape the glass in an attempt to improve visibility.

Before setting out on his second record attempt,

Branson had the windscreens of *Atlantic Challenger II* treated with Ritec ClearShield® 'non-stick', easy-clean glass surface protection to avoid the same situation from re-occurring.

Happily in June 1986, Richard Branson and his crew succeeded in crossing the Atlantic in the record-breaking time of 3 days, 8 hours and 31 minutes, shaving two hours off the record. The protected glass proved to be a big help, resisting harsh staining build-up and optimising visibility.



# Bláa Lónið (Blue Lagoon) Resort

Grindavík, Iceland

On-site application in 2004

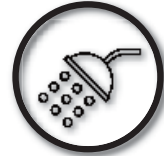


Photo by Ivan Sabljak (CC BY-SA 3.0)

Iceland's Blue Lagoon geothermal spa is one of the most visited attractions in the country. However, the silica-rich environment is aggressive to unprotected glass surfaces, making them opaque if not cleaned frequently.

The Ritec ClearShield System® was specified to provide a long-term solution. Some 700m<sup>2</sup> (7,535 ft<sup>2</sup>) of glass was renovated on-site to restore the original 'as-new' appearance, before the application of award-winning ClearShield® protection. This made the glass surface 'non-stick' and easy to clean, as well as providing effective resistance against the silica

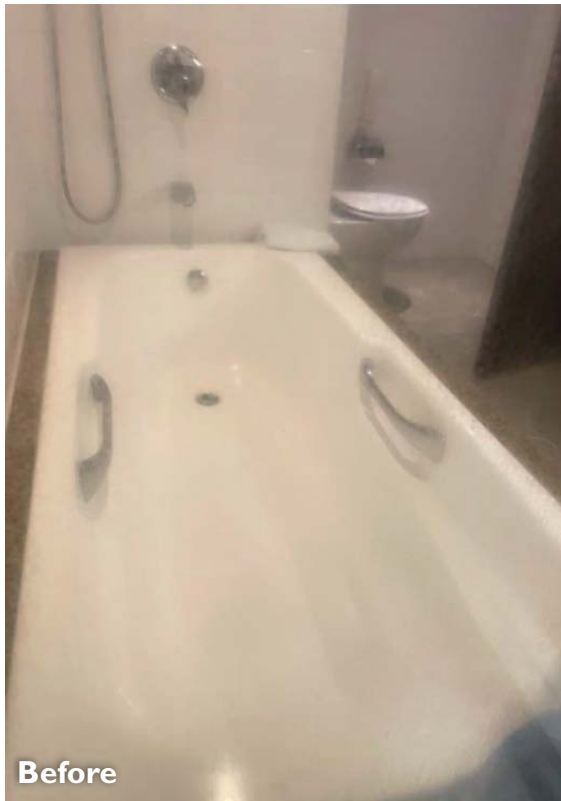
contamination and other forms of staining. Routine cleaning helped ensure the glass looked like new for longer without the need for harsh chemicals.



# Grand Millennium Auckland

Auckland, New Zealand

On-site application in 2022



Before



After

ClearShield New Zealand, Ritec International's Marketing Partner in the region, was approached by this hotel to discuss renovating and protecting glass bath and shower screens. This would be significantly cheaper, quicker and less disruptive than glass replacement. Additionally, ClearShield's ability to resist bacteria (which viruses depend on to replicate) creates a more hygienic environment, helping to reassure guests post-COVID-19 pandemic.

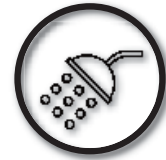
Local trained applicators ClearShield Auckland were contracted to carry out the job, upgrading over 430 bath and shower screens. The result was glass that

resists the build-up of mineral deposits, limescale and soap / shampoo staining.

Other surfaces such as the glass lift, glass surrounding the lift and restaurant glass were also renovated and protected with the ClearShield Eco-System®.

One Grand Millennium hotel staff member was particularly impressed with ClearShield Auckland, commenting: "Thank you very much for your hard work. You have done a great job, I definitely will recommend you to my colleagues!".





# The Sanderson Hotel

London, UK

On-site application in 2002

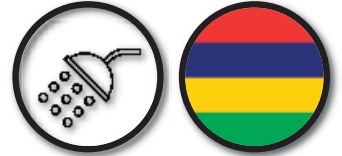


Shower cubicles in this chic hotel in London's West End were restored to their original pristine appearance by the ClearShield System®. The refurbishment project at the lavish urban retreat involved renovating and protecting sandblasted glass shower cubicles in 150 rooms using award-winning ClearShield® 'non-stick', easy-clean technology.

An imaginatively-created hotel like Sanderson clearly seeks high standards, with the best service and surroundings for its customers, so the use of ClearShield® to re-invigorate the bathrooms was a natural choice. Each of the large walk-in shower

cubicles is a different size and shape in rooms which are set up according to the principles of Feng Shui.

Thanks to ClearShield®, the shower cubicles became easier to clean and keep clean, and created a more hygienic environment as ClearShield® impedes the adherence of bacteria.



# Voile D'or Hotel

Bel Ombre, Mauritius

On-site application in 2005



This luxury four-star hotel is located in the South West Coast in the beautiful Mauritian countryside.

Glass shower doors in all of the hotel's 180 rooms were treated with ClearShield® for easier-to-clean, pristine-looking glass as well as improved hygiene.

Because of the proven performance of ClearShield®, many other hotels in the region have also had their glass shower enclosures treated too.



# Ekofisk 2/4 X Oil Platform

North Sea, Norwegian Sector

On-site application in 2008



This platform is part of the Ekofisk oil field complex in the Norwegian sector of the North Sea, about 320 km (200 miles) southwest of Stavanger. Ekofisk was Norway's first producing field and is also one of the largest on the Norwegian continental shelf. It produces both oil and gas, and production started in 1971.

Ekofisk 2/4 X is a drilling and production platform. Pollution and aggressive chemicals heavily stained the glass in the drilling area. Conventional cleaning methods were used to try and solve the problem, but without success. The ClearShield System® was

therefore specified to renovate and protect the driller's cabin, shaker and video camera, restoring the glass to an 'as-new' appearance. This also made the glass significantly easier to clean due to ClearShield's unique 'non-stick' properties.

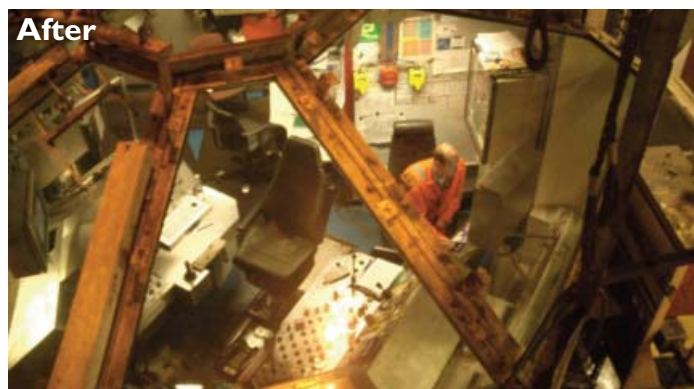
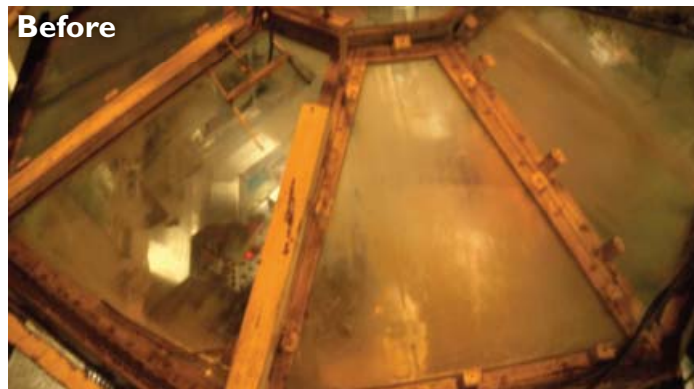




# Sleipner A Oil Platform

North Sea, Norwegian Sector

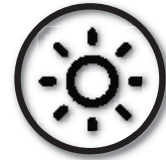
On-site application in 2008



Sleipner A is a combined accommodations, production and processing offshore platform at the Sleipner East gas field in the Norwegian sector of the North Sea. This oil platform was built by the company Norwegian Contractors for Statoil, a multi-national energy company, now known as Equinor.

temporarily stopping operations to clean the glass to an acceptable level.

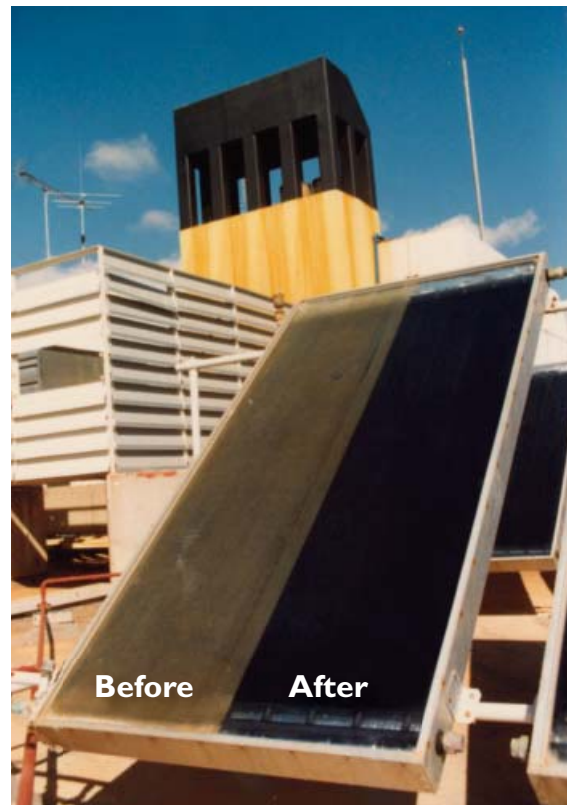
Glass in the driller cabin, knuckleboom crane, derrick, shaker room and camera lenses were all renovated and protected with the ClearShield System®. For the driller cabin, apart from increasing visibility for the driller operator, ClearShield® has also saved significant money from downtime for



# Cypria Maris Hotel

Pathos, Cyprus

On-site application in 1988



Cyprus enjoys over 330 sunny days annually so solar panels installed on hotel roofs for heating water is not an uncommon sight; the Cypria Maris is no exception.

However, the hotel's location created problems for its solar panels. First, they faced the sea, so contaminants from the sea bonding on the panels was extremely corrosive to the surface. Secondly, the dry and dusty environment meant the panels easily got dirty. The panels were therefore performing inefficiently.

ClearShield® was subsequently applied on-site to the panels to protect them from the dirt and harsh contamination. After treatment, not only were the panels operating with higher efficiency, they were easier to clean and keep clean. The frequency of having to access the roof to clean the panels was also reduced, saving time and effort.



# Solar Panel Trees

Oss, Netherlands

Factory application in 2013



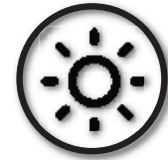
In the carbon-neutral avenue named 'Road of the Future' which lies between Oss and Berghem are unusual and distinctive steel structures designed to fit in with a nearby technology business park.

The steel structures are in the shape of trees. However, the 'leaves' are made up of solar panels which are used to produce energy for businesses on the park. Each tree measures twelve metres high (39'), with a twelve-metre diameter.

All of the custom-made solar panels – supplied by Hermans Techniglaz – were protected with

ClearShield® to resist traffic pollution and general dirt in order to optimise light transmission and therefore maximise efficiency.





# Vista Campestre

Tijuana, Mexico

On-site application in 2022



Ritec International's Marketing Partner in Mexico, Transparencia en Servicios (TeS), applied 'non-stick', easy-clean Ritec ClearShield® glass surface treatment on rooftop photovoltaic (PV) solar panels sited at the top of this ten-storey apartment block.

The major obstacle to a solar panel's performance is dirt ('soiling') or anything else that lands on the glass surface. This is where the proven Ritec ClearShield Eco-System®, developed to renovate, protect and maintain glass, comes in.

With the ClearShield Eco-System®, TeS on-site

applicators renovated 100m<sup>2</sup> (1,080ft<sup>2</sup>) of solar panel glass, bringing them all back to new, before upgrading them to 'non-stick', easy-clean ClearShield Eco-Glass®. The newly-protected surface means less build-up of dirt and other forms of staining, thereby maximising solar performance and increasing energy generation.

As ClearShield Eco-Glass® brings back the original performance of solar panels, this helps to reduce payback time, another benefit.



# Go Bus

On-site application in 2012



This major bus company had significant problems with staining on the windows of its buses. Thanks to Peter and Heather Wavish of Specialist Glass Cleaning and Protection (SGC) however, they renovated and protected the glass with the unique ClearShield Eco-System®. Feedback from some of the drivers have been extremely positive:

- “The assistance of Pete and Heather has pushed us up to having the best fleet of buses in NZ, purely from the image of our windows.”
- “We’ve had several companies come in and say

they could fix the scale on the buses, they all say they can do it, no one has, until Pete and Heather came along and it’s just a perfect job.”

- “Clean clear glass, great job, passengers can see out of the windows now.”
- “It is just phenomenal the way the vehicles look now, you can see right through the buses. Easy to clean and maintain.”
- “Amazing product, when the glass is clean on a bus, all other sins on the body work fade away!”



# Hobbiton Coach Tours

On-site application in 2016



The Hobbiton Movie Set was a location used for *The Lord of the Rings* film trilogy and *The Hobbit* film trilogy. However, the set received negative reviews on Tripadvisor because of the state of the glass windows on its fleet of tour coaches. Tourists were unable to see clearly out of the windows, let alone take photos.

Standard cleaning regimes were unable to remove the heavily-bonded staining on the glass. With many years' experience using the Ritec ClearShield Eco-System®, particularly on glass in vehicles, Peter and Heather Wavish of Specialist Glass Cleaning and Protection (SGC) provided a long-term solution.

Using specialist Ritec renovation products, they brought the glass back to an 'as-new' appearance. They then applied the durable and protective 'non-stick', easy-clean ClearShield® treatment to resist future staining and maintain the original clarity. SGC have also implemented a maintenance programme every six months to ensure the ClearShield® protection is performing to its best.

Thanks to SGC and the ClearShield Eco-System®, negative comments on Tripadvisor about the coach windows have become a thing of the past.





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