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Socially Responsible:
Brazilian Aid Project

Ecologically Persuasive:
Japanese Recycling Roof

Economically Profitable:
Swiss Load Carriers

Märkisches Viertel

Germany's Largest Low-Energy Housing Development

At the end of September 2008, the Berlin building company Gesobau AG announced the complete modernisation of 13,000 residential units in the Märkisches Viertel. Two thousand flats have already been renovated. In July, this ambitious modernisation project in Berlin was awarded the Gold Plaque by German Federal Minister Wolfgang Tiefensee in the competition "Energy-Efficient Modernisation of Large Residential Housing Areas". Modern window systems made of PVC have had a decisive impact on saving energy in this enormous apartment complex.

The residential buildings renovated in the Märkisches Viertel are characterised by surrounding greenery, attractive façades, as well as considerably less energy consumption.

An Unprecedented Modernisation Project

The new cobalt-blue KBE windows with integrated ventilation not only save energy: they also look good.

Gesobau AG plans to invest approximately 440 million euros into this modernisation project which is expected to be the largest low-energy residential housing development in Germany upon completion in 2015. The energy-efficient modernisation work includes the use of modern energy-saving windows made of PVC, façades and upper-floor ceilings furnished with new insulation systems, and two-pipe heating systems which replace the older single-pipe ones. This was a rewarding investment for the tenants of the 2,000 completed flats. Heating costs were reduced by 40 to 50 percent. A sensible use of energy consumption could save between 0.70 and 0.85 euros per square metre, which would mean a cost reduction of approximately 650 euros per year for a 70-square-metre flat.

The energy-saving modernisation concept could receive an additional push forward in 2011 when the Märkisches Viertel district power plant is converted into a biomass power plant. It will provide a combination of heat and electricity and supply residential units with energy more efficiently. After completion of the modernisation project, CO_2 emissions in the Märkisches Viertel should be reduced from 40,000 to approximately 17,000 tonnes per year.

Improved Heat Insulation

For this energy-saving modernisation project, 6,400 window units have been used from the profile system "KBE 70md" of the profine Group which places great emphasis on climate protection with the brands KBE, Kömmerling and Trocal. The most important cornerstones of these products are their energy efficiency and CO_2 reduction, the use of innovative "green" stabilisers, as well as their ability to be recycled and save resources. A typical feature of the central seal system installed in the Märkisches Viertel is the integrated "ClimaTEC_70" ventilation system. The system, concealed in the window frame, guarantees the flow of fresh air and dehumidification in the rooms of the flat with a minimal loss of heat. Equipped with three panes of insulating glass, the new PVC windows have a Uw-value of 1.1 W/(m²K): this is an enormous improvement in heat insulation since the Uw-value of the old windows was only between 2.5 and 3.0 W/(m²K). The narrow cobalt-blue foil-covered profiles are visually pleasing. They have many advantages which speak for themselves. "We were able to fully convince the contractors during the pilot phase with the KBE system and therefore got the go-ahead to use the windows in the next building phase", states Horst-Uwe Hasse, managing partner of the window manufacturer Fehrbelliner Fensterwerk GmbH which installed the profile systems.

A total of 13,000 residential units in the Märkisches Viertel will be completely renovated by 2015. Investments amounting to 440 million euros are projected.

Residential Property in Demand

Living comfort in the Märkisches Viertel has improved considerably through energy-saving renovation and the installation of modern kitchens and bathrooms. This is reflected in

After renovation of this large residential complex in Berlin, tenants are able to enjoy its well-groomed appearance.

Photos: (building above, middle left and window profile): profine Group, other photos: Gesobau AG

With the ventilation system integrated into the window frame, the central seal system “KBE 70md” provides a healthy indoor climate.

One of the modernised flats in the Märkisches Viertel. Most of these residential units are now inhabited due to their high-quality furnishings and energy-saving renovation.

An integral part of the energy-saving modernisation project in the Märkisches Viertel is the replacement of old windows with modern energy-saving systems.

both increased tenant satisfaction and the enormous success in letting the flats.

High Distinction

As an example of the importance of conserving energy and integrating these processes into the modernisation of large residential complexes, Gesobau AG received the coveted Gold Plaque in July 2009 from German Federal Minister Wolfgang Tiefensee as part of a competition announced throughout Germany. “The award confirms the overlying concept that ecological, economic, and social sustainability are not mutually exclusive, but rather complement one another. This integrative approach is the proper way to continue to design large residential housing complexes in a life-sustaining way”, states Jörg Franzen, Chairman of Gesobau AG. Together with five other urban building companies, Gesobau signed a climate protection agreement with the Berlin Senate in order to work more responsibly with energy. The goal of the agreement is to reduce the CO_2 emissions by at least 10 percent by 2010 from the approximately 268,000 urban flats, which equals a total of 56,000 tonnes per year.

infr www.profine-group.de,
www.gesobau.de

In facilities for seniors such as the Caritas-Altenhilfezentrum in Kaiserslautern, not only is the functionality of the flooring important. Aesthetics and liveability are also required.

BEARING THE “WORKLOAD” IN HOSPITALS

Demands on flooring in health care facilities often vary considerably. That is why Tarkett Objekt offers suitable solutions through an extensive selection of PVC floor coverings. They not only create a pleasant atmosphere, but also offer enormous cost-effectiveness and the best possible performance.

Although the well-being of patients has top priority in health care facilities, institutions must be run like professionally managed private companies. PVC flooring by Tarkett is persuasive in terms of cost-effectiveness, functionality, and sustainability. And at the same time aesthetics are not sacrificed.

Easy to Clean and Refurbish

Homogeneous flooring with iQ PUR™ protection is ideal for use in hospitals because of its outstanding properties. Its special surface not only protects the flooring over its entire lifespan, but can also be refurbished. The functional qualities of the surface can be restored at any time through dry buffing. Additional coatings are not necessary. This prevents downtime while coatings are drying. In addition, the need for cleaning detergents, fresh water and energy is reduced considerably. Ergonomic cleaning processes with less water as well as considerable reduction in maintenance costs are at the core of its economic and ecological sustainability.

A heavy-traffic hallway in the Zentralklinikum in Augsburg: The extremely resilient PVC flooring satisfies high demands on functionality and aesthetics.

A Variety of Grains for any Style

Functionality has high priority in areas used for medical purposes, while aesthetics and liveability also play an important role in health care facilities such as retirement homes. Heterogeneous PVC flooring in authentic wood designs satisfies these needs. Acoustic flooring is recommended, which reduces the noise level in buildings and also increases comfort in walking.

Designs for Health Care Facilities

Design flooring has also made its way into health care facilities because it meets the high demands on harmonious interiors without the more typical medical atmosphere. This type of flooring has displayed a remarkably positive trend in rehabilitation centres and retirement homes. The advantages are obvious: a natural finish, maximum resistance to wear, and also affordable prices and maintenance.

Beautiful and extremely robust: This homogenous PVC flooring with its friendly snail as an intarsia is located in the children’s medical unit at Gifhorn District Hospital in Germany.

The Solution for Wet Rooms

The floor covering Granit Multisafe and the wall covering Aquarelle Wall HFS satisfy high demands on hygiene. Installation, especially in corners, prevents bacteria build-up. Furthermore, the floor covering provides safer footing with its studded structure. The surface is easy to clean, warmer on feet than ceramic tiles, and works without seams.

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Photos: Tarkett Holding GmbH, Bereich Objekt

EDITORIAL

TIME TO GROW

Products which have been on the market for decades are naturally backed by a long history of development. This has certain advantages: there is sufficient time to perfect the manufacturing processes, improve the technical features of the products, and carefully examine these products' impact on people and the environment.

Having the time to grow is also very important for PVC products. This is seen in the success story of the plastic window which began in 1954 when the German company Dynamit Nobel began mass-producing the first PVC windows. Today, approximately 40 percent of the window systems installed in Europe are made of PVC. For good reason: this is apparent in our story on the Märkisches Viertel in Berlin with its 13,000 flats. It will be the largest low-energy housing complex in Germany after modernisation. Many of these buildings have been furnished with modern PVC window systems in order to save energy costs and to drastically reduce CO_2 emissions. The five-chamber system with its complicated internal mechanisms and integrated ventilation can hardly be compared to the one-chamber solution of 1954. But good things take time! This is also evident from the PVC flooring introduced in this issue which is used in medical facilities. No matter whether it involves hospitals, health care facilities, or doctors' offices, modern PVC flooring satisfies high demands in terms of functionality and aesthetics. This is also an example of how PVC products have continued to develop in many ways through their use over the past few decades.

In this issue, we are also introducing you to some unusual possibilities for the use of proven PVC products. In Brazil, simple medical furniture made of PVC pipes, connections, and sheets provides effective help. It assists the family members and health care providers of children with neuromotor disorders in their challenging daily work. We hope you will be inspired by pneumatic supporting structures that are able to bear heavy loads despite their own light weight. PVC-coated polyester fabric plays a decisive role in this process. And, alternately, we find PVC material in fantastic creations: sometimes in gigantic, sometimes in miniature form.

You may be surprised by the stories in this issue. And if you have an idea for a new article about PVC, we would appreciate your suggestions. The same holds true for your comments on "PVC Today" as a publication, which we would like to publish in one of the next issues. Let us know what you think. We look forward to hearing from you!

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Simple and effective: This walker made of PVC pipes gives patients secure footing while walking.

No matter whether it involves eating, physical care or mobility: people with neuromotor disorders are extremely limited in their movement and therefore depend a lot upon family members and health care staff. Professional care is not really possible without the proper equipment. A dedicated project in Brazil shows how PVC products can facilitate care for these individuals.

SO SIMPLE AND HELPFUL

Grace Gasparine is a therapist. With the support of the Catholic University Dom Bosco in the Brazilian city of Campo Grande, she has developed sanitary-assist products for children with neuromotor disorders. Regardless of whether it involves walkers, bathing chairs, or toilette and dining chairs, she has developed the furnishings primarily from PVC products such as vinyl piping, connections, or sheets which the Instituto do PVC in São Paulo donated to the project. The express goal of the project is to help families and therapists in their challenging daily work with needy children through cost-effective sanitary-assist products. Gasparine works closely with family members and health care staff in developing custom-made practical solutions. Her success justifies her work: "The vinyl furnishings improve the child's posture and body position while bathing or using the toilette and so prevent further problems", reports Ione Raineri, the mother of a five-year-old child with a neuromotor disorder.

This simple chair made of fastened PVC pipes and a table in front allows children with neuromotor disorders to sit upright.

Reclining chair made of lightweight PVC pipes with flexible fabric. Young patients can easily be lifted into the bathtub with it.

Photos: Instituto do PVC

Superior in Many Respects

Products on the market made of other materials are often more expensive. "The versatility of PVC makes it cost-effective and easier to manufacture these products", states Miguel Neto Bahiense, Executive Director of the Instituto do PVC. But these solutions are also superior in other respects. "Vinyl furnishings are guaranteed to be more effective. The materials used are lightweight and therefore easy to handle. Moreover, the cost-effective furnishings are easy to clean and adjust", states Gasparine. Since all these products can be adapted to the size and needs of the children, low-income parents save by not buying new products. For Bahiense, there are many good reasons to support ideas like these. "The Brazilian PVC industry has the responsibility to support social projects. This is especially true when product quality is essential and beneficial for developmental processes, as is the case of PVC."

More Quality of Life

As partners, the Catarinense Association of Teaching (ACE) and the Carlos Roberto Hanssen Foundation in Joinville, supported the project in 2007 after its establishment in 2006. At the request of the Instituto do PVC, Gasparine has trained therapists from ACE who have passed on their knowledge to occupational therapists, experts, and staff members of social NGOs in the region. The first furnishings were made available to children in the Abdon Batista Home in Joinville and patients at the ACE Clinic, which meant an enormous improvement in the quality of life and the social integration of those who benefited from them. Through further measures such as workshops and lectures, this socially responsible project will soon set a precedent throughout Brazil.

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An Excellent Atmosphere

Pleasant atmosphere: The genuine-looking light oak flooring emphasises the colours of the walls.

It is clear that a trip to the dentist is not one of our favourite appointments. But a well-designed dentist's office makes the visit all the more bearable. An example of such a comfortable environment with high hygienic standards is the award-winning dental office of Dr. Matthias Niemeyer in Potsdam which has been furnished with light PVC flooring in an oak finish.

Curved functional furniture, an emphasis on coloured walls, and lively art: the reception area of the Potsdam dental office is anything but sterile and cold. The PVC flooring in authentic oak grain by PROJECT FLOORS GmbH matches the interior design of the room. It is part of the PREMIUM COLLECTION which has been designed especially for heavy wear in professional areas such as health care facilities and shops. The water-resistant off-white flooring especially sets the scene for the rooms with their contrasting colours.There is a good reason why the dental office received a design prize from the journal "Zahnarzt Wirtschaft Praxis" which recognised its persuasive symbiosis of functionality and design.

PVC flooring in a natural oak finish easily withstands heavy traffic and wheelchairs.

The reception area of the Potsdam dental office is captivating with its modern interior design and friendly atmosphere.

Hygienic and Easy-To-Clean

"Our flooring responds to high hygienic demands in sensitive health care areas with its special surface protection. It allows for easy and cost-effective cleaning. Moreover, our flooring is regularly examined for toxic substances", states Markus Dünkelmann, managing partner of PROJECT FLOORS GmbH. The company was established in 1999 with its headquarters in Hürth, near Cologne. The business and its affiliates in England and New Zealand, as well as its 19 offices throughout Europe, specialise in recyclable plastic design-covers for heavy use in professional and residential areas with authentic-looking wood, granite, marble, and other natural materials in floorboard and tile design. In the process, all production sites are certified in accordance with Environmental Management Standard ISO 14001:2004, an important international standard.

Resilient and Safe

The PVC flooring in this Potsdam dental office with its soothing sound-insulation will withstand heavy traffic and wheelchairs for years. Furthermore, it is flame-retardant, slip-resistant, and is not sensitive to short-term application of cleaning chemicals. Customers are also guaranteed high safety standards through the company's stringent safety policies.

infr www.project-floors.com

Photos: PROJECT FLOORS GmbH

Balancing Act

During the heat of August, the city of Malmö in southern Sweden proves a popular attraction: the Malmö Festival was established in 1985 and this year focused on environmental issues such as the sustainability of the festival. This major event attracts up to 1.4 million visitors each year with its diverse selection of music, art, and culture. PVC took centre stage for 2009 when it came to both art and sport.

Difficult balancing act: It was not so easy to walk across the water in an upright position in these huge PVC bubbles.

Enormous: Artist Mats Karlsson created gigantic woven baskets from standard PVC pipes for this year's Malmö Festival.

Photo: Malmö Festival, Kasper Dudzik

Two gigantic hand-woven baskets by artist Mats Karlsson welcomed visitors to the Malmö Festival in the classic town market. In contrast to traditional basket-weavers who make their products out of wicker, Karlsson built his three metre-high sculptures out of PVC drain pipes. At night, the illuminated baskets turned into impressive light objects which radiated a pleasant, diffused glow. After the event, the PVC pipes were recycled in line with the sustainable orientation of this major event.

Dry Feet

On the banks of the harbour canal, fun-seeking youngsters were queuing up to have a go at walking on the water inside large transparent inflated bubbles made of soft PVC. The daring participants moved along inside the bubbles slowly, but surely. This was an endeavour which required very good balance and body control as well as bubbles with a secure and strong outer shell.

infr www.pvc.dk, www.malmofestivalen.se

Photo: PVC Information Council Denmark

52-metre span: This ski bridge in the French Alps uses the pneumatic supporting structure Tensairity. PVC-coated fabric filled with air plays an important role in this process.

Air as a Load Carrier

Pneumatic supporting structures are extremely heavy workers. Although they are lightweight, they can carry immense loads. An example is the technology of Tensairity: the synergetic combination of a body filled with air and conventional elements of tension and pressure. It can be used anywhere in which simple lightweight supporting structures are needed that can be easily assembled and dismantled. PVC-coated polyester fabric plays an important role in this process.

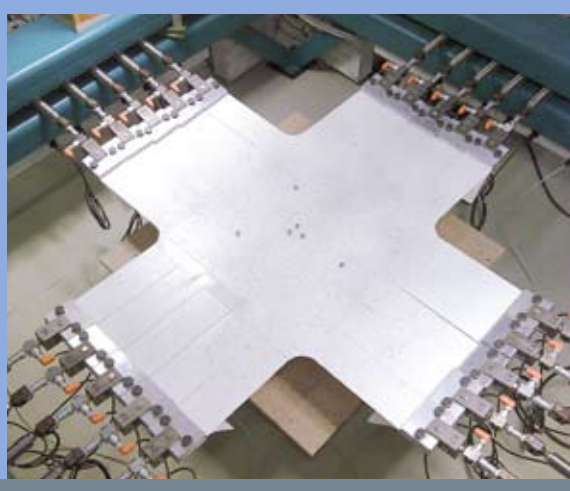
Photos: Empa

Tensairity: this phrase was coined from the terms "tension", "air" and "integrity". In principle, the technology works quite easily. A combination of struts, cables, and a cylinder filled with air made of PVC-coated polyester fabric supports and carries the loads. Reinforcing elements give the pneumatic body made of robust, highly tear-resistant membranes its load-bearing capability. "The whole thing only works, though, if the membranes, cables and struts are ideally aligned and work together perfectly", states Dr. Rolf Luchsinger, Head of the Centre for Synergetic Structures in the Swiss city of Dübendorf. The institute, established in 2006, is a public-private partnership between Empa, an interdisciplinary research and service institution for material science and technological development, and the automation company Festo AG. The Centre carries out basic research and develops new applications for synergetic supporting structures.

Airbeams

The load-bearing capacity of a Tensairity structure exceeds its own weight many times over. The best proof of this is a demonstration bridge with an eight-metre span made of Tensairity beams and PVC-coated membranes. Although the beams themselves only weigh 160 kilograms, the structure is able to hold a 1.5-tonne automobile. "A single beam is small enough to fit into the boot of a car", states Luchsinger.

The feather-light airbeams can be assembled quickly and easily and stretch over enormous distances. The ski bridge in Lanslevillard in the French Alps was erected in this way by using PVC-coated membranes filled with air. The structure extends 52 metres over a river.



Reception area for physical therapy: These PVC floorboards in wood finish convey the feeling of liveability and warmth.

For the Well-Being of Patients

The enormous saving of costs in health care facilities does not rule out the possibility of visually pleasing interior designs with an emphasis on sustainability. An example is the physical therapy unit at the Eichstätt Clinic in Germany. Although the new design of the rooms was planned on a tight budget, the beautifully selected colours and materials enhance a fast recovery for patients there. PVC flooring provides for the stylish atmosphere in a natural-looking wood finish.

Photos: objectflor Art und Design Belags GmbH

What is remarkable is the clear design in which colours define the various rooms of the 630-square-metre therapy area. The fresh green provides a friendly atmosphere in the reception area. The red glass wall powerfully illuminates the waiting area from behind. The feeling of warmth and liveability is conveyed in these areas with the expressive wood-grain finish "blond driftwood" from the collection EXPONA DESIGN by objectflor Art und Design Belags GmbH in Cologne. "Innovative printing and embossing techniques give these light heterogeneous PVC floorboards their seemingly natural surface which can be easily mistaken for genuine wood. Moreover, the floorboards offer all the advantages of elastic flooring such as resilience, easy cleaning for hygienic demands, and resistance to wetness, dirt and extensive use", states Stephan Wolff, Managing Director of objectflor, one of the leading European manufacturers of elastic flooring for professional and residential use.

Fast Recovery

From the floor design to the unusual concept of colour and light: the new design at the Eichstätt

In redesigning the rooms, special emphasis was placed on the modern concept of colour and light as well as friendly and easy-to-clean floors.

Self-Repairing Membranes

Through extensive tests, a wide range of applications for this new technology are being developed. In this process, it is also important to establish high safety standards. Researchers in Switzerland are examining the load-bearing capacity of the fabric by means of a unique biaxial engine which pulls the membranes with four claws with adjustable strength. Based on the results, researchers will continue to develop their own analytical model and detailed methods of calculation. Damage to the membrane fabric is also one of the subjects of the tests. In order for no air to leak from the airbeams, specialists are working on a self-repairing membrane. The interior side of the fabric is coated with pore-filling foam which is activated and seals holes when damage occurs.

infr www.empa.ch

This demonstration bridge with an eight-metre span easily holds large loads such as a 1.5-tonne automobile.

The load-bearing capacity of the membranes is tested with a biaxial engine. For this purpose, the claws of the machine use adjustable strength to pull on four sides of the fabric.

The light-coloured grain of the PVC floorboards in the hallways is in perfect harmony with the blue flooring in the treatment rooms.

Clinic conveys a patient-friendly atmosphere which opens up new possibilities for fitness and prevention courses and wellness treatments. This is a competitive advantage for the locally-managed clinic in a highly-competitive health care market. The implementation of the extremely design-oriented and sustainable renovation project satisfied all previously-made demands and was within cost projections. The EXPONA collection combines the aesthetics of high-quality materials with ideal functionality in a wide selection of wood and stone designs. For precisely this reason, PVC floors are exceptionally well-suited for surroundings with people who are ill or in need of care. This is reason enough to use the idea for other clinics in the Altmühltal Nature Park. New private rooms with design flooring by objectflor are being built at this moment in the Kösching Clinic.

infr www.objectflor.de

The square in front of the Miraikan Museum in Tokyo: The air-permeable triangular shapes made of recycled PVC protect against the sun's rays and provide cool temperatures on hot days.

Recycling Sets Standards

Recycled PVC is used for numerous applications because of its high quality. This is evident in the manufacturing of flooring, window profiles, or fashion items such as handbags and shoes. More and more new products are extending the broad use of this recycled material which helps protect the environment. This is seen in the current article from Japan.

A roof made of natural leaves not only provides cool temperatures during the summer by way of shade. Leaves are normally small enough to be cooled by air currents or winds which pass through them. The heat absorbed at the leaves is removed by the air currents which convect upwards. Closed roofs, on the other hand, increase temperatures. They absorb the sun's rays and emit heat to their surroundings.

Re-creating Nature

In order to achieve the cooling effect of natural leaves through artificial means, a group of researchers at Kyoto University, led by Professor Toshio Sakai, has been searching for a naturally inspired solution. In the process, the scientists came across a permeable fractal triangular structure discovered by the Polish mathematician Waclaw Franciszek Sierpiński. This shape provides ample space for air currents to flow while effectively blocking the sun's rays. In order to demonstrate its effectiveness, the Japanese specialists installed a 250-square-metre roof made of the triangular shapes in front of the National Museum of Emerging Science and Innovation (Miraikan Museum) in Tokyo this summer. The process for manufacturing the shapes from recycled PVC was carried out by Sekisui Chemical under the direction of the Kyoto University Group, with the support of the Vinyl Environmental Council in Japan.

Convincing Results

The new system worked flawlessly. The ground temperature under the roof was reduced by 10 degrees Celsius. The surface area of the fractal triangular shapes did not increase much in relation to the air temperature. Recycled PVC is extremely well-suited for manufacturing the permeable designs. It can easily be processed into complex geometric shapes, is durable, highly flame resistant and of high quality. Furthermore, it saves valuable resources and thereby provides these products with an additional eco-value.

infr www.vec.gr.jp

Photos: Vinyl Environmental Council Japan

Re-creating the natural shape of the leaf: This fractal triangle continuously retains little heat and is cooled down by means of air circulation.

Photos: Hans Scherhaufer

Giants Large and Small

Sometimes small gestures and presents make us happy, but at other times it is also the large, more spectacular events which amaze us. Two examples which could not be more different in their nature provide us with vivid proof of this. What they have in common is the use of PVC materials.

Two enormous figures find one another once again and embrace after a prolonged separation. The story couldn't be more fitting which Jean Luc Courcoult wrote on the occasion of the fall of the Berlin Wall about the large giant, and his niece, the small giant. Courcoult is the artistic director and founder of the French street theatre company "Royal de Luxe". The company staged a magnificent production of his fairy tale about separation and reunification entitled "Le rendez-vous de Berlin – The Berlin Reunion" in central locations across Berlin. For the 20th anniversary of German reunification, about two million people followed the path of the two over-sized figures first-hand along the streets of the German capital. It was an unbelievable theatrical event by the organiser "spielzeit' europa/Berliner Festspiele".

The small giant in waterproof raincoat and cap on her way through Berlin, always in search of her uncle, the deep sea diver.

On 3 October, the large giant emerged from the Spree River in the presence of numerous spectators in an unforgettable event. In addition to his helmet for deep sea divers, the giant also wore a waterproof diving suit made of lorry tarpaulins.

The long-awaited reunion at the Brandenburg Gate: The two figures finally find one another again after many years of separation.

The figure of Michelle Obama in three fashionable outfits. The First Lady wore the red-and-black dress on election night on 4 November 2008.

Unusual couple: PVC figures by Jailbreak Toys are bestsellers. The action figure of Barack Obama alone has sold over 200,000 copies.

Unbelievably True-To-Life

The large giant achieved truly gigantic proportions with a height of 9.50 metres and a weight of 2.5 tonnes. A shovel dredger with a mechanical arm and a boom gantry as well as 30 people were needed to tow the mega-puppet made of steel, linden and poplar wood through the city with unbelievably true-to-life movements. This was a major accomplishment which required long planning and precise work.

Custom-Made Suits for the Giants

The clothing for the two giants was true to the story. When the large giant emerged from the Spree River in an unforgettable moment on 3 October, he was wearing a durable waterproof diving suit made of brown lorry tarpaulins and a helmet for deep sea divers. Materials such as these are usually made of PVC-coated fabric and are often used on lorries for advertising or in the form of mega-posters. The small giant, still large at 5.50 metres tall and weighing 800 kilograms, sometimes wore the traditional children's yellow raincoat and cap. Dressed in these over-sized waterproof garments, these two giants embraced in front of the Brandenburg Gate on the Day of German Unity.

Everyone Should Have Their Own Obama

The story now moves from the Berlin giants to two much-sought-after miniature figures. This time the object of enthusiasm is a small PVC Barack Obama action-figure which the American company Jailbreak Toys introduced to the market. It is an absolute sensation: the "small" U.S. President has sold about 200,000 copies. And it is also part of the collection of the National Museum of American History.

Here Comes Michelle

In the hope of achieving similar sensational sales results, a 15-centimetre PVC figure of Michelle Obama was introduced in mid-November. The figure has six points of articulation and retails for $12.99. Fans of the First Lady and passionate collectors of action figures can choose among three sleeveless outfits which Michelle Obama wore to important events. The robust, rather compact figure not only appears to be a design contrary to the slim shape of the Barbie doll: she also embodies completely different values. "Michelle is intelligent and independent, yet not intimidating. She is deep and thoughtful, yet fun and fashionable", states Jason Feinberg, founder of Jailbreak Toys which is headquartered in New York City. No matter whether it is Warhol, Picasso, Shakespeare or Lenin: Feinberg has introduced some of the world's most famous citizens to the market in miniature form.

infr www.riesen-in-berlin.de, www.jailbreaktoys.com

Photos: Jailbreak Toys