

NOE[®] report

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Tall order – safely fulfilled

NOEtop S goes through a baptism of fire in the construction of the „Salle de Sport“ at Quai de la Moselle in Calais, France

Right from its very first use – the construction of the Salle de Sport at Quai de la Moselle in Calais, France – NOEtop S convinced the main contractor.

The Salle de Sport, a sports hall with static and lowering spectator stands, is being built in Calais. The substructure supporting the static stands consists of triangular fair-faced concrete walls which are left open in some areas and have an abrupt change in the vertical direction. In order to create this shape in concrete, the project team decided to use NOEtop S wall formwork.

Calais is a well-known ferry port for crossings to the United Kingdom. But the coastal city has much more to offer. In addition to wonderful countryside, the visitor to Calais can see some noteworthy architecture – such as a 2400 m² multi-sports hall currently being built in the heart of the city. It lies directly adjacent to the Quai de la Moselle and is immediately noticeable for its extensive glass facade. The state-of-the-art hall will be the venue of sports events such as basketball, volleyball and handball matches. The building has static and lowering stands to allow up to 1500 spectators to follow the games in comfort. The substructure for the static spectator seating is in fair-faced concrete and was constructed with the help of NOEtop S panels, a task which fell to contractor Demathieu Bard from Montigny-les-Metz. NOE France –

Téchnique de Coffrage, St. Quentin, France, a subsidiary of NOE-Schaltechnik, Süssen, Germany, is the partner of the main contractor on this project.

Reach the heights in stand construction with NOEtop S

The complexity of construction is apparent only at second glance, because the substructure of the 150-m-long static spectator stand is actually made up of triangular concrete walls. The walls are spaced about 7 m apart. They are a maximum of 11.50 m high and have a width of 18 m. Openings at various points in the walls lend a sense of airiness to the structure and allow visitors to walk under the stands. The walls also have a kink – a sudden change in vertical direction – which posed another challenge during

construction. The project team decided to use NOEtop S wall formwork to safely fulfil this tall order.

On this project, the extremely robust NOEtop S system (the S stands for safety) got its first chance to prove its true versatility. It was developed especially for use in countries with particularly high site safety standards. Working platforms with allround safety rails, ladder access and stabilizers are attached directly to NOEtop S large area panels and are supplied to site ready for immediate use. Simply fold out the working platforms and align the stabilizers – and NOEtop S is ready for use. It requires only to be folded up again before being moved to the next site. The safety devices do not have to be dismantled or removed for transport or storage.

NOE offers a number of different panel sizes for the NOEtop S panel system, which means the user can always create the most appropriate panel joint pattern. The XXL panel with dimensions 5.30 x 2.65 m is the largest frame formwork panel available on the market and allows more than 14 m² of concrete to be formed



In the background, a Calais landmark – the town hall. In the foreground, the new NOEtop S system with integrated working platforms and access ladders.

without a single panel joint mark. Other advantages of NOEtop S are its ease of handling and extreme durability. All frames and profiles are hot-dip galvanised inside and out. The tie rods can be freely positioned anywhere within the bracing. The GSV-tested formwork can withstand a concrete pressure of 88 kN/m².

Clean-cut corners and edges

NOE-Schaltechnik also offers a number of additional modules to extend the system's scope of application. Examples include the adjustable internal and external corner modules. They produce clean-cut corners for angles much greater or less than 90° and were crucial to the decision

to use NOE products on the Calais site. The corner connection is patented and is noted for its smoothly operated adjustment mechanism, which allows the corner to be set to almost any angle. Replaceable PU corner strips in the external and internal corners prevent cement grout from leaking out. The highly aesthetic appearance of the concrete continues in



Site board

- **Client:**
Ville de Calais, Calais, France
- **Architect:**
bureau faceB, Lille, France
- **Main contractor:**
Demathieu Bard Direction
Générale – Siège Administratif,
Montigny-lès-Metz, France

The patented adjustable NOEtop internal and external corners with their easy-to-maintain adjustment mechanism and replaceable PU corner chamfer strips leave no wish unfulfilled.



the corner areas, which was paramount at Calais because the concrete is left open to view.

In addition, the hinges on the corner modules never become stuck with hardened concrete. This reduces the work involved in cleaning and servicing the formwork to a minimum. The smoothly operated adjustment mechanism makes formwork erection and stripping considerably easier. The system allowed the contractor to construct the kink in the walls without additional complications. However, one more challenge remained to be overcome.

Special in-form elements

A way still had to be found to place and compact the concrete in the unusually shaped walls. Without the use of additional elements, the concrete would have to have been self-levelling and the triangular shape narrowing to the top would have been practically impossible to form. To achieve this, the contractor fitted suitable void-formers inside the formwork which would hold the concrete in the required triangular shape. A similar approach was also used for the wall openings. Specially fabricated void formers were fitted here. The contractor took



NOEtop S can be moved to the next position without the working platforms and access ladders having to be disassembled.



NOEtop S is sure to impress with the quality of its fair-faced concrete surfaces.

only two months to complete the structural work. As soon as the building opens, the games will be able to take place in an attractive environment and watched from the stands.



The spacer attached to the back of the NOEtop S panels allows the units to be easily and safely transported.

NOEtop S is delivered to site ready for immediate use, including stabilizers, working platforms and access ladders. Another convincing feature: the low stacking height.



Curved, textured and structural

A retaining wall with the look of natural stone masonry formed with the NOEplast texture Murus Romanus



NOE is the only manufacturer that can make and supply both textured formliners and formwork. Delivered to site, ready for immediate use, including the formwork reuse plan and concreting schedule.



With the NOE Combi 70 system, the ties are placed in the unseen plinth area and above the formwork. Therefore no tie rod marks can be seen in the fair-faced concrete surface.



Thanks to the NOEplast texture Murus Romanus, the new retaining wall has the same appearance as the old wall.



The floods of August 2013 damaged an important retaining wall dating back to 1901 in Großschönau, Saxony. Although some parts could be reconstructed, certain sections had to be replaced by new concrete walls. These new walls had to look like old masonry. As a result, the local council responsible for Großschönau decided in favour of a textured formliner from NOE-Schaltechnik, Süssen. The manufacturer offered the main contractor, Bau GmbH Franke, Hainewalde, a formwork system that would make his work considerably easier and supply a visually superior result than would have been possible with an ordinary formwork system.

Großschönau is a district in the administrative area of Görlitz, Saxony and has a history of flooding. This happened most recently in 2013, when the Mandau, a small river, broke its banks. The huge flow of flood water damaged not only cellars and gardens, but also an important retaining wall. This wall was erected in 1901 and protected a public access road. After all the debris and mess from the flooding had been removed, it quickly became clear that the retaining wall had been badly affected. Part of the wall could certainly be repaired, however, other sections were so seriously damaged that they would have to be replaced. The new sections were to be constructed in reinforced concrete (class C 30/37; exposure classes XC4, XD1, XF2, XA2) and, at the wish of the listed structures authority, it should look like the existing masonry.

Reproducing a natural stone look

This meant that the new 0.65 cm thick retaining wall sections should have the surface relief of a random rubble natural stone masonry wall. To achieve this look, the main contractor called upon textured formliners manufactured by NOE-Schaltechnik. The manufacturer markets them under the name NOEplast and has an extensive range of standard designs available. NOEplast textured formliners can give concrete the surface texture of, for example, wooden boards, bush-hammered concrete or even plaster. The "Murus Romanus" motif was chosen for the retaining wall in Großschönau. This textured formliner is approximately

4.1 cm thick and comes in standard sizes or of 6.00 x 2.50 m. It can also be manufactured and supplied to larger dimensions. The formliners have matching saw-tooth edges that allow them to be butted together without an obviously visible joint.

Textured surfaces

For forming a textured surface in concrete using NOEplast in a precasting works, it is enough to place the formliner in an appropriate form on the vibrating table. For in-situ site work, such as in Großschönau, it has to be glued to the formwork. Then the concrete is poured and compacted. As soon as the concrete has achieved adequate strength, the formwork including the formliner can be removed to reveal the selected texture. The special feature of NOEplast standard textured formliners is that they have a glassfibre fabric backing, which ensures they are robust and minimises dimensional changes due to temperature fluctuations. Moreover, the formliners can be used up to 100 times, which drastically reduces the price per square metre of concrete surface on a project.

On the Großschönau site, NOE supplied only 36 m² of Murus Romanus textured formliner, which were then used up to 8 times. NOE-Schaltechnik is in a position to supply its customers with a quite unique service.

It is the only manufacturer that can supply companies with textured formliners already glued in the factory onto formwork or supporting boards that can be screwed to the formwork panels. Bau GmbH Franke preferred to use this service in Großschönau, where the formliners – at the suggestion of the NOE team – were not fixed to standard wall panels but to NOE Combi 70 panels.



The openings for pipes etc. in specific bays of wall were allowed for in the design and implemented on site in a way which allowed only the relevant parts of the panels to be removed and reinserted as necessary.

No tie rod holes in fair-faced concrete – NOE Combi 70

This formwork system is stiffened by 70 cm deep galvanised light truss girders. The girders are spaced at centres of 100 to 150 cm. The system is highly resilient because the tie rods are positioned 10 cm above the top of the foundation and at a height of approximately 290 cm, which is usually above the top of the wall.

The actual formwork element consists of a grillage of multihole channels and vertical NOEtop edge profiles attached to a 21 mm thick basic panel facing. To this can be attached any conceivable kind of formwork liner for producing fair-faced concrete – such as, for example, NOEplast textured formliners – and subsequently screwed into place. Because the retaining wall in Großschönau does not run in a straight line, but to a certain extent follows the course of the river, it was decided to make the structure follow these curves with the help of the formwork. The curve was idealised as a polygonal chain and the NOE Combi 70 units installed on a series of angled straight lines. The curved shape was achieved by incorporating timber spacer pieces sawn to taper at the appropriate angle. The special feature of the NOE Combi 70 system is that it can be used to construct fair-faced concrete surfaces up to a concreting height of 290 cm, with practically no tie



Tie-rod-free fair-faced concrete: with NOE Combi 70, the tie rods are positioned in the unseen plinth area and above the formwork.

rod holes to be seen. The horizontal positions of the two butted elements were set using spindles and the formliner at that point was made from one piece so that no butt joint appears in the final exposed surface. In addition, the NOE Combi 70 units can be placed one upon the other up to a formwork height of 450 or 600 cm, which was very beneficial to the construction work on site at Großschönau. The retaining wall starts at a height of 2.80 m and increases to a height of 4.30 m at the other end. For construction, the 84 m long wall was divided into 14 segments. Flexible movement joints were installed at approximately 6 m centres with front and back water stops.

Service, formwork, follow-up order

The contractor originally intended to construct the retaining wall with conventional wall formwork. However, this would have had the disadvantage that considerably more tie rod holes would have been visible and the curved wall alignment would not have been as elegant. Instead, the engineers at NOE's Cottbus subsidiary suggested the adjust-



Something only NOE can do: make and supply both formwork and textured formliners. Delivered to site, ready for immediate use, including the formwork reuse plan and concreting schedule.

able variant in their tender – an option which is possible only with NOE Combi 70. The client found this proposal most convincing. Although Bau GmbH Franke had never worked with NOE before, the main contractor decided to adopt NOE's solution. In order to ensure that the concrete components achieved the desired high-class appearance, it was essential that the formwork supplier and the main contractor worked closely together. For example, some bays had to incorporate openings of various sorts, which were taken into account during the design and fabrication of the formwork so that only the relevant parts of the panels needed to be removed and reinserted as necessary. NOE worked closely with the main contractor to draw up and implement all the details at the construction joints (continuous surface) and around pipe outlets (masonry spout detail). The main contractor's site team were so impressed with the products and services supplied by NOE-Schaltechnik during the construction of this project that Bau GmbH Franke placed a follow-up order with the formwork manufacturer very shortly afterwards. A company could wish for no greater praise.

The NOEplast Murus Romanus textured formliner reproduces the appearance of a random rubble natural stone masonry wall, thus fulfilling the wishes of the listed building authority that the new wall should match the existing masonry.



Site board

■ **Main contractor:**
Bau GmbH Franke, Hainewalde

New Saalebridge near Hammelburg

NOEratio loadbearing formwork combined with NOEplast textured formliners cuts down construction time



The concrete surfaces were formed with NOEplast "Kufstein" masonry textured formliner to look like natural stone cladding. This proved to be a cost-effective way for contractor Arlt to meet the client's aesthetic requirements.

A new bridge is being built to carry the B27 road over the Fränkische Saale. The existing structure can no longer cope with the volume of traffic. The appearance of the new bridge is based on that of its predecessor. The designers achieved this look by using a textured formliner from NOE-Schaltechnik, Süssen. In order to complete the works within the tight schedule, contractor Arlt called on a special NOE service: the textured formliner was premounted onto NOEratio loadbearing formwork and delivered to site ready for immediate use.

Arlt Bauunternehmen GmbH, Frankenheim, is constructing a 173-m-long bridge on the B27 near Hammelburg. The new bridge replaces a prestressed concrete bridge, which was built in 1955 and now struggles to cope with today's traffic volume of 8,500 vehicles per day. Traffic safety will also be improved by the inclusion of a new combined pedestrian and cycle way. The new structure spans the Fränkische Saale and improves flood protection by providing a larger opening for the river than did the previous bridge.

Parallel structures

The new bridge is located four metres to the north of the existing, which will remain in operation for the whole of the construction period, with the advantage that traffic flow will be able to continue almost without disruption. The new seven-span structure will have a prestressed beam and slab deck with two main longitudinal members. The contractor installed 1.5 m diameter bored piles to form the foundations. So that the bridge achieves an improvement in traffic flow and looks better than the existing, the project team

decided to form the pier surfaces up to a height of 2.13 m using textured formliners. This proved to be a cost-effective way of meeting the local council's wishes for a natural-looking stone facing. The chosen texture was "Kufstein" manufactured by NOE-Schaltechnik because this natural stone facing design came very close to the appearance of the old bridge. The surface reproduces the look of hand-chiselled natural stone blocks laid in stretcher bond. Once the structure acquires a little patina, only an expert will be able to tell whether the facing is real natural stone or a textured concrete surface. The textured formliners were installed in such a way that they could be extended to any length and height.



The new Saalebrücke bridge near Hammelburg is being built just a few metres away from the old river bridge.



The concrete surfaces of the abutments and piers were formed with NOEplast "Kufstein" masonry textured formliner to look like natural stone cladding

Textured formliners for textured concrete

The manufacturer markets textured formliners under the name NOEplast and has a range of about 100 standard designs. In addition, NOE-Schaltechnik can create textured formliners from the customer's own design ideas. All textured formliners have different sizes and thicknesses. Dimensional stability is ensured by a glassfibre fabric backing. NOEplast textured formliners can be reused up to 100 times, depending on the material and workmanship. The textured formliners have to be attached to the formwork panels to produce the chosen texture in the concrete. For concreting in horizontal forms – as is often the case in precast concrete facto-

ries – it is enough to simply place the formliner into the form. For vertical use – e. g. on site – it must be glued directly to the formwork panel or a supporting board. The supporting board is then attached to the formwork. As soon as the textured formliner is secured against slipping, a special release agent is applied and the concrete is then poured into the form. When the concrete has hardened adequately, the formwork can be stripped and the results exposed to view.

NOEratio loadbearing formwork

The pier formwork was made up of NOEratio panels. This loadbearing formwork system with prefabricated elements was conceived specially for engineering

structures and systemised building construction. It consists mainly of H 20 timber beams and steel profiles for the bracing members. Thanks to the 25-cm pattern width and a wide range of accessories, the system offers a great deal of flexibility of application. With the H 20 facing support boards and bracing bolted into place, the formwork is outstandingly resilient and torsionally stiff. Bracing is positioned at levels 400 + 1250 + 1250 + 1250 mm on all standard elements up to 6000 mm height. This allows elements of different heights to be combined without undue complications up to a height of 6000 mm. Depending on the tie rod spacing, formwork based on NOEratio can withstand a concrete pressure of up to 50 or even 60 kN/m².

NOE-Schaltechnik is the only manufacturer on the market that can offer both concrete formwork and textured formliners. The designers chose to use NOEratio in combination with NOEplast "Kufstein" masonry textured formliner for the construction of the new Saalebrücke bridge near Hammelburg. An advantage that contractor Arlt made good use of.



The concrete surfaces of the abutments were formed with NOEplast "Kufstein" masonry textured formliner.

To allow the works to progress quickly, NOE-Schaltechnik supplied contractor Arlt with NOEratio loadbearing formwork combined with NOEplast textured formliners, which were delivered to site ready for immediate use.



Formwork and texture – a complete service from a single source

Engineers from NOE's Cottbus subsidiary assisted the contractor by supplying a detailed reuse formwork plan, the textured formliner construction drawings and elevations for the piers and abutments to help ensure the work on site went

smoothly and without problems. NOE Cottbus also took responsibility for fixing the textured formliners onto the formwork. Everything was delivered to the site near Hammelburg ready for immediate use. This saved contractor Arlt valuable time and above all working hours, which was very important in view of the tight timetable – indeed, the contractor had to build the bridge's six piers over a period of just six weeks.

NOE is the only manufacturer on the market that can supply textured formliners, concrete formwork, reuse plans and concreting schedules all from a single

source. This relieves the customer of much of the arduous coordination work and conveniently reduces the number of project contacts. The support NOE-Schaltechnik provided allowed the contractor to work efficiently and smoothly to construct the works by the planned completion date.



When the concrete surfaces have gained a little patina, only an expert would be able to tell at first glance that they were textured concrete and not natural stone cladding.

Site board

- **Design:**
Staatliches Bauamt Schweinfurt
- **Construction planning and structure:**
Arlt Bauunternehmen GmbH,
Frankenheim



Remarkable “dried-out clay” retaining wall

New NOEplast Santpoort stone texture celebrates its début in the Netherlands

An important public transportation link has recently been completed in the Netherlands. The appearance of a concrete retaining wall is bound to exert an enormous influence on its surroundings in these situations. The client therefore wanted the wall design to be attractive. The solution: a retaining wall with a surface design created with the new NOEplast texture “Santpoort”.



The new NOEplast Santpoort stone texture recalls the image of a dried-out, cracked clay surface – even when it’s standing in water. The NOEplast texture is designed to be easily extended in length and height.

HOV-Velsen is an important public transportation link recently brought into operation between Haarlem railway station and IJmuiden. The HOV bus service runs on existing roads. To ensure the service is given priority over other traffic and keeps to the timetable, traffic control systems were installed and the roads redesigned to suit. One of the results is a remarkable concrete retaining wall in Santpoort-Noord that has the appearance of a dried-out clay soil face.

Reinforced concrete retaining wall in fine form

Retaining walls have an important role to play but are usually quite boring to look at. However, they can – as can be seen from this example in Santpoort-Noord – be more than just grey, monotonous panels. Because how a retaining wall looks can considerably effect the visual quality of its environment, it was important for the architect to create an attractive design for this project. The architect placed great emphasis on integrating the wall visually into the landscape. The inspiration for his design was provided by an image that looked like dried-out clay. He wanted the consistent pattern and rough texture produced in this material by cracks of various widths and lengths to be reproduced in the surface of the retaining wall. But he had to find a way of realising his ideas. Faced with this task, he turned to

NOE Bekistingstechniek, Arkel, the Dutch subsidiary of NOE-Schaltechnik, Süssen, Germany. The company has been involved with concrete formwork and formwork technology for over 60 years and with concrete surfaces produced using textured formliners for over 40 years. NOEplast offers textured formliners under the brand name NOEplast for customers who wish their concrete surfaces to be appropriately aesthetic in appearance.

From clay soil to textured formliner

In order to realise the clay relief envisaged by the architect, the image was digitised, rastered and scaled to a size suitable for the retaining wall. All the project stakeholders were resolved that the textured surface should look as natural as possible. Furthermore, the pattern of the texture had to be capable of being extended to any height and width. This latter require-



The face of this retaining wall in Velsen, the Netherlands, looks like a section through a low mound of earth, the exposed face of which has dried out. Realised with the new NOEplast texture "Santpoort".



The features of a dried-out and cracked clay surface are reproduced on a retaining wall in Velsen, the Netherlands. Realised with the new NOEplast texture "Santpoort".

which is then screwed onto the formwork. In the precasting factory, it is enough for the textured formliner simply to be placed into the formwork. Depending on the actual textured formliner, it is then given a very thin layer of release agent. NOE-Schaltechnik offers a compatible release agent that has been specially designed to perform excellently with textured form-liners. The pour can take place as soon as the textured formliner has been prepared. After the concrete has hardened and the formliner has been stripped, the chosen pattern is revealed as an imprint in the concrete surface. NOEplast textured formliners can be reused up to 100 times.

Special service

NOE-Schaltechnik continually strives to make its customers' work easier. Alone in being a supplier of both formwork and textured formliners, the company is able to offer a special service: on request, NOE operatives can attach the formliners to the formwork or onto a supporting panel. This is mainly of interest on sites where uneven ground, lack of space or bad weather make the installation of the formliners more difficult. Textured formliners installed in this way by NOE are delivered ready for immediate use to site or the precast concrete works.

Individualised customer designs and combinations of standard form liners

NOE-Schaltechnik welcomes requests for individualised designs from its customers. Customers' design ideas can be realised in a number of ways:

- The traditional approach is to make a model and subsequently a mould from an existing surface texture.

- Alternatively, NOE can capture surface features and characteristics digitally with a 3D scanner and create a mould using CNC technology.

- The manufacturer has been working with CNC technology for several years to create surface textures and patterns based on vector data.

NOE-Schaltechnik also has a huge collection of standard designs. For example, there are standard designs to reproduce the texture of wood, stone, masonry and plaster. Furthermore, NOE can form free-hand motifs, linear patterns or ornamental elements in concrete surfaces.

NOE-Schaltechnik is therefore always in a position to offer the right solution for its customers whatever the required concrete surface design.

With its new Santpoort stone texture, NOE proves that retaining walls do not always have to have a smooth, monotonous surface.



Creative surface textures on a retaining wall in Velsen, the Netherlands, achieved using the new NOEplast texture "Santpoort".

ment presented a big challenge but was mastered in the end. The NOE team created a model using CNC technology. The model was used to produce a mould and intermediate negatives, which were in turn used to manufacture the textured formliners.

Multiple reuses

The textured formliner merely has to be fixed in position in the form to give the concrete the desired textured finish. In practice, however, for in-situ site structures, the formliner must be glued onto the formwork, or onto a supporting board,

Brushed finish for precast concrete units

NOEplast "Sydney" textured formliner achieves DIN 51130 R12 slip resistance rating



The "Dorpshuis Heerde" community centre operated by Heerde district council not only brings the local population together, it also joins two streets. A footway runs through the building to provide the link. It is a key feature of the project. To ensure an appropriate and safe solution, the footway surface was made slip resistant with the help of the NOEplast "Sydney" textured formliner.

The surface quality of the NOEplast "Sydney" texture complies with DIN 51130 slip resistance rating R12.

A connecting footway runs directly through the Dorpshuis Heerde community centre to link two streets in the district of Heerde, the Netherlands.



The traditional brushed finish is reproduced in the concrete using the NOEplast Sydney texture.

The district of Heerde lies about 90 minutes by car from Amsterdam and has a population of 11,200. The open and high-quality architecture of the “Dorpshuis Heerde” invites visitors to enter and spend time in the multifunctional community centre. DAT Architects from Tilburg planned and designed the project. The design took the form of a multifunctional building that includes a library, theatre and offices. In appearance, it resembles a pavilion. Large windowed areas in the walls and the roofs combine with the light-coloured materials used for the floors, walls and ceilings to lend the interior a light and bright atmosphere. The external walls are defined by masonry blockwork decorated in a range of bright shades. They create a beautiful contrast to the green surroundings and the parking areas finished in red.

Connecting footways

The building is situated between two streets. They are connected by a footway that leads centrally through the building. It is a key feature of the project. This is where all the functions of the building come together and is a favourite place for informal social meetings or relaxing. The footway is constructed in precast concrete units.

To provide the required slip resistance, the surface has a traditional brushed finish. This method of concrete finishing originated in the in-situ concrete field. First a relatively smooth concrete slab is created, then fine grooves are introduced into the surface using a brush with metal bristles. This process demands a great deal of care if a uniform appearance is to be achieved.

Quick and easy alternative

It is much quicker and easier to manufacture precast concrete slabs using textured formliners from NOE. These formliners are marketed under the name NOEplast.



Before concreting, they simply need to be fixed to the formwork in such a way that they cannot slip. Then the form is filled with concrete. As soon as the concrete has hardened sufficiently, the precast unit can be removed from the form to reveal the desired textured finish. The project design team decided to use the NOEplast “Sydney” textured formliner for the “Dorpshuis Heerde” community centre. It reproduces a perfect brushed



Benches and table sets invite the visitor to stop and spend time here.



The surface of the precast concrete units was treated with a water-repellent coating.



NOEplast Sydney: A delicately drawn brushed concrete texture on large precast concrete slabs.

finish on the concrete and provides slip resistance complying with DIN 51130 rating R12. A water-repellent coating was then applied to the slabs to protect them from dirt and ensure their pleasing appearance is retained in the long term.

NOEplast textured formliners

In addition to the Sydney texture, NOE-Schaltechnik offers a choice of over 100 standard designs. They are mainly used to improve the appearance of wall surfaces. For example, NOEplast can reproduce a likeness of the texture of wood, masonry or natural stone in concrete. NOE can supply anything from fully free-form motifs right up to ornamental elements with an oriental touch. The manufacturer also

offers customers the opportunity of realising their own design ideas. Most can be created quite easily from the appropriate CAD drawings. All NOEplast textured formliners are suitable for use on site or in a precasting works. They can be reused up to 100 times.

Pleasant social meeting place

The "Dorpshuis Heerde" is a favourite meeting place for all members of the community. With this well-designed project concept, appropriate choice of materials and high standard of construction, the architects have created a building with a very pleasant atmosphere. A successful example of good architecture.

Unique NOE service

The company is the only manufacturer to provide both NOE concrete formwork and textured formliners from a single source and offers a special installation service. On request, NOEplast textured formliners can be attached to the forms or a supporting board in the factory. The textured formliners are then delivered to site, ready for use. This service saves a great deal of work for the contractor, especially on in-situ concrete sites. It also gives the contractor the confidence that the result will meet the client's requirements. In addition, NOE can prepare the formwork reuse plan and concreting schedule on request.

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Cover image: Salle de Sport at Quai de la Moselle in Calais, France. The formwork reached a height of up to 11.50 m for the walls. The safety features integrated into the NOEtop S allowed all the tie rod positions to be easily accessed.

NOE-Schaltechnik
Georg Meyer-Keller
GmbH + Co. KG
Kuntzestraße 72
73079 Süssen, Germany
T +49 7162 13-1
F +49 7162 13-288
info@noe.de
www.noe.de
www.noeplast.com

Austria
NOE-Schaltechnik
www.noe-schaltechnik.at
noe@noe-schaltechnik.at

Belgium
NOE-Bekistingstechniek n.v.
www.noe.be
info@noe.be

Brazil
Mills do Brasil
Estruturas e Serviços Ltda
www.mills.com.br
millsbr@cepa.com.br

Bulgaria
NOE-Schaltechnik
www.noebg.com
noe-bg@netbg.com

Croatia
NOE oplatna tehnika d.o.o.
www.noe.hr
noe@noe.hr

Czech Republic
ISD-NOE s.r.o.
www.isd-noe.cz
info@isd-noe.cz

France
NOE-France
www.noe-france.fr
info@noe-france.fr

Netherlands
NOE-Bekistingstechniek b.v.
www.noe.nl
info@noe.nl

Poland
NOE-PL Sp. Zo.o.
www.noe.com.pl
noe@noe.com.pl

Russia
NOE Moskau
info@noe-moscow.ru
NOE St. Petersburg
noe@sovintel.ru

Saudi Arabia
Global NOE Trade Est.
NOE – The Formwork
www.noe.de
jeddah@noe.de

Serbia
NOE Sistemske Oplate d.o.o.
www.noe-scg.com
noe-scg@eunet.yu

Switzerland
NOE-Schaltechnik
www.noe.ch
info@noe.ch

Slovakia
ISD-NOE spol. s r. o.
www.isd-noe.sk
info@isd-noe.sk

Turkey
NOE Beton Kalıpları A.Ş.
www.noe.com.tr
info@noe.com.tr