

Architectural Concrete

Formliner & surface finish solutions

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Edition: UP





Architectural Concrete

Formliner & surface finish solutions

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Adding a different dimension to bridges, retaining walls and other concrete structures

As a construction material, concrete delivers a unique combination of benefits. First and foremost, it offers exceptional durability and strength, either on its own or in combination with other reinforcement materials. Low maintenance and inherently fire resistant, it also delivers a range of sustainability benefits including energy-efficient production.

It can be used to create any shape or form, from the purely utilitarian to landscape-defining bridges and towering skyscrapers.

Transform plain concrete surfaces

Alongside these practical advantages is a quality that sets concrete apart from any other material: the ease with which virtually any surface finish can be applied through the simple use of textured formliners.

This brochure offers an introduction to the possibilities open to you, with examples of how the inspired use of textured formliners and MAX FRANK architectural products can transform an otherwise plain concrete finish into something that has a positive impact on the architectural landscape.

Design finishes to complement the local environment

While eminently practical, plain concrete structures can have an adverse impact on their surroundings, giving the impression of cold, un-involving utilitarianism. This can be overcome through the use of textured profile formliners, helping these structures to promote a more positive response.

The breadth of choice available means designs and forms can be applied that enable such structures to blend in with the local environment and complement existing structures and natural features.

At MAX FRANK we offer a comprehensive range of architectural concrete solutions, enabling the application of finishes to meet every requirement: practical, aesthetic, economic or a combination of all three.

	Insitex®	NOE [®] plast
Ease of installation	J J	1
Design choice	J J	<i>s s s</i>
Re-use	55	<i>」 」 」 」</i>
Cost-effective for smaller applications / individual structures	<i>」」」</i>	1
Cost-effective for larger applications	11	<i>\ \ \ \</i>









BUILDING COMMON GROUND

Insitex®

Formwork liners

Insitex[®] Bedford design used on precast panel



Insitex[®] - enhance the finish of concrete structures

Insitex formwork liners provide a low cost means of applying appealing textured finishes to a wide variety of concrete structures, often replacing plasters, tiles, stone tooling and brick or masonry cladding.

Applications range from bridge abutments, retaining walls and culverts to pedestrian ramps, walkways and underpasses. They can also be used to add visual interest to railway structures, reservoirs and industrial building interiors and exteriors.

Wide range of finishes, plus bespoke designs

The Insitex formliner range provides a diverse choice of designs, covering a variety of texture repeats and profile depths. Patterns include geometric and vertical textures, and finishes designed to replicate brickwork, natural stone and timber (see design range on pages 8-9).

While liners are generally designed for vertical use – vertical joints are incorporated in the textures – certain textures also lend themselves to horizontal application, and all can be finished with fair-faced copings and surrounds. Bespoke designs can be created within certain parameters.



Insitex®

Lightweight and easy to use

Insitex panels are supplied in standard 600mm widths and heights up to 7m, are light to handle and fix and are easily trimmed. Manufactured in the UK from PVC, Insitex formliners are readily available.

In normal use they are simply panel-pinned to the timber formwork at their overlapped edge joints, then sealed with adhesive taping; no site gluing is involved.

When coated with release agent, Insitex can be easily stripped without delaying concrete operation.

Improve construction speed and reduce man-hours

The ease with which Insitex formwork liners can be fixed and removed can be a key factor in helping to drive down costs, improve construction speed and reduce man-hours.

In addition, its use protects underlying forms for re-use and enables early stripping and rapid formwork turnaround. And labour intensive tasks such as post-strip tooling and hammering are eliminated.



Insitex design: Grampian



Quick turnaround

As a UK-manufactured product, Insitex formwork liners are readily available and can be produced with quick turnaround for custom designs.

Re-use opportunities for additional savings

With careful handling, fixing and removal, Insitex formliners can be used up to five times for insitu applications, depending on the application, height, shape and texture.

Suitable for precast panels and in situ construction

While the inherent lightness and ease of fixing/stripping of Insitex formwork liners make them ideal for on-site use, they are equally well suited to off-site production of precast panels - an increasingly important area in today's construction industry.

Delivers a touch-smooth quality

Insitex touch-smooth surfaces and textural designs provide enhanced self-cleaning performance compared with coarse, granular or abrasive surfaces which can trap airborne pollution.

The use of textured surfaces, particularly those with a rugged feel or deep profile, can also deter vandalism by making graffiti more difficult to apply.





A variety of finishes to suit your needs

Insitex formwork liners are currently available in 21 different finishes, arranged into four groups: Vertical ribbed, Masonry and brick, Timber and Abstract. Examples of these profiles, along with diagrams of each, are shown over the following pages.



Ashbourne Design group: Vertical ribbed Reference: 916 Profile depth: 10mm





Brecon Design group: Vertical ribbed Reference: 813 Profile depth: 37mm





Buxton Design group: Vertical ribbed Reference: 815 Profile depth: 20mm



Cambourne Design group: Vertical ribbed Reference: 1125 Profile depth: 14mm





Durham Design group: Vertical ribbed Reference: 505 Profile depth: 25mm



Grampian Design group: Vertical ribbed Reference: 609 Profile depth: 5mm



Lancaster

Design group: Vertical ribbed Reference: 504 Profile depth: 37mm



Lothian

Design group: Vertical ribbed Reference: 608 Profile depth: 12mm



Malvern

Design group: Vertical ribbed Reference: 814 Profile depth: 25mm



Warwick

Design group: Vertical ribbed Reference: 712 Profile depth: 10mm



Windsor

Design group: Vertical ribbed Reference: 711 Profile depth: 20mm







Alston

Design group: Masonry & brick Reference: 1128 Profile depth: 25mm





York Design group: Masonry & brick Reference: 607 Profile depth: 25mm

Design group: Masonry & brick

Wicklow

Reference: 1124

Profile depth: 20mm





Bedford Design group: Masonry & brick Reference: 917 Profile depth: 10mm





Design group: Masonry & brick Reference: 1019 Profile depth: 20mm





Cromarty Design group: Masonry & brick Reference: 1021 Profile depth: 20mm



Solway Design group: Masonry & brick Reference: 506 Profile depth: 15mm





Kielder Design group: Timber Reference: 1122 Profile depth: 7mm



Stirling

Design group: Abstract Reference: 1020 Profile depth: 10mm



Truro Design group: Abstract Reference: 918 Profile depth: 15mm



All patterns shown reflect the surface of the finished concrete. The shutter is the negative impression.



BUILDING COMMON GROUND

NOE[®]plast

Formwork liners





NOE[®]plast – realise the design possibilities available through textured concrete

Add impact and aesthetic appeal to architectural concrete

The application of form and texture to a concrete surface can transform the appearance of a structure. It can create definition, add character and visual interest, make a powerful corporate statement or help a structure to blend more comfortably into the surrounding environment.

It is a solution offering almost unlimited possibilities in terms of enhancing walls, bridgeworks, buildings and other vertical, curved and sloping wall installations – and the NOEplast formliner system delivers an outstanding combination of design choice, practicality and value for money.

Cost-effective, multi-use formliner system

NOEplast is a durable, multi-use formliner system designed for the easy application of textured decorative finishes for both precast and in-situ concrete structures.

The strength and flexibility of the polyurethane (PU) material enables formliners to be used repeatedly, with at least 80 uses possible. This exceptional durability makes the NOEplast formwork liner system an extremely cost effective solution for multi-use work.





Outstanding texture definition

The use of a flexible elastomeric material gives outstanding texture definition, enabling the application of textures with extremely fine detail on structures ranging from large expanses of flat wall to curved and radiused structural elements.

This can enable the creation of soft, natural-looking timber grains, realistic rough textured stone, formal, masonry and brick, and abstract designs that can create subtle light and shadow effects.



NOEplast timber design: Madras

More than 100 standard designs

The NOEplast range encompasses more than 100 textures including timber boards, natural wood effects, rough stonework, regular brick, granite walls, and textured plastered finishes. The range also includes bush-hammered designs, abstract artistic designs, regular repeat patterns and special anti-slip textures.

Such a broad choice of designs, with a huge range of options in terms of texture repeats and depth of profile, enables solutions to be provided for all kinds of concrete structures.

Replicate stone, brick, timber and more

The quality and fine detail achievable through the use of NOEplast formliners enables the accurate reproduction of many other construction materials, creating the impression of a finish other than plain concrete.

This includes a number of different timber cladding options, a wide range of natural stone walls and various brickwork styles.



NOEplast artistic design: Liverpoo



NOEplast design: Krakau

Ideal for non-slip pedestrian applications

NOEplast formwork liners can also be used to create non-slip concrete for a variety of pedestrian applications.

As well as shopping malls, streets and pedestrian areas, non-slip concrete surfaces can also be used in communal areas in blocks of flats, on stairs and foot bridges and on walkways around office buildings.



NOEplast non-slip design: Noppen



The use of NOEplast liquid enables you to take the versatility of this system one step further by creating your own corporate castings.

Logos, branding, badges and corporate statements; all can be created and replicated in the finest detail, quickly and easily, with NOEplast liquid.

Design finishes to match existing profiles

The versatility of NOEplast means the design possibilities extend far beyond the 100+ standard designs available.

If you have an existing profile to match – or indeed a special texture or treatment you'd like to bring to a project – then custom NOEplast formliners can be produced to your individual requirements. The design opportunities available through NOEplast are literally endless.









BUILDING COMMON GROUND

Zemdrain®

Controlled Permeability Formwork (CPF) Liner

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Zemdrain[®] – achieve a smoother surface with increased resistance to degradation

Deliver a surface suitable for aggressive environments

Zemdrain liners deliver a concrete finish significantly better than that achievable using oiled plywood, steel or plastic faced formwork, increasing the potential surface life of all concrete structures.

This makes it ideal for use on structures where environmental factors such as frost, abrasion and acid attack can otherwise result in rapid degradation, threatening the integrity of the structure to such an extent that surface replacement or refurbishment becomes necessary.

Typical applications include seawalls, reservoirs, wastewater treatment plants, sewage works and associated structures such as bridges and piers.



Zemdrain is a formwork liner with a controlled pore size that allows excess water and air to escape from the concrete while retaining the majority of the cement and small fines.

As a result, the concrete surface area benefits from a low water/cement ratio and decreased porosity, with a concentration of the finest concrete particles giving a durable and hard-wearing cement-rich surface.





Appealing blemish-free surface also resists microbiological growth

Where profiled formliners are not required, a smoother, virtually blowholefree Zemdrain surface with low porosity is better able to resist the growth of micro-organisms such as lichen and mould which would otherwise impact on the aesthetic qualities of the structure.

The resulting low porosity surface also provides enhanced resistance to water-transported substances – such as chlorides – towards the reinforcement, and to air penetration that can drive processes such as carbonation.

Proven economic benefits over whole service life

The increased surface hardness and substantially improved resistance to degradation provided by Zemdrain can deliver proven economic benefits and cost savings over the whole service life of a structure.







Fibre concrete

Spacers and architectural sealing cones







Create architectural features using fibre concrete spacers and sealing cones

MAX FRANK extruded fibre reinforced concrete spacers and sealing cones provide an innovative means of turning a practical challenge into a positive design feature.

We can manufacture spacers with a variety of cover sizes and with many different profiles in accordance with BS 7973. MAX FRANK standard and premium spacers are designed to maximise the bond with the concrete and, where required, minimise the visible surface impact. The ability to choose the durability properties of your spacers, as well as the optimum profile, ensures the ideal solution for every project.

The application of shuttering using reusable tie bars inevitably results in conical recesses being left behind in the concrete. These can of course be sealed by conventional means but the use of specialist, fibre-reinforced concrete sealing cones opens up the possibility of adding a modern architectural design feature whilst at the same time as providing a quick, reliable and effective seal for these recessed holes, matching or contrasting with the existing concrete colour.









MAX FRANK - Formliners in use

Flood Defence schemes

Architectural retaining walls for flood alleviation projects complement the surrounding environment through the use of patterned formliners. CPF liners add longevity by producing a blemish-free surface finish.





Hotels, Spas, Education & Leisure facilities

Patterned liners transform otherwise plain concrete buildings into interesting structures. CPF liners are also used on such developments to prevent surface defects, for example, within swimming pool tank walls.







Waterfront, Coastal & Bridge applications

Economical and durable patterned formwork solutions for lengthy and continuous seawalls. CPF liners eliminate voids within the concrete, successfully contributing to the overall water-tightness and abrasion-resistance of the structure.







DOWNLOAD INSITEX® FORMLINER DATASHEETS: www.maxfrank.com

View the complete range of formwork liners and download PDF datasheets and application guidelines from our website. If you have any questions - sample requests, prices or just a chat about how we might be able to help with your next project - please contact our sales team on **01782 598041** or email **info@maxfrank.co.uk**





INTEGRATED SOLUTIONS

Virtually all our products can be customised and yet retain the ability to be installed together – creating unique, integrated solutions that are designed to save you time and money during the construction process and, at the same time, increase the project's lifespan.



FULL COMPLIANCE ENSURED

MAX FRANK construction systems fulfil the highest industry standards – from CARES & BBA approvals, Building Control & Warranty, to Fire Regulation compliance.



Max Frank Limited Clough Street, Hanley

Stoke-on-Trent, ST1 4AF Staffordshire United Kingdom

Tel. +44 (0)1782 598 041 info@maxfrank.co.uk www.maxfrank.com