COELAN

A WIDE RANGE OF OPTIONS

DECORATIVE COATINGS

CONTENTS

HIGH-QUALITY COELAN FLOORS

DISCOVER THE POSSIBILITIES

Our COELAN coating systems for floors indoors or outdoors on balconies, terraces, roofs and boats literally offer hundreds of possible combinations and designs. Of course, alongside an attractive finish, reliable protection of the building fabric and a robust surface that can meet all requirements are of equal importance. Our product range extends from our COETRANS systems, which protect building fabrics from penetrating moisture, to our COEPLAN floor coatings, which offer increased resilience, to our COELAN Boat Coating, which provides outstanding long-term protection even in this particular area of application. Perfectly matching products for a wide range of applications – with plenty of options for décor and colour...

Experience a personal floor finish thanks to completely personalised colour combinations.

WHAT IS COELAN?

COELAN is the perfect fusion of aesthetics and efficiency. Whether for balconies, terraces, staircases, access balconies, loggias or escape routes, **COELAN** offers the perfect floor coating for every area of application. There are hardly any limits to the design possibilities – thanks to the vast variety of colours, the desired personalised finish can always be achieved.

FOR EVERY SUBSTRATE

Every substrate has its own special requirements. Our liquid and flexible COELAN products suit all conditions.

VERSATILE DESIGN OPTIONS

With our coloured coating systems, we offer you a vast range of decoration options. There are no limits to your creativity.

SAFE FLOORS

COELAN features a high slip-resistance rating. Our floor coatings are highly durable and provide an excellent level of slip resistance.

HIGH RESILIENCE

COELAN not only looks good, but also ensure safety and robustness thanks to high-quality decorative materials.

ROBUST WATERPROOFING AND COATING WITH A SYSTEM

Perfectly efficient as a system: with our **COELAN waterproofing** in combination with **COELAN coatings**, you get a safe, perfectly matched system that won't let you down. Thanks to the vast range of design options, you can also find the perfect combination for the look of your project.

An example of the system structure using the **COELASTIC EVO waterproofing** and **KEMCO Decor Stone** for decoration:

5 **Decoration**
KEMCO Decor Stone with COETRANS 1-K Binder

4 **Bonding layer**
COETRANS 1-K Binder

3 **Waterproofing**
COELASTIC EVO waterproofing with COELAN Perforated Fleece

2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
concrete

PROVEN QUALITY FROM KEMPER SYSTEM

KEMPER SYSTEM has been the driving force in the field of liquid waterproofing and coating for over 60 years. As one of the world's leading manufacturers, we convince with the highest quality standards. Our products feature a CE marking and a European Technical Assessment (ETA) and are continuously tested and certified by numerous independent bodies. Quality, a spirit of innovation and our proximity to the user are values we also stand for internationally.

AS INDIVIDUAL AS YOU ARE

DESIGN OPTIONS

Colourful and unique, indoors and outdoors – our decorative **COELAN floor coatings** are very diverse and individual. Design your floor entirely according to your wishes with countless decoration options and individualised colour design. Whether classically discreet or bright and colourful, the **COELAN product range** allows you to create anything from subtle accents to large-scale effects. In addition to the visual benefits, the various interspersions also increase the slip resistance and offer high reliability and resilience thanks to the proven **KEMPER SYSTEM quality**.

OUR **DECORATION OPTIONS**

COLOURED COATINGS

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FOR INTERIOR AND EXTERIOR SURFACES

COLOURED COATINGS

Our **COELAN floor coatings** score points indoors and outdoors thanks to their variety of colours and are as strong and resilient as you need them to be for your project. Choose from our 12 different colours to find the right base layer for your substrate and its surroundings.

COELAN COATINGS **COLOUR DIVERSITY**

- Earth orange
- Glowing red
- Wine red
- Ice grey
- Misty grey
- Ivory beige
- Sahara beige
- Coffee brown
- Shell white
- Sea green
- Rock grey
- Deep sea black

DECORATIVE INTERSPERSION

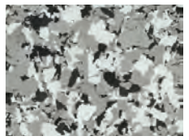
COELAN COLOURED FLAKES

COELAN Coloured Flakes can be used as decorative interspersion in a range of our coating systems that take a transparent top or sealing layer. The ready-to-use product is available in a variety of colour combinations and different sizes.

COELAN COLOURED FLAKES **OPTIONS**


Coral red

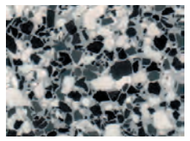

Terrazzo pastel


Pebble grey


Grey blue


Akoya


Silver grey


Terrazzo granite


Granite

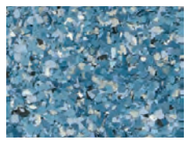

Brown grey


Beige brown


Amber


Ochre brown


Beige melange


Aquamarine

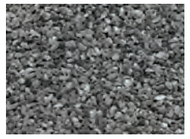
HIGH-QUALITY STONE SURFACES

KEMCO DECOR STONE / NATURAL STONES

The natural stones' wide variety of colours allows a vast scope of designs for all floors. Plain colours set off with motifs and multi-coloured contrasting mixtures show the harmonious interplay of the individual stones in their many facets. Here, taste and style are presented in combination with high resilience and slip resistance, as well as reliable protection thanks to UV and weather resistance.

KEMCO DECOR STONE / NATURAL STONES **OPTIONS**

Black

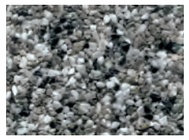


Anthracite

Light brown / terra

Dark beige

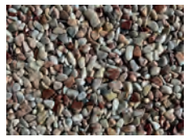
Light grey



Contrasting black

Contrasting brown

Chestnut



Copper / beige

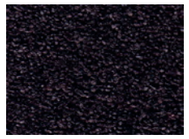
Contrasting sienna

DECORATIVE SURFACES

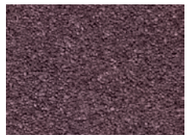
KEMCO COLOURED QUARTZ

With our coloured quartz, you get not only a decorative floor covering but a highly resilient surface at the same time, characterised by its temperature and weather resistance. Moreover, thanks to its slip-resistance rating, it is ideally suited for outdoor stairs, balconies and terraces. Of course, a wide variety of decorative options are also available.

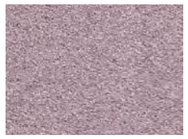
KEMCO COLOURED QUARTZ **OPTIONS**



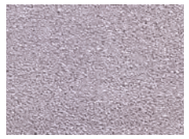
Graphite



Umber



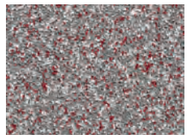
Agate



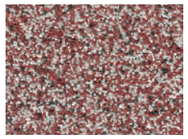
Papyrus

Ochre

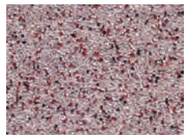
Grey / white / black



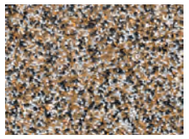
Grey / white / red



Red / white / black



Graphite / oxide / ivory



Yellow / white / black

OUR AREAS OF APPLICATION

CREATING PLACES OF WELL-BEING

FLOORS

Our **coloured floor coverings** are highly resilient and are perfect for entrance areas, staircases, public baths, bathrooms, living areas, office spaces, business premises, winter gardens and almost all other interior areas, as well as for commercial and industrial floors.

BALCONIES & TERRACES

Our **system solutions** are ideally suited for use on balconies, terraces, stairs, access balconies, loggias, escape routes and bridges – exactly where an easy-care, single-component liquid product is required.

ROOFS

Whether you have a metal roof, melted asphalt, plastic sheeting, a roof with in-situ PU foam, concrete, screed, bitumen sheeting or gritted bitumen sheeting, with antennas, parapets, lightning conductors, roof edges, outlet vents, gullies, skylight domes, chimneys or wall flashings – our **liquid synthetic roof waterproofing** masters every challenge.

BOATS

For wooden, steel, inflatable, aluminium or GRP boats or even wooden elements such as gangways, chairs, masts, fenders and rudders – **COELAN Boat Coating** offers a wide range of application options. Protect your boat against influences such as oil, fuel, solvents and of course wind, weather and UV light for many years!

FOUNDATION FOR MAXIMUM BENEFIT

THE FLOOR

The look and feel of a floor are crucial for the atmosphere of a room. But the focus should not be on colour and décor alone – equally important is the floor's durability. This focus on robustness means that our **COEPLAN floor coatings** are also ideally suited for use as industrial flooring.

We supply you with a wide variety of floor coverings that meet all requirements. Thanks to our optimally coordinated coating system, your ideas become floors that perfectly combine colour and function.

NOW IT'S GETTING COLOURFUL!

WITH COELAN COLOUR PASTES

COELAN colour paste is an additive product for colouring transparent, glossy or matt **COEPLAN floor coatings** made of polyurethane-based liquid synthetic material.

DIVERSITY AT ITS BEST

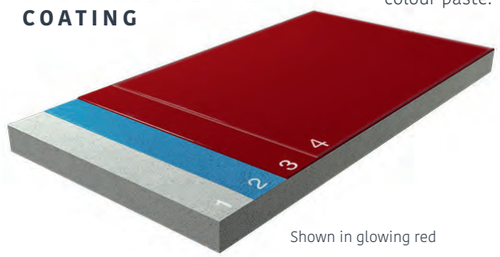
Highly stressed floor surfaces in commercial and private areas must be one thing above all: abrasion-resistant and very resilient. **COEPLAN floor coatings** made of polyurethane resin fulfil exactly this requirement. What's more, the product can be used almost limitlessly on private and commercial floors. And thanks to the wide range of colours in the **COELAN colour world**, the floor coating also meets every aesthetic challenge. Whether in the bathroom, living room, business area, winter garden or staircase – safety and creative colour design go hand in hand here.

COEPLAN SYSTEMS **FOR FLOORS**

COEPLAN

COLOURED FLOOR COATING

The all-round solution for a quick colour finish for the substrate with colour paste.



Shown in glowing red

4 **Sealing (optional)**
COEPLAN 2-K Super Sealant glossy

3 **Decorative coating**
COEPLAN 2-K Poured Coating PLUS with colour paste

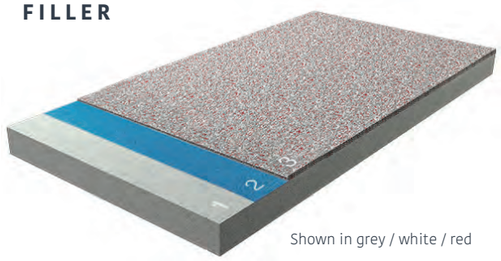
2 **Priming**
COELAN Primer EP PLUS

1 **Substrate**
Concrete / screed

COEPLAN CQ

COLOURED QUARTZ FILLER

The coloured quartz filler is perfect for use in entrances, staircases and almost any other interior area.



Shown in grey / white / red

3 **Decorative coating**
KEMCO QB1 Binder incl. KEMCO Coloured Quartz

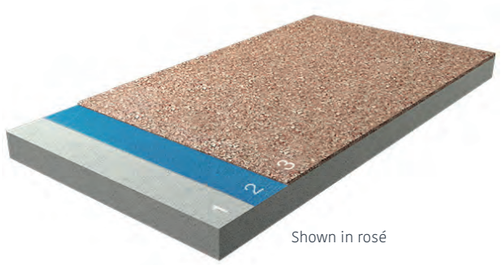
2 **Priming / bonding coat**
COELAN Primer EP PLUS inkl. KEMCO NQ 0408

1 **Substrate**
Concrete / screed

COEPLAN DS

DECOR STONE NATURAL STONE FILLER

This covering made of marble and granite perfectly combines a natural look, creative leeway and durability.



Shown in rosé

3 **Decorative coating**
KEMCO QB1 Binder incl. KEMCO Decor Stone

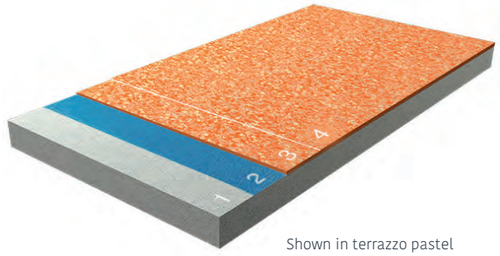
2 **Priming**
COELAN Primer EP PLUS inkl. KEMCO NQ 0408

1 **Substrate**
Concrete / screed

COEPLAN FC I

PARTIAL COLOURED FLAKES INTERSPERSION

Thanks to partial coloured flakes interspersion, the colour of the coating comes through perfectly.



Shown in terrazzo pastel

4 **Sealing**
COEPLAN 2-K Super Sealant glossy

3 **Decorative coating**
COEPLAN 2-K Poured Coating PLUS incl. COELAN Coloured Flakes

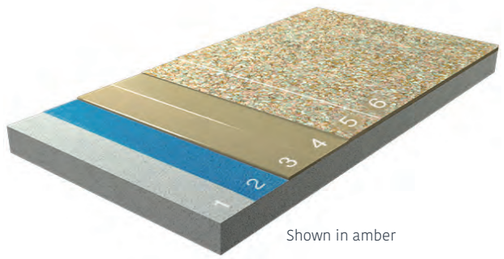
2 **Priming**
COELAN Primer EP PLUS

1 **Substrate**
Concrete / screed

COEPLAN FC II

FULL-SURFACE COLOURED FLAKES INTERSPERSION

An even colour pattern can be created by setting coloured flakes over the entire surface.



Shown in amber

6 **Sealing**
COEPLAN 2-K Super Sealant glossy

5 **Decorative interspersion**
COELAN Coloured Flakes

4 **Bonding layer**
COEPLAN 2-K Super Sealant glossy

3 **Coating**
COEPLAN 2-K Poured Coating PLUS

2 **Priming**
COELAN Primer EP PLUS

1 **Substrate**
Concrete / screed

MAKING THE OUTDOORS FUN

BALCONIES & TERRACES

Terraces and balconies are exposed to all kinds of weather, all year round. This can easily result in weak points, and the building fabric can be damaged. But we have the ideal solution for you!

With our **COETRANS system solution**, building fabrics are protected against moisture penetration. In addition, the system offers a wide range of visual design options. This way, an outdoor seat becomes a forever-beautiful place in no time.

VERSATILITY OUTDOORS

Our **COETRANS system solutions** are ideally suited for outdoor use on balconies, terraces, stairs, access balconies, loggias, escape routes and bridges – exactly where an easy-care, single-component liquid synthetic product is required.

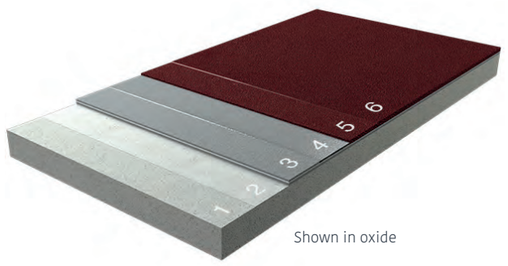
And that's not all. The design of our **COETRANS system solutions** can be fully personalised, whether in plain colour or with natural stones, coloured flakes or coloured quartz. Completely according to each personal taste.

SYSTEMS **FOR BALCONIES & TERRACES**

COETRANS DE

COLOURED QUARTZ INTERSPERSION

The decorative interspersion for better slip resistance, e.g. on outdoor stairs, access balconies, ramps or terraces.



Shown in oxide

6 **Final coating**
COETRANS Balcony Coating transparent

5 **Decorative interspersion**
KEMCO Coloured Quartz

4 **Bonding layer**
COETRANS Balcony Coating transparent

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

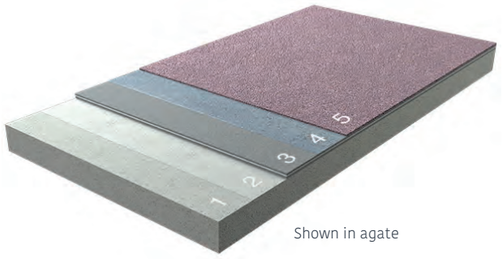
2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

COETRANS CQ I

COLOURED QUARTZ FILLER

Decorative and highly durable coating made of fine-grained KEMCO coloured quartz with a smooth surface.



Shown in agate

5 **Decorative coating**
KEMCO QB1 Binder incl. KEMCO Coloured Quartz

4 **Bonding coat**
COELAN Primer EP PLUS incl. KEMCO NQ 0408

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

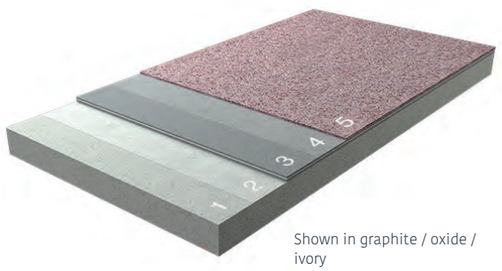
2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

COETRANS CQ II

COLOURED QUARTZ FILLER

Decorative and highly durable coating made of fine-grained KEMCO coloured quartz with a rough surface.



Shown in graphite / oxide / ivory

5 **Decorative coating**
COETRANS 1-K Binder incl. KEMCO Coloured Quartz

4 **Bonding layer**
COETRANS 1-K Binder

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

COETRANS FC I

PARTIAL COLOURED FLAKES INTERSPERSION

Balcony and patio coating, combined with colourful flakes for a partial-surface terrazzo-style look.

Shown in glowing red

6 **Final coating**
COETRANS Balcony Coating transparent

5 **Decorative interspersion**
COELAN Coloured Flakes in coral red (partial)

4 **Coating**
COETRANS Balcony Coating coloured

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

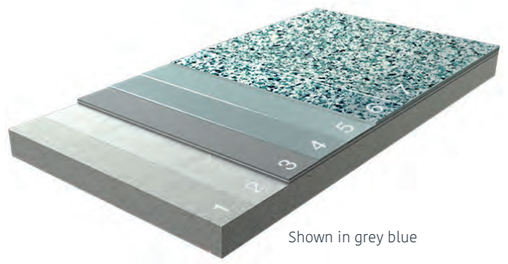
2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

COETRANS FC II

FULL-SURFACE COLOURED FLAKES INTERSPERSION

Balcony and patio coating, combined with colourful flakes for a full-surface terrazzo-style look.



Shown in grey blue

7 **Final coating**
COETRANS Balcony Coating transparent

6 **Decorative interspersion**
COELAN Coloured Flakes (full surface)

5 **Bonding layer**
COETRANS Balcony Coating transparent

4 **Coating**
COETRANS Balcony Coating coloured in misty grey

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

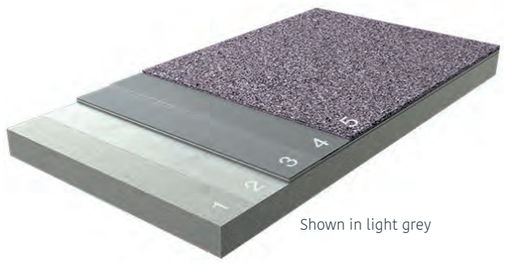
2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

COETRANS DS

DECOR STONE
NATURAL STONE FILLER

Protective layer made of natural stone with the most possible design options for balconies and terraces.



Shown in light grey

5 **Decorative coating**
KEMCO Decor Stone with COETRANS 1-K Binder

4 **Bonding layer**
COETRANS 1-K Binder

3 **Coating (with waterproofing effect)**
COETRANS 1-K Waterproofing Layer

2 **Priming**
KEMCO POX 2K-Primer

1 **Substrate**
Concrete / screed

INFO

All **COETRANS system solutions** can also be applied using **COELASTIC EVO** as a waterproofing instead of **COETRANS 1-K Waterproofing Layer**!

WE WOULD BE HAPPY TO ADVISE YOU!

TECHNICAL HOTLINE
+49 (0) 561 8295-5555

FURTHER INFORMATION IS AVAILABE AT
coelan.com

SAFE AND WATERPROOF

ROOF WATER-PROOFING

There are many types of roofs – and they can differ widely in appearance and efficiency. But whether it is a simple flat roof, a roof with solar panels, a green roof as a habitat or a classic pitched roof, one of its strongest requirements will be for reliable waterproofing.

The good news: **COELASTIC EVO** liquid waterproofing meets all requirements and provides long-term protection against moisture damage for the building fabric. The waterproofing fulfils the requirements set out in the relevant standards and passes the ETA-03/0059 European Technical Assessment.

COELASTIC EVO

COELASTIC EVO performs best as a seamless waterproofing in combination with **COELAN Perforated Fleece** for flat and slightly sloped roofs as well as for joints and penetrations – such as on balconies, terraces or flat roofs. The waterproofing is suitable for use on almost all substrates.

PRODUCT BENEFITS

- **BRIDGES CRACKS**
  Remains intact despite cracks developing in the substrate.
- **READY TO USE**
  Save time with less effort.
- **RESISTANT TO ROOT PENETRATION (FLL TEST)**
  Protects from root damage over the long term, boasting a high rhizome resistance.
- **UV AND WEATHER RESISTANT**
  Elevated resistance to the effects of UV radiation, temperature and humidity.

THE OPTIMAL LONG TERM PROTECTION

BOAT COATING

There is no question that a boat deck needs to be renovated every now and then. The effects and stresses of the weather are just too high. However, with the right boat coating, it is possible to lengthen the time between renovations.

This is exactly what our **COELAN Boat Coating** is designed for, as it brings reliable transparent or coloured long-term protection against weathering and physical stress to the deck.

COELAN BOAT PRIMER

Primer for hard and soft woods

PRODUCT BENEFITS

- FAST DRYING
- READY TO USE
- SINGLE-COMPONENT

COELAN BOAT COATING

For wood, metal and plastic substrates, available in gloss and matt finishes

PRODUCT BENEFITS

- BRIDGES CRACKS
- SINGLE-COMPONENT
- READY TO USE
- HIGH ABRASION RESISTANCE
- LIGHTFAST, UV AND WEATHER RESISTANT

THOUGHT OF EVERYTHING?

MATCHING COELAN PRODUCTS

COELAN also offers you supplementary materials for your successful project. Powerful individually – unbeatable in combination.

FLEECE

COELAN PERFORATED FLEECE

Our reinforcing layer for **COELAN coatings** and waterproofing.

CLEANER

COELAN UNIVERSAL CLEANER

A cleaner for tools and a thinner for some of our liquid synthetic materials.

THIXOTROPIC AGENT

COELAN THIXOTROPIC AGENT

Increases the thixotropic behaviour of **COELAN** liquid synthetic materials when added proportionally.

PRIMER

COELAN PRIMER EP PLUS

Our quick-drying primer for mineral substrates as well as wood and metal.

PRIMER

KEMCO POX 2K-PRIMER

An odourless primer for dry and damp substrates.

BINDER

COETRANS 1-K BINDER

Our surface protection system to be used with our coloured quartz and natural stones.

All product information is also available at **coelan.com**

APPLICATION INSTRUCTIONS

COELAN APPLICATION

Planning a renovation of balconies, (roof) terraces, loggias, access balconies, external staircases or glass surfaces means setting precise objectives for optimal, durable and economical long-term protection. As these areas are constantly exposed to the weather without protection, component movement, heat and frost can lead to cracks and cause moisture damage – with extensive repairs and refurbishment the direct result.

Due to the many stresses they are under as well as the different conditions of the building substances, surfaces in the outdoors must be cared for by qualified personnel using expert solutions. To handle the high stresses of mechanical use and environmental pollution, high-performance systems are particularly in demand here, and they also have to meet requirements for appearance through various processing techniques.

Step 1
Substrate testing and assessment

The most important requirement for the durability of **COELAN** products is the bond with the substrate. Therefore, testing, assessment and preparation of the substrate are of utmost importance. Balconies, terraces and patios can have many different substrates, e.g. old ceramic tiles, melted asphalt, old paint, concrete or screeds. According to the requirements of DIN 18365 for flooring works, any substrate that is to be treated must be firm, clean and free from all loose material, dust, dirt, oil and grease. According to the German Construction Contract Procedures (VOB), the contractor must test the substrate to check its suitability for the specified covering. They must immediately inform the client in writing if they have any doubts about the suitability of the substrate for the specified works.

1. CHECKING THE SUBSTRATE FOR MOISTURE

Screed and concrete surfaces can only be coated if their residual moisture has dropped below 5%. This is usually not until 28 days after laying the screed or placing the concrete. Substrates in contact with the soil must be adequately isolated against groundwater and rising damp (capillary moisture), e.g. by means of a gravel filter layer and horizontal damp-proof barrier. Waterproof concrete or screed does not constitute adequate protection against moisture penetration because they are permeable to water vapour. Moisture content measurements can be taken with a CM device or similar moisture meters. The residual moisture contents of 5% stated in the technical data sheets refer to the measurement using a CM device. Thus, the values are provided in mass percentage.

2. CHECKING THE STRENGTH OF THE SUBSTRATE FOR CONCRETE / SCREED

In all cases, the substrate must have adequate strength. The compressive strength of concrete and bonded screeds can be determined quickly with a rebound hammer (Schmidt hammer). They should have a value of at least 30 N/mm².

The pull-off strength is determined using an adhesion strength tester. The value must be 1.5 N/mm² on average, with no value lower than 1.0 N/mm². **COELASTIC EVO** waterproofing is elastic, has a high inherent strength and can bridge cracks.

Step 2
Preparing the substrate

The substrate must be prepared so that a strong, permanent bond can be achieved between the system to be applied and the substrate. To achieve this, the substrate must be consistently firm and free from all separating substances, sharp edges, burrs, flashes, fins, etc.

The choice of a suitable preparatory method depends on the condition and material of the existing surface and the requirements for and by the waterproofing system to be applied.

Aside from the “traditional” pre-treatment methods,

- Grinding (grinder)
- Cutting (angle grinder, floor saw)
- Chiselling (chisel)
- Hammering (chisel scaler, needle gun)
- Brushing (hand brush, rotary brush, brushing machine)
- Planing (planer)
- Sweeping (broom, magnetic broom, power sweeper)
- Blowing (hot / warm air)
- Vacuuming (industrial vacuum cleaner)

the following cleaning and blasting devices

- Water-jet cleaner up to 5 N/cm² (0.5 bar)
- Steam cleaner up to 5 N/cm² (0.5 bar)
- High-pressure water-jet cleaner up to 4,000 N/cm² (400 bar)
- Wet-blasting equipment with blasting medium recovery
- Wet vapour-abrasive sandblasting equipment
- Wet abrasive sandblasting equipment
- Dry-blasting units with blasting medium recovery
- Free jet pressure equipment
- Flame cleaning according to DVS 0302
- Liquid nitrogen cleaning
- Infrared radiation

are also described in publications (ZTV-SIB/DAfStb). Cleaning methods using solvents can be used as well, particularly in the case of greasy or atmospheric pollution and/or flexible synthetic sheeting.

Step 3
Preparing the substrate

1. FLATNESS OF THE SUBSTRATE

Substrates must be level and have a slope of 1–2%. The assessment of the flatness is based on DIN 18202 “Tolerances in building construction”, Table 3, Part 3. Applying a **COELAN** primer cannot compensate for unevenness; it therefore requires special treatment. Unevenness and irregularities must be levelled out either by removal or by using filling compounds or an EP mortar from **COELAN**.

The filling compound consists of a mixture of **KEMCO POX 2K-Primer** und **KEMCO FL Special Filler** with a mixing ratio of 1:1.5 or 1:3 by weight.

The filling or levelling compound is used for unevenness in the range of 2–6 mm. After drying, the EP mortar must be primed again using **COELAN Thixotropic Agent**.

2. SOILING

COELAN primersadhere little or very poorly to soiled substrates. For this reason, depending on the type of soiling, the surface must be thoroughly cleaned until it is completely uncontaminated, e.g. using an industrial vacuum cleaner, **KEMCO MEK Cleaning Agent**, scouring machines or flame cleaners. Any bitumen or products containing creosote adhering to the substrate must be removed completely by planing or blast-cleaning.

3. POROUS AND LOOSE CONSTITUENTS

Laitance, cement flakes, mortar residue and all surface constituents that are not permanently attached to the substrate, e.g. old paint, must be removed by chiselling, planing, blast-cleaning or grinding prior to applying the primer and can be levelled as described in point 1 above.

4. CRACKS IN THE SUBSTRATE

On substrates with a cement binder, a network of surface cracks does not have any detrimental effect on **COELAN product systems**; however, increased primer consumption must be allowed for because the substrate must be fully saturated. Continuous shrinkage cracks and other cracks resulting from structural movements must be assessed on a case-by-case basis according to the state of the art and can be filled using appropriate methods.

5. JOINTS IN THE SUBSTRATE

Joints in the substrate should be straight, with consistent width and stable edges. Any damage can be repaired with filling compounds or mortar as described in point 1, “Flatness of the substrate”.

Existing expansion joints in the substrate must be levelled out and finished with a jointing compound (e.g. **KEMCO GUM Jointing Compound**).

6. VOIDS

In the case of voids, e.g. under old tile coverings, the tiles must be removed and the void must be made good with filling or levelling compound.

INFO

Relevant data sheets and standards

- DIN 18299 – General rules applying to all types of construction work
- DIN 18336 – Waterproofing
- DIN 18352 – Wall and floor tiling works
- DIN 18353 – Laying floor screed
- DIN 18365 – Flooring works
- DIN 18202 – Tolerances in building construction
- DIN 18531–18534
- COELAN technical data sheets

Processing aid for the application of COELAN product systems

MOISTURE

As described in the relevant rules and regulations and in the manufacturers‘ application guidelines, waterproofing and coatings – made of liquid synthetic materials – must have a full-surface bond to the substrate. Moisture can reduce this bond.

Moisture can occur as:

- Water on the surface to be waterproofed
- Extremely high air humidity
- Moisture/water in joints (e.g. thermal insulation), expansion joints, grooves, and gaps
- Moisture/water in the area of large cavities, in the case of high surface roughness on mineral substrates
- Condensate or water accumulation on metallic substrates when the temperature falls below the dew point
- Condensate or accumulation of water under containers left out
- Rain and snow

As described in the relevant rules and regulations (see rules for waterproofing/DIN) and in the **KEMPER SYSTEM** application guidelines, waterproofing – made of liquid synthetic materials – must have a full-surface bond to the substrate. This is achieved with appropriate preparation of the substrate to be waterproofed. Such measures include blasting a concrete surface to be primed or drying the substrate. These measures are well known and commonly used.

DEW POINT

The necessary measures for substrate preparation are well known and commonly used by everyone who deals with building restoration. Less well known, but no less important, are situations in which bonding is prevented due to condensate forming on the substrate to be treated. Condensation forms when the temperature of the substrate is below the dew point. The dew point is the surface temperature at which the water in the surrounding air condenses on a surface. This water forms a separating film and the full-surface bond is no longer achieved.

Basically, there are two ways to determine the dew point:

1. Taking measurements

The dew point can be determined using a measuring device. The values measured can be used to determine the dew point from the table below.

2. Using a table

By measuring the surface temperature of the area to be treated, the relative humidity and the ambient temperature, the dew point can be determined from the table below. When applying liquid products, the temperature measured at the surface must be 3K above the identified dew point.

Substrates should always be dry. Damp substrates must always be allowed to dry prior to the application of **COELAN** products. If the containers are left outdoors overnight, water may form or collect on them (e.g. dew, rain). This water must not be allowed to get into the containers when they are opened. If fleece is stored incorrectly, moisture can develop in the fleece and in or on the application tools.

If you have any questions regarding the application conditions or the substrate to be processed, please contact our Technical Advisory Service.

Air temp.	Dew point temperatures in °C at a relative humidity of…										
(°C)	**45 %**	**50 %**	**55 %**	**60 %**	**65 %**	**70 %**	**75 %**	**80 %**	**85 %**	**90 %**	**95 %**
2	-7.77	-6.56	-5.43	-4.40	-3.16	-2.48	-1.77	-0.98	-0.26	0.47	1.20
4	-6.11	-4.88	-3.69	-2.61	-1.79	-0.88	-0.09	0.78	1.62	2.44	3.20
6	-4.49	-3.07	-2.10	-1.05	-0.08	0.85	1.86	2.72	3.62	4.48	5.38
8	-2.69	-1.61	-0.44	0.67	1.80	2.83	3.82	4.77	5.66	6.48	7.32
10	-1.26	0.02	1.31	2.53	3.74	4.79	5.82	6.79	7.65	8.45	9.31
12	0.35	1.84	3.19	4.46	5.63	6.74	7.75	8.69	9.60	10.48	11.33
14	2.20	3.76	5.10	6.40	7.58	8.67	9.70	10.71	11.64	12.55	13.36
15	3.12	4.65	6.07	7.36	8.52	9.63	10.70	11.69	12.62	13.52	14.42
16	4.07	5.59	6.98	8.29	9.47	10.61	11.68	12.66	13.63	14.58	15.54
17	5.00	6.48	7.92	9.18	10.39	11.48	12.54	13.57	14.50	15.36	16.19
18	5.90	7.43	8.83	10.12	11.33	12.44	13.48	14.56	15.41	16.31	17.25
19	6.80	8.33	9.75	11.09	12.26	13.37	14.49	15.47	16.40	17.37	18.22
20	7.73	9.30	10.72	12.00	13.22	14.40	15.48	16.46	17.44	18.36	19.18
21	8.60	10.22	11.59	12.92	14.21	15.36	16.40	17.44	18.41	19.27	20.19
22	9.54	11.16	12.52	13.89	15.19	16.27	17.41	18.42	19.39	20.28	21.22
23	10.44	12.02	13.47	14.87	16.04	17.29	18.37	19.37	20.37	21.34	22.23
24	11.34	12.93	14.44	15.73	17.06	18.21	19.22	20.33	21.37	22.32	23.18
25	12.20	13.83	15.37	16.69	17.99	19.11	20.24	21.35	22.27	23.30	24.22
26	13.15	14.84	16.26	17.67	18.90	20.09	21.29	22.32	23.32	24.31	25.16
27	14.08	15.68	17.24	18.57	19.83	21.11	22.23	23.31	24.32	25.22	26.10
28	14.96	16.61	18.14	19.38	20.86	22.07	23.18	24.28	25.25	26.20	27.18
29	15.85	17.58	19.04	20.48	21.83	22.97	24.20	25.23	26.21	27.26	28.18
30	16.79	18.44	19.96	21.44	23.71	23.94	25.11	26.10	27.21	28.19	29.09
32	18.62	20.28	21.90	23.26	24.65	25.79	27.08	28.24	29.23	30.16	31.17
34	20.42	22.19	23.77	25.19	26.54	27.85	28.94	30.09	31.19	32.13	33.11
36	22.23	24.08	25.50	27.00	28.41	29.65	30.88	31.97	33.05	34.23	35.06
38	23.97	25.74	27.44	28.87	30.31	31.62	32.78	33.96	35.01	36.05	37.03
40	25.79	27.66	29.22	30.81	32.16	33.48	34.69	35.86	36.98	38.05	39.11
45	30.29	32.17	33.86	35.38	36.85	38.24	39.54	40.74	41.87	42.97	44.03
50	34.76	36.63	38.46	40.09	41.58	42.99	44.33	45.55	46.75	47.90	48.98

TEMPERATURES DURING APPLICATION

Based on our experience, the temperature range at which **COELAN** product systems can be applied flawlessly is between +5 °C and +30 °C (see also corresponding technical data sheets). Colder application temperatures can lead to slower curing or even prevent curing altogether. Warmer application temperatures can lead to premature curing, unwanted skin formation and even the formation of bubbles.

WATERPROOFING ACCORDING TO REGULATIONS

If waterproofing is required in accordance with regulations, you can use **COETRANS 1-K Waterproofing Layer**. **COELASTIC EVO** is a waterproofing system featuring a European Technical Assessment (ETA) and meeting all requirements in the highest classes. Reinforced with a fleece layer, **COELASTIC EVO** forms a seamless waterproofing that offers the highest level of safety and meets all requirements. For further information, please refer to our technical data sheets.

Priming table

For a coating system to form a permanent bond with the substrate, careful priming until all pores are closed is necessary.

Consumption depends on the absorbency of the different substrates.

Product	Substrate	Consumption	Drying time*
KEMCO POX 2K-Primer	mineral, ceramic	min. 250–400 g/m²	approx. 12 h
COETRANS Transparent Primer	mineral, ceramic	min. 250–400 g/m²	approx. 2 h
KEMCO POX 2K-Primer	previous coating (COELAN)	min. 250–400 g/m²	approx. 0.5 h
COELAN Flexo Primer	previous coating (COELAN)	min. 250–400 g/m²	approx. 1 h

* at 23 °C.

Consumption

CONSUMPTION **COETRANS BALCONY COATING TRANSPARENT**

Product	Consumption
COETRANS Transparent Primer	min. 250 g/m²
COETRANS Balcony Coating transparent	min. 1.200 g/m²

CONSUMPTION **COETRANS BALCONY COATING COLOURED**

Product	Consumption
COETRANS 1-K Waterproofing Layer	min. 800 g/m²
COETRANS Balcony Coating coloured	min. 600 g/m²

CONSUMPTION **COETRANS FC**

Product	Consumption
COETRANS Balcony Coating coloured	min. 250 g/m²
COETRANS Balcony Coating transparent (as bonding layer)	min. 150–200 g/m²
COELAN Coloured Flakes (full-surface interspersion)	min. 700 g/m²
COELAN Coloured Flakes (partial interspersion)	min. 100 g/m²
COETRANS Balcony Coating transparent (as sealant)	min. 500 g/m²

CONSUMPTION **COETRANS DE**

Product	Consumption
COETRANS 1-K Waterproofing Layer	min. 800 g/m²
COETRANS Balcony Coating transparent (as bonding layer)	min. 150–200 g/m²
KEMCO Coloured Quartz	min. 4 kg/m²
COETRANS Balcony Coating transparent (as sealant)	min. 500 g/m²

CONSUMPTION **COETRANS DS**

Product	Consumption
COETRANS 1-K Waterproofing Layer	min. 800 g/m²
COETRANS 1-K Binder (as bonding layer)	min. 150 g/m²
COETRANS 1-K Binder	min. 950 g/m²
KEMCO Decor Stone / Natural Stones	min. 12 kg/m²

CONSUMPTION **COETRANS CQ**

Product	Consumption
COETRANS 1-K Waterproofing Layer	min. 800 g/m²
COETRANS 1-K Binder (as bonding layer)	min. 150 g/m²
COETRANS 1-K Binder	min. 700 g/m²
KEMCO Coloured Quartz	min. 7 kg/m²

REFERENCES

COELAN IN USE

Observatory, Fuldatal

A compass rose for the Rothwesten observatory

Since July 2019, the popular public observatory in the district of Rothwesten, Fuldatal, has boasted a weather-resistant and robust floor with that “certain something”. After more than 50 years as a venue for astronomy enthusiasts, it was time to renovate the domed room inside the observatory. For this purpose, **COELAN Primer EP PLUS** was first applied and scattered with **KEMCO NQ0408 Natural Quartz**. In the second step, the **KEMCO Decor Stones** in combination with the solvent-free **KEMCO QB1 Binder** were used to form the unique decorative coating in the shape of a compass rose.

PROJECT DATA

OBJECT: Observatory

LOCATION: Fuldatal

YEAR OF EXECUTION: 2019

SPECIALIST: Die Maler-Engel Patrick Seydler

PRODUCTS: COELAN Primer EP PLUS,
KEMCO NQ0408 Natural Quartz,
KEMCO Decor Stones with
KEMCO QB1 Binder

SERVICE, ADVICE AND CONTACT INFORMATION

FOR PROFESSIONALS, BY PROFESSIONALS

One of the quality features of **COELAN** is the proximity to the user. We also embody this philosophy when it comes to our service. Our expert advisers are there for you worldwide, thanks to our international locations and sales networks. With technical advice, training or on-site project support – **COELAN** guides you through to the best possible result for your project.

OUR SERVICE PROMISE

- Expert advice, from the product to the finished project
- Preparation of maintenance plans
- Worldwide support and training on site

QUESTIONS?

WE WOULD BE HAPPY TO ADVISE YOU!

Technical hotline

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Mon.–Thu.: 7.30 am to 5.30 pm
Fri.: 7.30 am to 3.30 pm

Sales hotline

+49 (0)561 8295-5568

Mon.–Thu.: 7.30 am to 5.30 pm
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