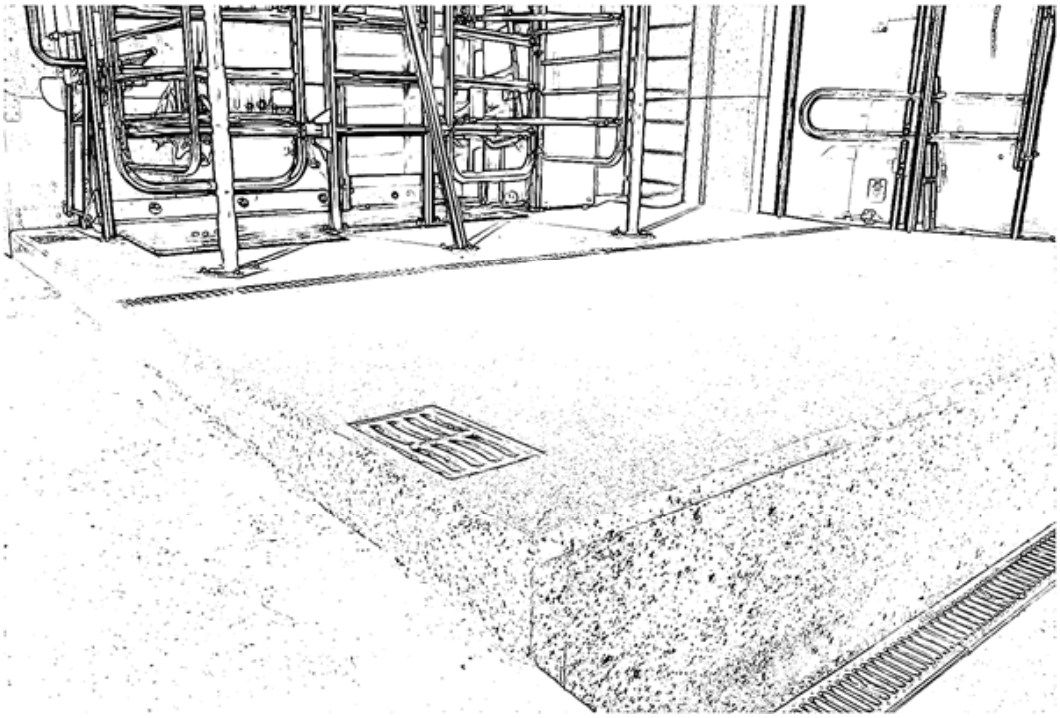
MEMO – English

DeLaval surface coating



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Safety precautions

Warning! *Chemicals must always be handled with care and common sense. DeLaval Surface coating is no exception. Sensitive people can suffer from skin problems when working with epoxy-based materials.*

Therefore, anyone working with DeLaval Surface coating must always wear appropriate protective clothing. This means overalls, protective gloves, safety glasses and, if necessary, a breathing mask.

The Health and Safety at Work recommendations must always be followed.

Do you have any questions regarding protective measures or product information?

Do not hesitate to contact a responsible person who can help you.

Keep your own health in mind – you only have it once!

Safety instructions

Mixing
Safety glasses with side shields must be used wherever there is a risk of splashing.

Working
When working with the compound materials neoprene gloves shall be worn. Don’t make a mess – keep everything clean – organise the work.

International safety instructions

For more detailed instructions about each product, check the international and local safety regulations in the multifolder.

First Aid

If the worst happens

Splashes in the eyes
Rinse under running water for at least 15 minutes. Seek medical help.

Spillage on the skin
Remove the spilled material immediately, then wash thoroughly with soap and water.

Ingestion (swallowing)
Drink water immediately. Do not encourage vomiting. Seek medical help.

Organise the work

Store material
Store the material close to the working area at room temperature (20˚C).

Work areas
Arrange separate areas, one area for mixing, another for storage at room temperature and a sack for harmful waste.

Prepare working

Rub the hands with skin cream. Put on protective equipment like:

- Overalls, gloves, safety glasses, breathing mask, knee protection

After mixing
Put the tops or lids back on empty packaging and put it into the assigned waste sack.

While working
Keep the working area clean. Do not eat, drink or smoke while handling with epoxy products.

After working
Put empty containers, brushes, rollers and tape into the waste sack. Clean up the mixing place. Change dirty clothing and clean the tools with Acetone after use. Clean hands and skin with soap and water.

Wasting

Note! Left over materials must be mixed together and cured before wasted due to environmental protection.

Protective equipment

Overalls

- With long sleeves and leggings.
- Preferably have a special set of overalls for working with DeLaval Surface coating (then change back out of these as soon as work is finished).

Protective gloves

Article number:

96500880 , 96500881 , 96500882 , 96500883 (S - XL)

- Made of PVC.
- Long gauntlets covering the forearm.

Safety glasses

No. 97164419

- Shall protect the complete area around the eyes and be equipped with side shields.
- Shall be used at all times when handling DeLaval Surface coating.

Breathing mask

No. 99944886

- Used when necessary, especially for people sensitive to epoxy products and in rooms with low fresh air ventilation.

Knee protection

No. 99944888

- Use knee protection when working with floor applications.

DeLaval surface coating

General description

DeLaval Surface coating is a complete range of products to give walls and floors a protective, hygienic and good-looking surface.

The different products offer a number of solutions to give a specific area the required surface structure and colour.

All surfaces treated with Surface coating products have high resistance to acid, thus preventing damage to concrete. By adding sand on floor applications the surface gets coarse and non slippery.

All the coating products are free from solvents and odours.

Which materials can be treated?

- Concrete
- Brick stone
- Wood
- Tiles
- Gypsum

Where to use Surface coating?

All floors and walls on the farm can be given a surface that fulfils the special requirements.

Feeding table	Feeding tables are attacked by fodder, mechanical treatment and silage acids. It needs a surface that is hygenic, durable and easy to clean.
Milk room floor	The milk room floor is attacked by lactic acid, high-pressure cleaning, acid detergents etc. It needs a hygienic and an easily-clean non-slip surface.

General description

Milking parlour and parlour pit	The milking parlour floor is attacked by manure, detergents, udder dipping products, high-pressure cleaning and daily cow traffic. It needs an easily-cleaned non-slip surface, resistant to detergents and strong high-pressure cleaning.
Colour walls in the barn, milk room and parlour	Walls are exposed to severe dirt and corrosive chemicals. They need an easily-cleaned surface that can stand daily wear and tear and high pressure cleaning. For chemical resistance top coating is needed.
Silo walls	The silo walls are exposed to fodder and silage acids. They need a hygienic surface that makes cleaning and packaging work easy. The surface must also be resistant to chemical and mechanical attacks.
Silo floor	Also the silo floor is exposed to fodder and silage acids. If the surface is uneven mould can gain a foothold. It needs a hygienic and durable surface. The surface must also be resistant to chemical and mechanical attacks.
Office and changing room	Office and changing room floors are exposed to dirt and wear. They need to be easily-cleaned and with decor sand or decor flakes they also are good-looking.
To repair damaged concrete	DeLaval Surface coating allows durable repairs of damaged concrete. It is an important preparatory work to repair the concrete before starting the normal application.

Product range

The DeLaval Surface coating range contains the following products:

Primer	Priming before all DeLaval Surface coating applications, to seal the substrate and to secure a proper adhesion of the surface coating. Use primer 100% epoxy for all dry substrates. Use DPM (Damp Proof Membrane) for fresh, humide substrate or as a damp membrane.
Colour	For painting walls in milk rooms, parlours and floors in office rooms. Two layers are required if bright colours are used.
Transparent	For floor applications in milk production on feeding tables, parlours and in milking room. For long lasting, high quality applications it is used as top-coating.
FC180	For floor applications in milk production on feeding tables, parlours and in milking rooms. The fast curing effect allows using the applied surface the same day. In combination with pigment powder, you can use it as a fast curing top-coating. Together with Tixfiber it is also used for reparation of damaged concrete.
A500	For thick-film painting of silo walls and other surfaces where acid resistance is required, e.g. feeding tables. Applied in two layers.
Sand	Natural sand is one of the main components for the floor applications. It is used for building up the structure and giving a non-slippery surface. Decor sand has the same features as natural sand and is added to brighten up rooms.
Decor flakes	For pleasant appearance in combination with Colour or A500.
Pigment	Pigment is for colouring floor applications and for FC180 as top coating solution.
Repair	To repair damaged floors.

General description

Fix	For attaching/ joining troughs and concrete elements.
Tixfiber	A tixfiber agent that is making the epoxy thicker (higher viscosity). It is needed for forming a rounded joint between wall and floor. It is also used together with FC180 for reparation of damaged concrete.
Additive	For a new epoxy application on old cured epoxy. Guaranties a perfect adhesion between the epoxy layers.

Solution overview

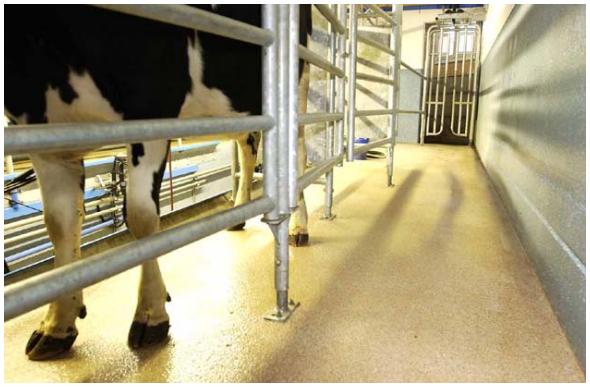
FEEDING TABLE / SILO FLOOR / SILO WALL				
Acid resistant, resistant to fair wear and tear, hygienic, smooth surface				
Class	**Method**	**Products**	**kg/m²**	**Comments**
**	Epoxy rolled-on	Primer 100% epoxy	0.3	Low cost alternative with a high resistance to acid. The surface can be used after 36 hours. Thickness 1.2 mm.
		A 500 in 2 layers	0.5	
***	Epoxy with natural sand applied	Primer 100% epoxy	0.3	Excellent hygienic feeding surface. Durable, easy to clean, resistant to fair wear and tear, resistant to strong acid. Surface can be used after just 24 hours.Thickness 2 mm.
		Transparent	1.3	
		Natural sand	2.0	
		Pigment as an option	0.08	
***	Fast curing epoxy with natural sand applied	FC180 as a primer	0.3	Excellent hygienic feeding surface. Durable, easy to clean, resistant to fair wear and tear, resistant to strong acid. Fast curing, the surface can be used after just 8 hours.Thickness 2 mm. FC180 becomes yellowish when applying without pigment powder.
		Natural sand	0.5	
		FC180	1.3	
		Natural sand	2.0	
		Pigment as an option	0.08	

FLOOR FOR: MILKROOM / PARLOUR / PIT / ALLEY / OFFICE and CHANGING ROOM				
Acid resistant, resistant to fair wear and tear, hygienic, non-slip surface				
Class	**Method**	**Products**	**kg/m²**	**Comments**
**	Epoxy with natural/ decor sand	Primer 100% epoxy	0.3	Excellent hygienic surface. Durable, easy to clean, resistant to fair wear and tear, resistant to acid. Surface can be used after 48 hours.Thickness 2 mm.
		Transparent	1.3	
		Natural/ decor sand	3.0	
**	Epoxy with decor sand	Primer 100% epoxy	0.3	Excellent hygienic surface. Durable, easy to clean, resistant to fair wear and tear, resistant to acid. Surface can be used after 48 hours.Thickness 2 mm.
		Transparent	1.3	
		Decor sand	3.0	
***	Epoxy with natural/decor sand and top coating	Primer 100% epoxy	0.3	Excellent hygienic and non-slip surface. Durable, easy to clean, resistant to fair wear and tear, resistant to strong acid. Surface can be used after 48 hours. Thickness 3 mm.
		Transparent	1.3	
		Natural/ decor sand	4.0	
		Transparent top coating	0.3	
***	Epoxy with decor sand and top coating	Primer 100% epoxy	0.3	Excellent hygienic and non-slip surface. Durable, easy to clean, resistant to fair wear and tear, resistant to strong acid. Surface can be used after 48 hours. Thickness 3 mm.
		Transparent	1.3	
		Decor sand	4.0	
		Transparent top coating	0.3	
***	Fast curing epoxy with natural sand and top coating	FC180 as a primer	0.3	Excellent hygienic and non-slip surface. Durable, easy to clean, resistant to fair wear and tier, resistant to strong acid. Fast curing the surface can be used after just 12 hours. Thickness 3 mm. FC180 becomes yellowish when applying without pigment powder.
		Natural sand	0.5	
		FC180	1.3	
		Natural sand	4.0	
		FC180 as a top coating	0.3	
		Pigment as an option	0.08	

COLOUR FLOOR / WALL				
Acid resistant, resistant to fair wear and tear, hygienic and decorative				
Class	**Method**	**Products**	**kg/m²**	**Comments**
**	Colour rolled-on	Primer 100% epoxy	0.3	Good, decorative surface protection for the office and changing rooms. Thickness 1.2 mm.
		Colour in 2 layers	0.4	
***	Colour rolled-on with decor flakes and a top coating	Primer 100% epoxy	0.3	Excellent hygienic surface. Durable, easy to clean, resistant to fair wear and tear, resistant to strong acid. Surface can be used after 48 hours. Thickness 1.5 mm.
		Colour in 2 layers	0.4	
		Decorflakes	0.017	
		Transparent top coating	0.3	

DeLaval surface coating

Product information



DeLaval Surface coating products are suitable to use within agriculture where high demands are placed on resistance to wear, adhesiveness, hygienic, non slipperiness and chemical resistance.

The Surface coating products are two-component products. All of them are free of solvents and odours which means that the products can be used indoors, even in the presence of livestock. DeLaval Surface coating is non-flammable.

Adhesion to other construction materials, like concrete, brick stones, wood and tiles, is very good. Repairs are carried out in a short time, just before the application starts. A correctly laid DeLaval Surface coating will have a very long life time.

The quality of the end result when the product has been applied depends very much on whether the preparation and application methods have been correctly carried out as described in this system book.

The acid resistance of DeLaval Surface coating is an effective shield against acid attack and ensures a much longer life time for repaired and overlaid areas.

DeLaval Surface coating products are manufactured in accordance with ISO 9001 standards, with high quality and frequent inspections.

Chemical testing

Chemical resistance has been tested for most products and the results are presented on the following product information sheets.

DeLaval Surface coating, Primer 100% epoxy

DeLaval Surface coating Primer 100% epoxy is a two-component 100% epoxy primer.
Primer is always used as a base preparation before any other Surface coating product is applied.

Art. No.		
91356901	**1.6 kg**	**1.0 kg A + 0.6 kg B**
91356809	**8.0 kg**	**5.0 kg A + 3.0 kg B**

Application area

Used to ensure best adhesion to the substrate. Primer is always used as a base preparation before any other DeLaval Surface coating product. Make sure the substrate is pre-treated correctly.

Chemical resistance

Not relevant.

Mixing ratio

Do not dilute with water! 10 parts of component A (base) mixed with 6 parts of component B (hardener) by weight. *See mixing table below.*

Consumption

Approx. 0.3 kg/ m²

Environment

Product is non-flammable and free from solvents. It gives no odour or taste.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life

Higher temperature means shorter working time. The mixed product must be used within 15 minutes at +25°C, 20 minutes at +18°C and 40 minutes at +10°C.

Drying time

3 hour at +25°C, 4 hours at +18°C and 24 hours at +10°C. Dry weather conditions and good ventilation are necessary for the above times to be applicable. Fully cured after 5–7 days at +20°C, longer at lower temperatures.

Colour

Clear/yellowish

Tool cleaning

Clean immediately after use with solvents such as acetone.

Storage

12 months in unopened packaging.

Mixing table per components kg		
Total	**A**	**B**
0.8	0.50	0.30
1.6	1.00	0.60
2.4	1.50	0.90
3.2	2.00	1.20
4.0	2.50	1.50
4.8	3.00	1.80
5.6	3.50	2.10
6.4	4.00	2.40
7.2	4.50	2.70
8.0	5.00	3.0

DeLaval Surface coating, primer DPM

DeLaval Surface coating primer DPM (Damp Proof Membran) is a two-component 100% epoxy primer for damp and humid concrete.
Primer is always used as a base preparation before any other Surface coating product is applied.
Art. No.
91356910 **8.0 kg** **5.0 kg A + 3.0 kg B**

Application area

For use as primer, gives excellent adhesion to damp and fresh concrete (3-4 day old) and steel. If any dry areas occur, apply additional DPM Primer. If the concrete is very porous or when used as a moisture barrier, two coats of 0.35 kg/ m² each is recommended. Make sure the substrate is pre-treated correctly.

Chemical resistance

Not relevant

Mixing ratio

Do not dilute with water! 10 parts of component A (base) mixed with 6 parts of component B (hardener) by weight. *See mixing table below.*

Consumption

For normal application, approximately 0,35 kg/ m².
For moisture barrier or porous concrete, apply two coats of 0,35kg/ m² each.

Environment

Product is non-flammable and free from solvents. It gives no odour or taste.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life

Higher temperature means shorter working time. The mixed product must be used within 40 minutes at +25°C, 50 minutes at +18°C and 90 minutes at +10°C.

Drying time

6 hours at +25°C, 9 hours at +18°C and 24 hours at +10°C. Dry weather conditions and good ventilation are necessary for the above times to be applicable. Fully cured after 5–7 days at +20°C, longer at lower temperatures.

Colour

Clear/yellowish

Tool cleaning

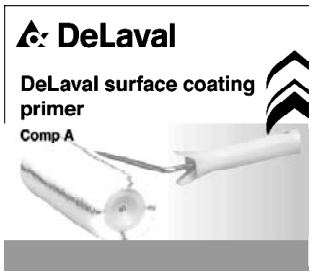
Clean immediately after use with solvents such as acetone.

Storage

12 months in unopened packaging.

Mixing table per components kg		
Total	**A**	**B**
0.8	0.50	0.30
1.6	1.00	0.60
2.4	1.50	0.90
3.2	2.00	1.20
4.0	2.50	1.50
4.8	3.00	1.80
5.6	3.50	2.10
6.4	4.00	2.40
7.2	4.50	2.70
8.0	5.00	3.0

DeLaval Surface coating, Primer



DeLaval Surface coating Primer is a fast-curing two-component epoxy primer that is diluted with water before use.
Primer is always used as a base preparation before any other Surface coating product is applied.
Art. No.
91356804 **6 kg** **3.0 kg A + 3.0 kg B**

Application area	Used to ensure adhesion to the substrate. Primer is always used as a base preparation before any other DeLaval Surface coating product. Make sure the substrate is prepared correctly.
Chemical resistance	Not relevant.
Mixing ratio	1 part of component A (base) mixed with 1 part of component B (hardener) by weight. Dilute with 10% cold water to fluid consistency.
Consumption	Approx. 0.2 kg/ m².
Environment	Water soluble, non-flammable, giving no odour and no taste.
Working temperature	The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.
Pot life	The mixed product must be used within 60 minutes at +18°C. Higher temperature means shorter working time.
Drying time	1 hour at +25°C, 2 hours at +18°C and 4 hours at +10°C. Dry weather conditions and good ventilation are necessary for the above times to be maintained. Fully cured after 5–7 days at 20°C, longer at lower temperatures.
Colour	Light grey, semi-gloss.
Tool cleaning	Clean with soap and warm water.
Storage	12 months in unopened packaging. Keep from freezing.

DeLaval Surface coating, Colour

DeLaval Surface coating Colour is a two-component epoxy paint. It gives a glossy surface with very good resistance to normal wear and tear.

Art No.		
91356850	**9 kg**	**Blue**
91356851	**9 kg**	**White**
91356852	**9 kg**	**Red**
91356853	**9 kg**	**Green**
91356854	**9 kg**	**Yellow**
91356855	**9 kg**	**Blue-grey**
91356856	**9 kg**	**Ivory**
61356857	**9 kg**	**Grey**

9 kg structure contains Comp A 1.5kg + Comp B 7.5kg.

Application area

Used to paint concrete and wood surfaces indoors. Mainly used for walls.

Chemical resistance

High resistance to chemicals in concentrations normally found in agriculture.
Discolouring can occur in contact with high concentrated acids. Spilt acidic washing agents and other concentrated chemicals must be rinsed off immediately with water.
Very high resistance to chemicals, including acids when using Surface coating Transparent as top coating.
Avoid hot water and acid spillage on the surface for the first 7 days.

Mixing ratio

1 part of component A (base) mixed with 5 parts of component B (hardener) by weight. Then diluted with 10% cold water.

Consumption

Approx. 0.2 kg/m² per layer. Two layers are recommended.

Environment

Water soluble, solvent-free, non-flammable, giving no odour and no taste.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.
High relative humidity >65% can result in reduced gloss.

Pot life

The mixed product must be used within 60 minutes at +18°C. The higher the temperature the shorter the working time.

Drying time	5 hours at +25°C, 8 hours at +18°C, 16 hours at +10°C, Dry weather conditions and good ventilation are necessary for the above times to be maintained. Fully cured after 5–7 days at 20°C.
Colour	White, ivory, grey, blue-grey, blue, red, green, yellow.
Tool cleaning	Clean with soap and warm water.
Storage	12 months in unopened packaging. Keep from freezing.

Chemical resistance

Test	4 hours	1 day	1 week	4 weeks
Ammonia 25%	5	5	5	5
Petrol	4	3	2	2
Brake fluid	5	4	4	3
Diesel oil	5	5	5	5
Distilled water	5	5	5	5
Lactic acid 50%	5	4	2	2
Lactic acid, 100%	5	4	2	2
Formic acid, 10%	3	2	2	2
Formic acid, 20%	4	3	2	2
Grumme (soap)	5	5	5	5
Nitric acid, 20%	5	4	2	2
Sulphuric acid, 20%	5	5	4	4
Hydrochloric acid 20%	5	5	4	4
Thinners	4	3	2	2
Water	5	5	5	5
Acetic acid, 20%	4	3	2	2

1	destroyed
2	strongly affected (cracks or blisters)
3	affected (considerable curing changes, serious discolouring)
4	lightly affected (minor curing changes, some discolouring)
5	unaffected

Test method:
Test bodies, 100 x 100 x 2 mm, were made and cured for 14 days. A 250 ml beaker with 25 ml of the chemical to be tested was turned upside down against the surface under test. The surface was inspected after 4 hours, 1 day, 1 week and 4 weeks. In practice several different chemicals can act on the surface at the same time, together with high temperatures and mechanical loading; factors that can hinder accurate judgement of chemical resistance.

Mixing table - Colour (1:5)		
Total (kg)	**A (kg)**	**B (kg)**
9.0	1.5	7.5
6.0	1.0	5.0
4.5	0.75	3.75
3.0	0.5	2.5
1.5	0.25	1.25

DeLaval Surface coating, Transparent

DeLaval Surface coating Transparent is an epoxy-based two-component product that gives a dense and highly impervious surface with very good mechanical and chemical resistance.

Art. No:

91356811	**10 kg**	**6.7 kg A + 3.3 kg B**
91356814	**30 kg**	**20 kg A + 10 kg B**

Application area

On floors in such areas as milking parlours, milk rooms, rotaries, feeding tables, and on most other floors inside a barn or other buildings.
As top coating for colour and floor applications.

Chemical resistance

High resistance to chemicals in concentrations normally found in agriculture.
See chemical resistance table further on.

Mixing ratio

2 parts of component A (base) mixed with 1 part of component B (hardener) by weight. Do not dilute.

Consumption

Top coating: 0.3 kg/m² for floor, 0.2 kg/m² for walls.
Sanded area: 1.3 kg/m².

Environment

Free from solvents. Gives no odour or taste, and is non-flammable.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life

The mixed product must be used within 40 minutes at +18°C. The higher the temperature the shorter the working time.

Drying time

7 hours at +25°C, 8 hours at +18°C,15 hours at +10°C
Dry weather conditions and good ventilation are necessary for the above times to be maintained.

Water spots

Avoid water contact (water hose, fog etc.) first 17 hours at +25°C, first 24 hours at +15°C and first 4 days at +10°C.

Colour

Clear, transparent. *Note! Discoloured by iodine.*

Tool cleaning

Clean immediately after use with solvents such as acetone.

Storage 12 months in unopened packaging.

Hardness Fully cured Transparent has a hardness of 89 ShoreD.

Test	Transparent	FC180	A500
Adhesion with primer	3	3	3
Chemical resistance	3	3	3
Water resistance soon after curing	3	2	3
UV-resistance	3	1	1
Viscosity CPS/25°C	265	640	1400
Deaerating	3	2	3
Ranking: 3 = Excellent, 2 = Good, 1 = Low			

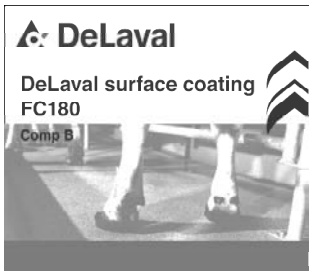
Chemical resistance

Test	4 hours	1 day	1 week	4 weeks
Ammonia 25%	5	5	5	5
Petrol	5	4	3	3
Benzyl alcohol	4	4	1	1
Brake fluid	5	5	4	4
Diesel oil	5	5	5	5
Distilled water	5	5	5	5
Lactic acid 50%	5	4	3	3
Lactic acid, 100%	5	5	4	4
Formic acid, 10%	5	5	4	4
Formic acid, 20%	4	4	3	3
Nitric acid 5%	5	5	5	5
Nitric acid, 20%	5	5	5	4
Sulphuric acid 5%	5	5	5	5
Sulphuric acid, 20%	5	5	5	5
Hydrochloric acid 5%	5	5	5	5
Hydrochloric acid 20%	5	5	5	5
Thinners	5	5	4	2
Water	5	5	5	5
Xylene				
Acetic acid 5%	5	5	4	3
Acetic acid, 20%	3	3	3	3

1 destroyed
2 strongly affected (cracks or blisters)
3 affected (considerable curing changes, serious discolouring)
4 lightly affected (minor curing changes, some discolouring)
5 unaffected

Test method:
Test bodies, 100 x 100 x 2 mm, were made and cured for 14 days. A 250 ml beaker with 25 ml of the chemical to be tested was turned upside down against the surface under test. The surface was inspected after 4 hours, 1 day, 1 week and 4 weeks. In practice several different chemicals can act on the surface at the same time, together with high temperatures and mechanical loading; factors that can hinder accurate judgement of chemical resistance.

DeLaval Surface coating, FC180



DeLaval Surface coating FC180 is a fast-curing epoxy-based two component product that gives a dense and highly impervious surface with very good mechanical and chemical resistance.

Art. No.

91356821	**10 kg**	**6.7 kg A + 3.3 kg B**
91356824	**30 kg**	**20 kg A + 10 kg B**

Application area

On floors in such areas as milk rooms, milking parlours, rotaries and feeding tables. It is an alternative product to be used when there is shortage of time or an specific method.

Chemical resistance

High resistance to chemicals in concentrations normally found in agriculture. See chemical resistance table. Discolouring can occur in contact with concentrated acids. Spilt acidic washing agents and other concentrated chemicals must be rinsed off immediately with water.

Mixing ratio

2 parts of component A (base) mixed with 1 part of component B (hardener) by weight. Do not dilute.

Consumption

Top coating: 0.3 kg/m² for floor
Sanded area: 1.3 kg/m²

Environment

Free from solvents. Gives off no odour or taste, and is non-flammable.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life

The mixed product must be used within 15 minutes at +18°C. The higher the temperature the shorter the working time.

Drying time

3 hours at +25°C and 4 hours at +18°C.
Dry weather conditions and good ventilation are necessary for the above times to be maintained.

Water spots

Avoid water contact (water hose, fog etc.) first 7 hours at +25°C and first 24 hours at +15°C. Not resistant to water spotting below +13°C, use Transparent instead. Note that above stated temperatures are the concrete temperature.

Product information

Colour — Clear, it is not a totally transparent product either, being somewhat yellowish in colour. It is recommended for use only with Brown or Yellow/ Brown sand and in combination with pigment powder. *Note! Discoloured by iodine.*

Tool cleaning — Clean immediately after use with solvents such as acetone.

Storage — 12 months in unopened packaging.

Hardness — Fully cured FC180 has a hardness of 89 ShoreD.

Test	Transparent	FC180	A500
Adhesion with primer	3	3	3
Chemical resistance	3	3	3
Water resistance soon after curing	3	2	3
UV-resistance	3	2	2
Viscosity CPS/25°C	300-450	400-550	950-1050
Deaerating	3	2	3
Ranking: 3 = Excellent, 2 = Good, 1 = Low			

Chemical resistance

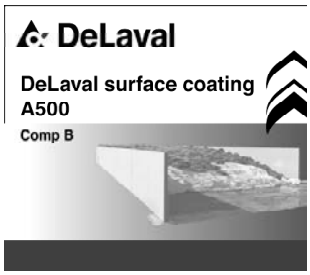
Test	4 hours	1 day	1 week	4 weeks
Ammonia 25%	5	5	5	5
Petrol	5	3	3	3
Brake fluid	5	5	4	4
Diesel oil	5	5	5	5
Distilled water	5	5	5	5
Lactic acid 50%	5	4	2	2
Lactic acid, 100%	5	4	2	1
Formic acid, 10%	5	4	3	2
Formic acid, 20%	5	4	4	2
Grumme	5	5	5	5
Nitric acid 5%	5	5	3	3
Nitric acid, 20%	5	5	3	3
Sulphuric acid 5%	5	4	4	4
Sulphuric acid, 20%	5	4	4	4
Hydrochloric acid 5%	5	5	5	4
Hydrochloric acid 20%	5	5	5	4
Thinners	5	4	3	2
Water	5	5	5	5
Acetic acid 5%	5	4	2	2
Acetic acid, 20%	5	3	2	2

1 destroyed
2 strongly affected (cracks or blisters)
3 affected (considerable curing changes, serious discolouring)
4 lightly affected (minor curing changes, some discolouring)
5 unaffected

Test method:
Test bodies, 100 x 100 x 2 mm, were made and cured for 14 days. A 250 ml beaker with 25 ml of the chemical to be tested was turned upside down against the surface under test. The surface was inspected after 4 hours, 1 day, 1 week and 4 weeks.

In practice several different chemicals can act on the surface at the same time, together with high temperatures and mechanical loading; factors that can hinder accurate judgement of chemical resistance.

DeLaval Surface coating, A500



DeLaval Surface coating A500 is an epoxy-based two-component product that gives a dense and highly impervious surface with very good mechanical and chemical resistance.

Art. No		
91356831	**10 kg**	**7.5 kg A + 2.5 kg B, Grey**
91356834	**10 kg**	**7.5 kg A + 2.5 kg B, Green**

Application area

For painting on silo walls and floors and feeding tables to protect against attack from fodder and chemicals.

Chemical resistance

High resistance to chemicals in concentrations normally found in agriculture. See chemical resistance table. Discolouring can occur in contact with concentrated acids. Spilt acidic washing agents and other concentrated chemicals must be rinsed off immediately with water.

Mixing ratio

3 parts of component A (base) mixed with 1 part of component B (hardener) by weight. Do not dilute.

Consumption

Approx. 0.25 kg/m² per layer. Two layers are recommended.

Environment

Free from solvents. Gives off no odour or taste, and is non-flammable.

Working temperature

The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life

The mixed product must be used within 30 minutes at +18°C. The higher the temperature the shorter the working time.

Drying time

8 hours at +25°C, 10 hours at +18°C, 15 hours at +10°C. Dry weather conditions and good ventilation are necessary for the above times to be maintained.

Colour

Grey, green. A500 gets yellowish when exposed to sunlight.

Tool cleaning

Clean immediately after use with solvents such as acetone.

Storage

12 months in unopened packaging.

Test	Transparent	FC180	A500
Adhesion with primer	3	3	3
Chemical resistance	3	3	3
Water resistance soon after curing	3	2	3
UV-resistance	3	2	2
Viscosity CPS/25°C	300-450	400-550	950-1050
Deaerating	3	2	3
Ranking: 3 = Excellent, 2 = Good, 1 = Low			

Chemical resistance

Test	4 hours	1 day	1 week	4 weeks
Silo residue	4	4	4	4
Ammonia 25%	5	5	5	5
Petrol	5	4	3	2
Benzyl alcohol	5	5	3	3
Brake fluid	4	4	2	1
Diesel oil	5	5	5	5
Distilled water	5	5	5	5
Lactic acid 50%	4	1	1	1
Lactic acid, 100%	3	2	2	2
Formic acid, 10%	2	1	1	1
Formic acid, 20%	3	1	1	1
Nitric acid 5%	4	3	3	3
Nitric acid, 20%	4	3	3	1
Sulphuric acid, 20%	4	3	2	2
Hydrochloric acid 5%	4	3	2	2
Hydrochloric acid 20%	3	2	1	1
Thinners	5	4	3	3
Water	5	5	5	5
Acetic acid, 20%	3	1	1	1

1 destroyed
2 strongly affected (cracks or blisters)
3 affected (considerable curing changes, serious discolouring)
4 lightly affected (minor curing changes, some discolouring)
5 unaffected

Test metod:
Test bodies, 100 x 100 x 2 mm, were made and cured for 14 days. A 250 ml beaker with 25 ml of the chemical to be tested was turned upside down against the surface under test. The surface was inspected after 4 hours, 1 day, 1 week and 4 weeks. In practice several different chemicals can act on the surface at the same time, together with high temperatures and mechanical loading; factors that can hinder accurate judgement of chemical resistance.

DeLaval Surface coating, Natural sand

DeLaval Surface coating Natural sand is used for building up structure and giving a non-slippery surface when scattered. For heavily loaded floors, e.g. heavy cow traffic, the extra hard Dynagrip sand is used.

Art. No.		
90558325	**25 kg**	**Sand F, 0.0 - 0.3 mm**
90558326	**25 kg**	**Sand N, 0.0 - 0.9 mm**
90558327	**25 kg**	**Sand M, 0.4 - 1.2 mm**
90558328	**25 kg**	**Sand S, 0.4 - 0.8 mm**
90558376	**25 kg**	**Dynagrip, 0.5 - 0.8 mm**

Application area

For all type of floor applications as the base layer, mix sand N together with Transparent or FC 180. For scattering the surface as a non-slippery structure use sand M or sand S. For heavily loaded floors mix 1/3 of Dynagrip sand into the scattered sand.

Chemical resistance

Together with Transparent or FC180 in the base layer. Top coating with an epoxy layer will improve the chemical resistance.

Mixing ratio

Add the sand to the mixed A and B epoxy components and continue mixing to a homogenious product.

Consumption

1.8 - 2.0 kg sand per 1 kg mixed epoxy for base layer. 2.0 kg sand per m² for scattering the surface.

Environment

It's a natural sand and some slight dust can occur.

Working temperature

Not applicable.

Pot life

Not applicable.

Hardness grade

Regarding Mohs index with max.10.0 hardness for diamond, Sand N, M, S has 7.5 and Dynagrip has 9.0 hardness.

DeLaval Surface coating, Decor sand

DeLaval Surface coating Decor sand is a coloured quartz sand for solvent free epoxy system available in two fraction sizes.

		Art. No.	Dimension	Art. No.	Dimension
Yellow/Brown	**25 kg**	90558356	0.8-1.2 mm	90558360	0.3-0.8 mm
Blue	**25 kg**	99944821	0.8-1.2 mm	99944825	0.3-0.8 mm
Yellow	**25 kg**	99944822	0.8-1.2 mm	99944826	0.3-0.8 mm
Grey	**25 kg**	99944823	0.8-1.2 mm	99944827	0.3-0.8 mm
Green	**25 kg**	99944824	0.8-1.2 mm	99944828	0.3-0.8 mm

Application area
Yellow/Brown is most suitable for parlours, parlour pits and milking room floors for best cleaning results. Yellow is most suitable for milking room floors. Blue, Grey and Green for office and changing room floors.

Chemical resistance
Together with Transparent or FC180 epoxy as the base layer. Top coating with an epoxy layer will improve the chemical resistance.

Visual constancy
Yellow/Brown floors with top coating have best visual constancy against manure, teat dip and chemical spots. Direct sunlight can cause yellowish discoloration on floors with Blue, Grey or Green sand.

Mixing ratio
Add sand to the mixed A and B epoxy components and continue mixing to a homogenious product.

Consumption
1.8 - 2.0 kg sand per 1 kg mixed epoxy for base layer.
2.0 kg sand per m² for scattering the surface.

Environment
It is a coloured sand and some slight dust can occur.

Working temperature
Can be used in all temperatures, but is easier to use in high temperatures.

Pot life
Not applicable.

Hardness grade
Regarding Mohs index with max.10.0 hardness for diamond, all decor sand have 7.5 hardness.

DeLaval Surface coating, Decor flakes

DeLaval Surface coating Decor flakes are mixed black and white synthetic flakes to use in colour applications together with top coating.

Art. No.

91356890 **0.5 kg** **Black/White**

Application area	Blowing on second layer of the wet colour application.
Consumption	Depending on effect, approx. 0.5 kg / 20 m².
Top coating	Surfaces with decor flakes need a top coating with transparent epoxy.

DeLaval Surface coating, Pigment powder

DeLaval Surface coating Pigment powder is used to colour Transparent or FC180.

Art. No.		
91356891	**0.6 kg**	**Grey**
91356892	**0.6 kg**	**Yellow**
91356893	**0.6 kg**	**Red**
91356894	**0.6 kg**	**Green**
91356895	**0.6 kg**	**Blue/Grey**

Application area

To colour feeding table applications or other epoxy floors.

Mixing ratio

Mix the requested pigment powder with epoxy comp. A first and add then epoxy comp. B and continue mixing to a homogenious product. Add the needed sand and mix again.

Consumption

0.6 kg for 10 kg epoxy A and B mixed.

Caution with additive

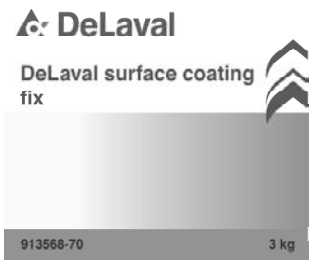
Can not be used in combination with Additive.

DeLaval Surface coating, Repair

DeLaval Surface coating Repair is an one-component cement based product.
Art. No.
91356876 **20 kg**

Application area	Used for repairing damages (approx. between 2-10 mm) on concrete floors and walls. **Note! Never apply in direct sunlight.**
Chemical resistance	High resistance to chemicals in concentrations normally found in agriculture.
Mixing ratio	5 parts of powder mixed with 1 part of cold water. If the product is to be used to repair walls, somewhat less water should be added.
Consumption	2 kg per 1 mm thickness/m².
Environment	Free from solvents. Gives off no odour or taste, and is non-flammable.
Working temperature	The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.
Pot life	The mixed product must be used within 30 minutes at +18°C. The higher the temperature the shorter the working time.
Drying time	1 hour at +25°C, 2 hours at +18°C, 4 hours at +10°C. Dry weather conditions and good ventilation are necessary for the above times to be maintained.
Colour	Grey
Tool cleaning	Clean with soap and warm water.
Storage	12 months in unopened packaging. Keep from freezing.

DeLaval Surface coating, Fix



DeLaval Surface coating Fix is an epoxy compound for joining and fixing concrete, ceramic, wood, etc.
Art. No.
91356870 **3 kg** **0.88 kg A + 0.22 kg B + 1.90 kg C**

Application area
Meant for acid-resistant jointing of clinker floors in milking parlours, dairies and abattoirs. Also for troughs etc. where the floor is exposed to severe chemical and mechanical attacks.

Chemical resistance
High resistance to chemicals in concentrations normally found in agriculture.
Discolouring can occur in contact with concentrated acids. Spilt acidic washing agents and other concentrated chemicals must be rinsed off immediately with water.

Mixing ratio
0.88 part of A + 0.22 part of B + 1.90 part of C. Do not dilute.

Consumption
Depending on concrete and operation.

Environment
Free from solvents. Gives no odour or taste, and is non-flammable.

Working temperature
The temperature of the substrate must always be between +10°C and +25°C. It is also important that the difference in temperature between the substrate and the surrounding air is never more than 5°C.

Pot life
The mixed product must be used within 40 minutes at +18°C. The higher the temperature the shorter working the time.

Drying time
9 hour at +25°C, 15 hours at +18°C, 24 hours at +10°C.
Dry weather conditions and good ventilation are necessary for the above times to be maintained.

Colour
Grey.

Tool cleaning
Clean immediately after use with solvents such as acetone.

Storage
12 months in unopened packaging. Keep from freezing.

DeLaval Surface coating, Tixfiber

DeLaval Surface coating Tixfiber is a white light weight powder for use to get a tixfiber epoxy system. Only for solvent free system.

Art. No.

91356879 **2.0 kg**

Application area	For use to make no sagging epoxy products or making putties to repair small damages, cracks or small pin holes. Tixfiber is needed for forming a rounded joint between wall and floor. It is also used together with FC180 for reparation of damaged concretes.
Chemical resistance	Has no effect on the high chemical resistance for epoxy.
Mixing ratio	Mix the requested handful Tixfiber with epoxy comp. A first and add then epoxy comp. B and continue mixing to a homogenious product. Add the needed sand and mix again.
Consumption	Depending on the application. For light tixfiber 1 handful/kg. For putties 3-5 handful/kg.
Environment	Water-soluble non-flameable, give no odour and no taste. It is very light, dust will occure.
Working temperature	Can be used in all temperatures, but it is easier to use in high temperature.
Pot life	Tixfiber does not effect the pot life.

DeLaval Surface coating, Additive

DeLaval Surface coating Additive is a clear liquid binding product to improve the addition to old epoxy system.
Art. No.
91356888 **2 litre**

Application area	For a new epoxy application on old or already cured epoxy applications with too smooth or too rough surfaces.
Chemical resistance	Not applicable.
Preparation old epoxy	Make sure the old epoxy surface is completely clean and dry.
Mixing ratio	After mixing the A and B epoxy components add 3 % of Additive and continue mixing to a homogenious product.
Consumption	3 % Additive into mixed epoxy (1.8 dl for 6 kg epoxy).
Environment	Additive is not volatile and is soluble in water.
Working temperature	Can be used in all temperatures.
Pot life	Does not effect pot life.
Not for pigment powder	Additve in combination with pigment powder and epoxy is not allowed.
Curing time	Let the new application cure for at least 24 hours.
On smooth surfaces	Roll on 0.3 kg/m² of epoxy with Additive, scatter 0.8 kg/m² of the same sand as in the base layer and smooth carefully with a toothed steel float.
On rough surfaces	Roll on 0.4 - 0.5 kg/m² of epoxy with Additive as a top coating.
On Colour or A500	Roll on 0.3 kg/m² per layer of new colour or A500 with Additive.
Primer as ground coat	Roll on 0.2 kg/m² of new Primer with Additive.

DeLaval surface coating

Installation

Preparation before applying DeLaval surface coating

Before applying any type of surface coating all surfaces have to be prepared properly. Preparation includes checking the conditions of the substrate and preparing the surface step by step. This will ensure best adhesion and lays the groundwork for a good final result.

Check substrate conditions

- Check the condition of the surface to be treated. Quality of the concrete, old oil spots - any information that can be of interest to your judgement.
- Make your own judgement of the substrate. Look for damages, cracks and if the concrete is broken somewhere.
- Scrape with a mechanical tool (e.g. knife or screwdriver) to look at the quality.
- Check if there is moisture in the substrate. Attach a piece of plastic to the concrete 2 days before application and check for condense, or even better, use the recommended moisture instrument 1 day before application.
- Observe the weather conditions when starting and continuing the work. Especially the temperature difference between day and night creates dew. Check dewpoint list.

Dewpoint (ºC) at different relative humidity (RH)

During the night the air cools down, the humidity in the air (RH) will condense on cold surfaces. A typical example is dew forming on grass in the morning. On surfaces like concrete, brick stones or wood, condensation (Dew) penetrates the surface but it’s not visible.

Needed equipment:

Thermometer °C, Hygrometer RH

Dewpoint (ºC) at different relative humidity (RH)

Air temp. ºC (day)		Air temp. ºC (night)								
	RH	50%	55%	60%	65%	70%	75%	80%	85%	90%
5		-1.1	-2.9	-1.8	-0.9	0.0	0.9	1.8	2.7	3.6
6		-3.2	-2.1	-1.0	-0.1	0.9	1.8	2.8	3.7	4.5
7		-2.4	-1.3	-0.2	0.8	1.8	2.8	3.7	4.6	5.5
8		-1.6	-0.4	0.8	1.8	2.8	3.8	4.7	5.6	6.5
9		-0.8	0.4	1.7	2.7	3.8	4.7	5.7	6.6	7.5
10		0.1	1.3	2.6	3.7	4.7	5.7	6.7	7.6	8.4
11		1.0	2.3	3.5	4.6	5.6	6.7	7.6	8.6	9.4
12		1.9	3.2	4.5	5.6	6.6	7.7	8.6	9.6	10.4
13		2.8	4.2	5.4	6.6	7.6	8.6	9.6	10.6	11.4
14		3.7	5.1	6.4	7.5	8.6	9.6	10.6	11.5	12.4
15		4.7	6.1	7.3	8.5	9.9	10.6	11.5	12.5	13.5
16		5.6	7.0	8.3	9.9	10.5	11.6	12.5	13.5	14.4
17		6.5	7.9	9.2	10.2	11.5	12.5	13.5	14.5	15.3
18		7.4	8.8	10.2	11.4	12.4	13.5	14.5	15.4	16.3
19		8.3	9.7	11.1	12.3	13.4	14.5	15.5	16.4	17.3
20		9.9	10.7	12.0	13.3	14.4	15.4	16.4	17.4	18.3
21		10.2	11.6	12.9	14.2	15.3	16.4	17.4	18.4	19.4
22		11.1	12.5	13.8	15.2	16.3	17.4	18.4	19.4	20.3
23		12.0	13.5	14.8	16.1	17.2	18.4	19.4	20.3	21.3
24		12.9	14.4	15.7	17.0	18.2	19.3	20.3	21.3	22.3
25		13.8	15.3	16.7	17.9	19.2	20.3	21.3	22.3	23.2
26		14.3	16.2	17.6	18.8	20.1	21.2	22.3	23.3	24.2
27		15.7	17.2	18.6	19.8	21.1	22.2	23.2	24.3	25.2
28		16.6	18.1	19.9	20.8	22.0	23.2	24.2	25.2	26.2
29		17.5	19.1	20.5	21.4	22.9	24.1	25.2	26.2	27.2
30		18.4	20.0	21.4	22.7	23.9	25.1	26.2	27.2	28.2
Example: Dewpoint at 20ºC air temperature and RH 60 % is 12ºC. Which means if temperature falls from 20ºC to 12ºC water will condensate on the surface.										

Preparing the substrate, step by step

The following pages will present how to prepare different substrate before any surface coating is applied.

The different substrates are:

- Concrete floors
  - New
  - Old
  - Previously treated
- Concrete walls/Brick walls
  - New
  - Old
  - Previously treated walls
- Tile surface
- Wood plates
  - New
  - Old
  - Previosly treated

Please follow the instructions carefully. To prevent failures with surface coating, make sure the preparatory work is made correctly as recommended. The preparation work can be done the day before the application starts.

Preparing a new concrete floor

Curing time
A new laid concrete floor must be at least three to four weeks old
Humidity
Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface. If no moisture meter is available glue a sheet of plastic foil (1m²) to the floor over night. If no condensation is visible on the under side of the sheet the concrete is dry enough to prepare.

Concrete skin
When new concrete is curing about 3 mm of the top part has less shock resistance, is unstable and more compact than the concrete below. A strong adhesion to such a weak surface is impossible. This concrete skin must be removed before applying surface coating.

Scouring/Grinding
A scouring or grinding machine is needed to remove the concrete skin from the new concrete floor. This opens the concrete and gives a solid surface with good adhesion.

Vacuum cleaning
Vacuum clean the application area carefully after scouring/grinding to remove all the dust.
Attention : Never wash or dampen a scoured/grinded surface after scouring/grinding has begun.
Ready to supply
The scoured/grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing an old concrete floor

Cleaning
Wash the floor with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface, otherwise the adhesion will be reduced.

Drying
Dry the wet surface with a hot air blower, wet vacuum cleaner, gas burner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface.

Scouring/Grinding
Fragments of dirt and grease from manure, feeding stuffs or detergents are still in the top layer of an older floor. Also any existing concrete skin has to be removed first. We recommend to remove the top layer with a scouring or grinding machine. While scouring or grinding always connect a strong vacuum cleaner to remove the micro dust immediately. The removal of 3 mm of floor will be replaced by an application of the DeLaval Surface coating.

Vacuum cleaning
Vacuum clean the application area carefully after scouring/grinding to remove all the dust.
Attention: Never wash or dampen a scoured/grinded surface after scouring/grinding has begun.

Ready to supply
The scoured/grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing a previously treated floor

Cleaning
Wash the floor with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface.

Drying
Dry the wet surface with a hot air blower, wet vacuum cleaner, gas burner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface.

Scouring/Grinding
Remove old coatings or paint with a scouring or grinding machine. On surfaces that are difficult to reach use abrasive paper or scraper. It is important to get the concrete surface as clean as possible. While scouring or grinding always connect a strong vacuum cleaner to remove the micro dust immediately. The removal of 3 mm of floor will be replaced by an application of the DeLaval Surface coating.

Vacuum cleaning
Vacuum clean the application area carefully after scouring/grinding to remove all the dust.
Attention: Never wash or dampen a scoured/grinded surface after scouring/grinding has begun.

Ready to supply
The scoured/grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing new concrete walls or brick stones

Curing time:
A newly constructed concrete or brick stone wall must be at least three to four weeks old.

Humidity
Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface. If no moisture meter is available glue a sheet of plastic foil (1m²) to the wall over night. If no condensation is visible on the under side of the sheet the concrete is dry enough to prepare.

Concrete skin
When a new concrete wall is constructed the outer part, the concrete skin, has less shock resistance, is unstable and also more compact than the concrete inside. A grease film from the mould plates will be left on the concrete surface. A strong adhesion to such a weak surface is impossible.

Brick stone
Brick stones have a grease film left over from the production process. Some stones are treated with a silicon film.

Grinding
Remove the concrete skin and grease with a grinding machine. Use a strong hand grinder with a wire brush, a diamante disc or grinding disc P16. While grinding always connect a strong vacuum cleaner to suck up the micro dust immediately. The 1 mm of material removed will be replaced by subsequent Surface coating application.

Vacuum cleaning
Vacuum clean the application area carefully after grinding to remove all the dust.
Attention: Never wash or dampen a grinded surface after grinding has begun.

Ready to supply
The grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing old concrete walls or brick stones

Cleaning
Wash the wall with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface, otherwise the adhesion will be reduced.

Drying
Dry the wet surface with a hot air blower, wet vacuum cleaner, gas burner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface.

Concrete skin
When a new concrete wall is constructed the outer part, the concrete skin, has less shock resistance, is unstable and also more compact than the concrete inside. A grease film from the mould plates will be left on the concrete surface. A strong adhesion to such a weak surface is impossible.

Brick stone
Brick stones have a grease film left over from the production process. Some stones are treated with a silicon film.

Grinding
Remove the concrete skin and grease with a grinding machine. Use a strong hand grinder with a wire brush, a diamante disc or grinding disc P16. While grinding always connect a strong vacuum cleaner to suck up the micro dust immediately. The 1 mm of material removed will be replaced by subsequent Surface coating application.

Vacuum cleaning
Vacuum clean the application area carefully after grinding to remove all the dust.
Attention: Never wash or dampen a grinded surface after grinding has begun.

Ready to supply
The grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing previously treated concrete walls, brick stones

Cleaning
Wash the wall with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface, otherwise the adhesion will be reduced.

Drying
Dry the wet surface with a hot air blower, wet vacuum cleaner, gas burner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface.

Grinding
Remove old coatings or paint with a grinding machine. Use a strong hand grinder with a wire brush, a diamante disc or grinding disc P16. While grinding always connect a strong vacuum cleaner to suck up the micro dust immediately. The 1 mm of material removed will be replaced by subsequent Surface coating application.

Vacuum cleaning
Vacuum clean the application area carefully after grinding to remove all the dust.
Attention: Never wash or dampen a grinded surface after grinding has begun.

Ready to supply
The grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing a tile surface

Cleaning
Wash the tiles with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface, otherwise the adhesion will be reduced.

Drying
Dry the wet surface with a hot air blower, wet vacuum cleaner, gas burner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface.

Loose tiles
Check the surface for loose tiles by beating softly with a hammer. Remove the loose tiles with a scraper.
Top coated tiles have a smooth, strong and waterproof surface. A strong adhesion on such a non absorbent surface is impossible. We must remove the top coat totally for best result when applying Surface coating.

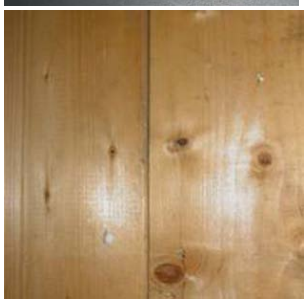
Grinding
Remove the top coat with a grinding machine. For floors use a strong grinding machine with a hard diamante disc. For walls use a strong hand grinder with a diamante disc. While grinding always connect a strong vacuum cleaner to suck up the micro dust immediately. The 1 to 3 mm of material removed will be replaced by the Surface coating application.

Vacuum cleaning
Vacuum clean the application area carefully after grinding to remove all the dust.
Attention: Never wash or dampen a grinded surface after grinding has begun.

Ready to supply
The grinded and vacuum cleaned surface presents a stable underlay able to provide the best adhesion result for a new DeLaval surface coating application.

Preparing new wood plates

Humidity
Make sure the surface is dry enough by using a moisture meter (Article Number 99944895). The relative moisture recommendation is maximum 3 º volume humidity on the surface. If no moisture meter is available glue a sheet of plastic foil (1m²) to the wall over night. If no condensation is visible on the under side of the sheet the wood is dry enough to prepare.



Rough surface
The wood surface must be free of any wood treatment applications. The best adhesion is to non knotty wood. Knotty wood with a smooth surface is recommended for walls in offices.

Vacuum cleaning
Carefully vacuum the area until it's free of dust.
Attention: Never wash or dampen a wooden surface after a humidity measuremant has been taken.

Preparing old wood plates

Cleaning
Wash the wood plates with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface.

Humidity
Dry the wet surface with a hot air blower, wet vacuum cleaner or some other heating source to shorten the drying time. Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface. If no moisture meter is available glue a sheet of plastic foil (1m²) to the wall over night. If no condensation is visible on the under side of the sheet the wood is dry enough to prepare.

Rough surface
The wood surface must be free of any wood treatment applications. The best adhesion is to non knotty wood. Knotty wood with a smooth surface is recommended for walls in offices.

Vacuum cleaning
Carefully vacuum the area until it's free of dust.
Attention: Never wash or dampen a wooden surface after a humidity measuremant has been taken.

Preparing previously treated wood plates

Cleaning
Wash the wood plates with warm water and an alkaline detergent, using a brush (1 part alkaline to 3 parts water). A faster and more efficient cleaning solution is our foam cleaner detergent in combination with a high pressure cleaner. Let the solution take effect for 20 to 30 minutes. This will remove dirt and grease from the surface. Rinse thoroughly afterwards with a lot of water. It is important to remove all traces of cleaning agent from the surface. Let the surface dry completely.

Scouring/Grinding
Remove old coatings or paint with a grinding machine. Use a strong hand grinder with a wire brush or a diamante disc. On areas that are difficult to reach abrasive paper or a scraper to remove the surface. It is important to get the wood surface as clean as possible. While grinding always connect a strong vacuum cleaner to suck up the micro dust immediately. The 1 mm of material removed will be replaced by the Surface coating application.

Humidity
Make sure the surface is dry enough by using a moisture meter (Art No 99944895). The relative moisture recommendation is maximum 3º volume humidity on the surface. If no moisture meter is available glue a sheet of plastic foil (1 m²) to the wall over night. If no condensation is visible on the under side of the sheet the wood is dry enough to prepare.

Vacuum cleaning
Carefully vacuum the area until it's free of dust.
Attention: Never wash or dampen a wooden surface after a humidity measuremant has been taken.

Application instructions for different areas

Before making any application, ensure that the surface is properly prepared as described in the Preparation sections.

A. Make your own judgement of the substrate. Look for damages, cracks and oil spots.

B. Clean the surface as described in the preparation section.

C. Dry the surface as described in the preparation section. Make sure the surface is dry enough by using the moisture meter.

D. Cut a 3 mm wide cutting line into the concrete surface when the application border ends on open space. For feeding table it's the opposite line of the feed fence. Use a disc cutting machine.

E. Scoure or grind the surface as described in the preparation section.

F. Never wash or dampen a prepared surface before the application starts. Check the dew point and relative humidity as described in the Preparation section.

G. Stir the comp. A before mixing with the comp. B.

Application instructions - general

1. Use protective equipment as described under safety precautions.

2. Ensure that the surface preparation is properly carried out as described under the preparation section.

3. *Always work on a dry surface and with a really clean surface. If the surface is fresh (3-4 days) or still too humide, us DPM primer.*

4. *For best adhesive results make sure that the surface is sound, even and primed before you start applying.*

5. *Keep the products at +20°C room temperature 24 hours before use.*

6. *Keep the site and tools clean during work.*

7. *Weigh the products carefully and respect the mixing ratio of the components.*

8. *Do not mix more than 6 kg (3 kg for FC180) at a time and use it within the recommended time described in the product information sheets.*

9. *Always work at temperature between +10°C and +25°C, and ensure good ventilation (with never more than 5°C difference between the underlay and the surrounding air; dewpoint and relative humidity-moisture effect).*

Application feeding table

Acid resistant, tear-wear resistant, hygienic, smooth surface

Required equipment

Protective equipment	Masking tape	Rollers and shaft
Drilling machine	Buckets 17 litre volume	Toothed steel float
Mixer blade	Paper rolls and waste bag	Rubber spatula
Disc cutting machine	Scale	

System overview

Class	Method	Products	kg/m²	A : B	Thickness (mm)	Curing time (h)
***	Epoxy with natural sand applied	Primer 100% epoxy	0.3	10:6	2.0	24
		Transparent	1.3	2:1		
		Natural sand	2.0			
		Pigment as an option	0.08			
***	Fast curing epoxy with natural sand applied	FC180 as primer	0.3	2:1	2.0	8
		Natural sand	0.5			
		FC180	1.3	2:1		
		Natural sand	2.0			
		Pigment as an option	0.08			

How to apply

Reparation - when necessary

Fast curing method!

In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1 kg of FC180, 1.5 kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.

Priming - normal curing

A. Put masking tape around the cutting line.

B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a rubber spatula within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.

Applying - normal curing

A. When using pigment powder, add it to the Transparent comp. A and mix it carefully.

B. Mix Transparent A+B carefully with a low speed drill for about 1 minute.

C. Add about 1.5kg to 1.8kg sand N0.0-0.9 (depends on surface) for 1 kg Transparent and mix it 1 more minute.

D. Pour out the mixture in small portions. Apply evenly with the teethed side of the steel float in 2 mm thickness.

E. Smooth the application with the flat side of the steel float.

F. Stir the mixture carefully before pouring out the next portion.

G. Remove the masking tape immediately after applying.

H. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Priming - fast curing FC180

A. Put masking tape around the cutting line.

B. Mix FC180 A+B carefully with a low speed drill for about 1 minute. Note! Do not mix more than 3 kg, due to fast curing process.

C. Apply FC180 with a rubber spatula directly on the prepared surface.

D. Scatter sand (N 0.0-0.9) over the applied layer until completely covered and not glossy any longer. Note! Scattering must be done immediately after the 3 kg batch is applied.

E. Let cure for about 30 minutes/ 18°C.

F. When the application has cured (not sticky anymore) vacuum clean the left over sand.

Applying - fast curing

A. When using pigment powder, add it to the FC180 comp. A and mix it carefully.

B. Mix FC180 A+B carefully with a low speed drill for about 1 minute. Note! Do not mix more than 3 kg, due to fast curing process.

C. Add about 1.5kg to 1.8kg sand N0.0-0.9 (depends on surface) for 1 kg FC180 and mix it carefully with a low speed drill for about 1 minute.

D. Pour out the mixture in small portions. Apply evenly with the teethed side of the steel float in 2 mm thickness.

E. Smooth the application with the flat side of the steel float.

F. Stir the mixture carefully before pouring out the next portion.

G. Remove the masking tape immediately after applying.

H. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 1 day.

Sloping surface - fast curing

When applying on a sloping surface a thicker epoxy mixture is needed.

A. Add 2 handful of Tixfiber per 1 kg of mixed FC180 and mix carefully.

B. Continue with step C under Applying -fast curing FC180.

Application milk room and parlour pit

Acid resistant, tear-wear resistant, hygienic, non-slippery

Required equipment

Protective equipment	Buckets 17 litre volume	Toothed steel float
Drilling machine	Paper rolls and waste bag	Hand grinding stone
Mixer blade	Scale	Spiked shoes
Masking tape	Rollers and shaft	

System overview

Class	Method	Products	kg/-m²	A : B	Thickness (mm)	Curing time (h)
***	Epoxy with natural/ decor sand	Primer 100% epoxy	0.3	10:6	2.0	48
		Transparent	1.3	2:1		
		Natural sand/ decor sand	3.0			
***	Epoxy with natural/ decor sand and top coating	Primer 100% epoxy	0.3	10:6	3.0	48
		Transparent	1.3	2:1		
		Natural/ decor sand	4.0			
		Transparent top coating	0.3	2:1		
***	Fast curing epoxy with natural/ decor sand and top coating	FC180 as a primer	0.3	2:1	3.0	12
		Natural sand	0.5	2:1		
		FC180	1.3	2:1		
		Natural sand	4.0			
		FC180 as a top coating	0.3	2:1		
		Pigment as an option	0.08			

How to apply

Reparation - when necessary

Fast curing method!

In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1 kg of FC180, 1.5 kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.

Priming - normal curing

A. Put masking tape around the cutting line.

B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a rubber spatula within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.

Applying - normal curing

A. Mix Transparent A+B or FC180 A+B carefully with a low speed drill for about 1 minute.

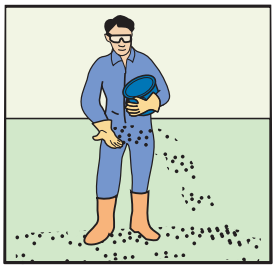
Note! *For FC180, do not mix more than 3kg, due to fast curing process.*

B. Add about 1.8kg sand (N 0.0-0.9 or decor) for 1 kg epoxy and mix it carefully with a low speed drill for about 1 minute.

C. Pour out the mixture in small portions. Apply evenly with the teethed side of the steel float in 2 mm thickness.

D. Smooth the application with the flat side of the steel float.

E. Stir the mixture carefully before pouring out the next portion.



Scattering - 1 step method

A. Remove the masking tape.

B. Used spiked shoes for walking on the application during scattering.

C. Scatter approx. 1 kg/m² of sand (S 0.4-0.8 or Decor) over the applied layer until completely covered and not glossy any longer.

Note! *For FC180 the scattering must be done immediately after the 3kg batch is applied.*

D. Smooth the application with the flat side of the steel float. The scattered sand must be slightly covered by the epoxy material.

Note! *Do not leave any glossy areas - they present a danger of slipping when wet.*

E. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Scattering - 2 step method

A. Remove the masking tape.

B. Used spiked shoes for walking on the application during scattering.

C. Scatter approx. 2 kg/m² of sand (S 0.4-0.8 or Decor) over the applied layer until completely covered and not glossy any longer.

Note! *For FC180 the scattering must be done immediately after the 3kg batch is applied.*

Note! *Do not leave any glossy areas - they present a danger of slipping when wet.*

D. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 1 day.

Top coating - 2 step method

A. Remove all loose quartz sand completely with a vacuum cleaner.

B. Grind the surface with a heavy grinding stone to get rid of sharp sand edges.

C. Vacuum clean properly.

D. Mix Transparent A+B or FC180 A+B carefully with a low speed drill for about 1 minute. ***Caution*** *FC180 can get yellowish!*

E. Roll mixed epoxy crosswise on the surface to a thin full coverage.

F. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Application Parlour and alley

Acid resistant, tear-wear resistant, hygienic, non-slippery

Required equipment

Protective equipment	Buckets 17 litre volume	Toothed steel float
Drilling machine	Paper rolls and waste bag	Hand grinding stone
Mixer blade	Scale	Spiked shoes
Masking tape	Rollers and shaft	

System overview

Class	Method	Products	kg/m²	A : B	Thickness (mm)	Curing time (h)
***	Epoxy with natural/ decor sand and top coating	Primer 100% epoxy	0.3	10:6	3.0	48
		Transparent	1.3	2:1		
		Natural sand/ decor sand	4.0			
		Transparent top coating	0.3	2:1		
***	Fast curing epoxy with natural sand and top coating	FC180 as a primer	0.3	2:1	3.0	12
		Natural sand	0.5			
		FC180	1.3	2:1		
		Natural sand	4.0			
		FC180 as a top coating	0.3			
		Pigment as an option	0.08			

How to apply

Reparation - when necessary

Fast curing method!

In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1 kg of FC180, 1.5 kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.

Priming - normal curing

A. Put masking tape around the cutting line.

B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a rubber spatula within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.

Applying - normal curing

A. Mix Transparent A+B or FC180 A+B carefully with a low speed drill for about 1 minute.

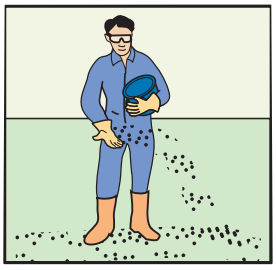
Note! *For FC180, do not mix more than 3kg, due to fast curing process.*

B. Add about 1.8kg sand (N 0.0-0.9 or decor) for 1 kg epoxy and mix it carefully with a low speed drill for about 1 minute.

C. Pour out the mixture in small portions. Apply evenly with the teethed side of the steel float in 2 mm thickness.

D. Smooth the application with the flat side of the steel float.

E. Stir the mixture carefully before pouring out the next portion.



Scattering - 2 step method

A. Remove the masking tape.

B. Used spiked shoes for walking on the application during scattering.

C. Scatter approx. 2 kg/m² of sand (0.4-0.8 or Decor) over the applied layer until completely covered and not glossy any longer.

Note! *For FC180 the scattering must be done immediately after the 3kg batch is applied.*

Note! *Do not leave any glossy areas - they present a danger of slipping when wet.*

For high cow traffic or sloping areas it is best to mix Dynagrip sand into the scattering sand.

D. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Top coating - 2 step method

A. Remove all loose quartz sand completely with a vacuum cleaner.

B. Grind the surface with a heavy grinding stone to get rid of sharp sand edges.

C. Vacuum clean properly.

D. Mix Transparent A+B or FC180 A+B carefully with a low speed drill for about 1 minute.

Caution! *FC180 can get yellowish!*

E. Roll mixed epoxy crosswise on the surface to a thin full coverage.

F. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Application Colour for wall and office floor

Acid resistant, tear-wear resistant, hygienic, decorative

Required equipment

Protective equipment
Drilling machine
Mixer blade
Masking tape
Buckets 17 litre volume
Paper rolls and waste bag
Scale
Rollers and shaft

System overview

Class	Method	Products	kg/m²	A : B	Thickness (mm)	Curing time (h)
**	Colour rolled-on	Primer 100% epoxy	0.3	10:6	1.2	36
		Colour in 2 layers	0.4	1:5		
***	Colour rolled-on with decor flakes and top coating	Primer 100% epoxy	0.3	10:6	1.5	48
		Colour in 2 layers	0.4	1:5		
		Decorflakes	0.017			
		Transparent top coating	0.3	2:1		

How to apply

Reparation - when necessary

Fast curing method!

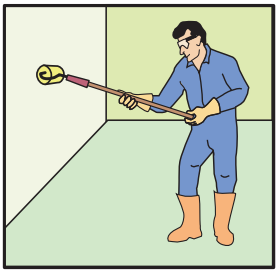
In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1 kg of FC180, 1.5 kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.



Priming - normal curing

A. Put masking tape around the cutting line.

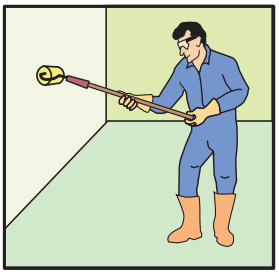
B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a rubber spatula or roller within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a rubber spatula or roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.



Applying - Colour

A. Mix Colour A+B carefully with a low speed drill for about 1 minute.

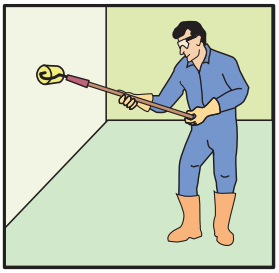
B. Add 10% cold water and mix it again for about 1 minute.

C. Roll on the first layer crosswise within the next 30 minutes.

D. Wait until the first layer is dry enough, but maximum 24 hours. Test by touching the Colour without getting spots on the hands. Ensure good ventilation. A lower temperature gives a longer curing time.

E. Apply the second layer of Colour as described in steps A to C.

F. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.



Top coating and decor flakes

A. Blow the decor flakes into the second layer, when still wet, immediately after it is rolled on.

B. Wait until the second layer is dry enough, but max 24 hours.

C. Mix Transparent A+B carefully with a low speed drill for about 1 minute.

D. Roll mixed epoxy crosswise on the surface to a thin full coverage. Avoid dropping down.

E. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Application Silo floor

Acid resistant, tear-wear resistant, hygienic, smooth surface

Required equipment

Protective equipment	Masking tape	Rollers and shaft
Drilling machine	Buckets 17 litre volume	Toothed steel float
Mixer blade	Paper rolls and waste bag	
Disc cutting machine	Scale	

System overview

Class	Method	Products	kg/m²	A : B	Thickness (mm)	Curing time (h)
**	Epoxy rolled-on	Primer 100% epoxy	0.3	10:6	1.2	36
		A500 in 2 layers	0.5	3:1		
***	Epoxy with natural sand	Primer 100% epoxy	0.3	10:6	2.0	24
		Transparent	1.3	2:1		
		Natural sand	2.0			
		Pigment as an option	0.08			

How to apply

Reparation - when necessary

Fast curing method!

In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1kg of FC180, 1.5kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.

Priming

A. Put masking tape around the cutting line.

B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a rubber spatula within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.

(Alt. 1) Applying A500

A. Mix A500 A+B carefully with a low speed drill for about 1 minute.

B. Roll on the first layer crosswise within 30 minutes over the prepared surface.

C. Wait until the first layer is dry enough, but maximum 24 hours. Test by touching the A500 without getting spots on the hand. Ensure good ventilation. A lower temperature gives a longer curing time.

D. Apply the second layer of A500 as described in steps A-C.

E. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

(Alt. 2) Applying Transparent

A. When using pigment powder, add it to the Transparent comp. A and mix it carefully.

B. Mix Transparent A+B carefully with a low speed drill for about 1 minute.

C. Add about 1.5kg to 1.8kg sand N 0.0-0.9 (depends on surface) for 1kg Transparent and mix it 1 more minute.

D. Pour out the mixture in small portions. Apply evenly with the teethed side of the steel float in 2 mm thickness.

E. Smooth the application with the flat side of the steel float.

F. Stir the mixture carefully before pouring out the next portion.

G. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Application Silo wall

Acid resistant, tear-wear resistant, hygienic, smooth surface

Required equipment

Protective equipment
Drilling machine
Mixer blade
Masking tape
Buckets 17 litre volume
Paper rolls and waste bag
Scale
Rollers and shaft

System overview

Class	Method	Products	kg/m²	A : B	Thickness (mm)	Curing time (h)
**	Epoxy rolled-on	Primer 100% epoxy	0.3	10:6	1.2	36
		A500 in 2 layers	0.5	3:1		

How to apply

Reparation - when necessary

Fast curing method!

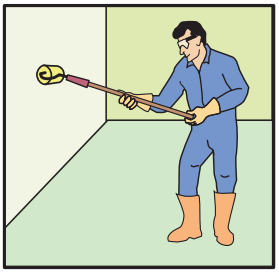
In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1kg of FC180, 1.5kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.



Priming

A. Put masking tape around the cutting line.

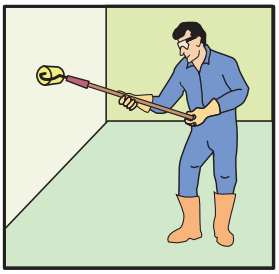
B. Mix Primer A+B carefully with a low speed drill for about 1 minute.

C. If using DPM or 100% epoxy, do NOT mix with water. Apply this primer on the prepared surface with a roller within the next 20 min. at 18°C.

D. If using waterbased Primer, add 10 % cold water and mix it again for about 1 minute. Apply Primer on the prepared surface with a roller within the next 60 minutes at 20°C. Leave to cure for about 1.5 hours at18°C.

E. Ensure good ventilation. A lower temperature gives a longer curing time.

F. Wait until the surface is dry enough. Test it by touching the Primer without getting spots on the hand.



Applying A500

A. Mix A500 A+B carefully with a low speed drill for about 1 minute.

B. Roll on the first layer crosswise within 30 minutes over the prepared surface.

C. Wait until the first layer is dry enough, but maximum 24 hours. Test by touching the A500 without getting spots on the hand. Ensure good ventilation. A lower temperature gives a longer curing time.

D. Apply the second layer of A500 as described in steps A-C.

E. Wait until the surface is dry and cured before using it. Avoid any water on the new Surface coating for at least 2 days.

Application Troughs and Panels

To join concrete panels to wood and concrete

Required equipment

Protective equipment
Drilling machine
Mixer blade
Spatula
Disc cutting machine
Paper rolls and waste bag
Scale

System overview

Class	Method	Products	A : B : C	Curing time (h)
**	Joining	Fix	0.88 x A + 0.22 x B + 1.90 x C	15

How to apply

Preparation

Fast curing method!

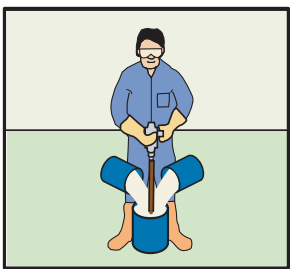
In case of damage or cracks of 2-10 mm, the surface has to be repaired before priming.

A. Remove all dirt and broken parts. Vacuum clean the spots property.

B. Mix 1kg of FC180, 1.5kg of sand (N 0.0-0.9) and 1 handful of Tixfiber.

C. Apply immediately and level the surface with a toothed steel float.

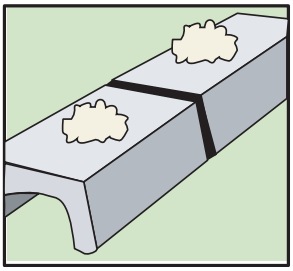
D. Let the layer dry for about 20 minutes/18°C. Ensure good ventilation.



Mixing

A. Mix Fix A+B carefully with a low speed drill for about 1 minute.

B. Add the component C and mix for another minute. Use immediately.



Joining a feed trough to the floor

A. Put three small lumps of Fix on the underside of the trough.

B. Lay the trough in place, using a line to ensure correct alignment. Leave a 5 mm opening between the trough and the floor.

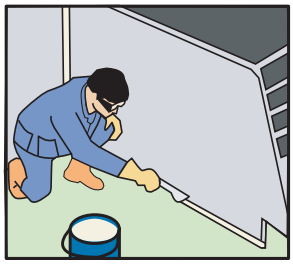
C. Fill the gap with Fix compound. A spatula is suitable for smoothing off and forming recesses.

Joining the ends of a feed trough

A. Put a string of Fix, about 0.3kg/ linear metre, on the roughened trough surface.

B. Press the end part firmly into the joining compound.

C. Smooth off with a spatula on both side of the end part.



Fixing fibre cement panels

A. Position the panel.

B. Apply Fix and press it into chambers and corners.

C. Smooth off with a spatula on both sides of the panel. Consumption approx. 0.4kg/ linear metre.

Hints

Exposed corners and edges should be given extra reinforcement. Use a hammer drill and drill shallow holes, or grind grooves (with a wheel grinder and cutting disc) to make a deeper and stronger anchorage for the adhesive (riveting effect).

Reparation

When necessary

Required equipment

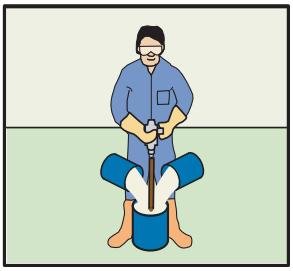
Protective equipment	Disc cutting machine	Scale
Drilling machine	Buckets 17 litre volume	Rollers and shaft
Mixer blade	Paper rolls and waste bag	Toothed steel float

System overview

Class	Method	Products	A : B	Curing time (h)
***	Epoxy based reparation	FC180	2:1	1/2 hours
		Natural sand N 0.0-0.9		
		Tixfiber		
***	Cement based reparation	Primer 100% epoxy	10:6	Keep wet
		Repair		3 hours

Preparation

The surfaces that are to be joined must be thoroughly cleaned. Loosely attached material such as cement dust and grease must be removed. Smooth joint surfaces on panels and floors must be roughened to ensure the best possible adhesion. Use a wheel grinder equipped with a cutting or abrasive disk. Try to obtain a grooved or roughened surface on the concrete where the adhesive is to be applied. Make sure that all dust is blown or vacuumed away.



Epoxy based reparation - FC180

Applying

A. Mix FC180 A and B, 2:1 together (max. 3kg) for about 1 minute, using the low speed drill.

B. Per 1kg mixed FC180 add about 1.5kg sand (N 0.0-0.9) and 1-2 handful Tixfiber.

C. Mix all together for about 1 minute to a homogenious mass. For higher thickness add more Tixfiber.

D. Apply the homogeneous mass immediately after mixing.

E. The curing time is about 20 minutes at 18°C.

F. Ensure good ventilation.

Cement based reparation - repair

Priming

A. Mix Primer A+B carefully with a low speed drill for about 1 minute.

B. Add no water!

C. Roll on primer on the prepared surface within the next 10 minutes.

D. Make sure that the Primer is still wet when applying Repair on it.

Applying

A. Mix 20 kg Repair powder with 4.5 litres cold water for about 1 minute, using a low speed drill.
(For repairing a wall, use about 3.5 litres of water instead)

B. Apply the Repair mixture "wet to wet" directly on the primer, and spread with a board or steel float.

C. Leave to cure for approx. 3 hours/ 18°C and ensure good ventilation.

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