

PERMOHONAN PERSETUJUAN MATERIAL

Aplikasi Consol Floor 351 Ecocrete

Nama Proyek	: Epoxy Flooring Area Apron Shelter (Outdoor) PT. Mustika Lastari Jaya di Lanud Madiun
Nomor SPK	: 044/PO/MLJ/IV/2026
Lokasi Pekerjaan	: Area Taxiway dan Depan Hanggar Lanud Madiun
Item Pekerjaan	: Aplikasi Consol Floor 351 Ecocrete
Tanggal Pengajuan	: 21 Juli 2026
Diajukan Oleh	: Ilman Arif

1. MATERIAL YANG DIAJUKAN

1.1.

Nama Produk	: CONSOL 82 LP	
Packaging	: 5 kg/set	
Keterangan	: Perekat epoxy untuk merekatkan beton baru ke beton lama, serta dapat digunakan pada baja, logam, kayu, dan material struktural lainnya.	

1.2.

Nama Produk	: CONSOL CRETE FLOOR LEVEL	
Packaging	: 25 kg/bag	
Keterangan	: Consol Crete Level berfungsi sebagai material repair untuk memperbaiki beton rusak, mengisi cekungan atau kerusakan ringan pada permukaan beton.	

1.3.

Nama Produk	: BOSTIK P795 SEAL'N'FLEX FC PREMIUM	
Packaging	: 600 ml/ssg	
Keterangan	: Sealant polyurethane 1 komponen yang juga berfungsi sebagai perekat. Produk ini memiliki elastisitas tinggi, cepat kering, tidak menyusut, bebas gelembung saat curing, serta memiliki daya rekat yang sangat baik pada berbagai permukaan, termasuk permukaan lembap.	

1.4.

Nama Produk	: CONSOL FLOOR 351 ECOCRETE	
Packaging	: 53.1 kg/set	
Keterangan	: Sebagai material heavy duty epoxy water based untuk pekerjaan floor topping dan perbaikan lantai beton yang memiliki ketahanan terhadap abrasi, benturan, dan bahan kimia, serta memiliki daya rekat yang sangat baik pada substrat beton kering maupun lembap.	

1.5.

Nama Produk	: BACKROD	
Packaging	: 500 m/roll	
Keterangan	: Backrod berfungsi sebagai material pengisi (joint filter) yang dipasang di dasar joint sebelum sealant diaplikasikan.	

1.6.

Nama Produk	: SIDAPOS 480 SL	
Packaging	: 1 liter/pack	
Keterangan	: Membasmi gulma yang sudah tumbuh (purna tumbuh) di sekitar dan pada celah joint beton secara sistemik hingga ke akar.	

1.7.

Nama Produk	: GOAL 240 EC	
Packaging	: 50 ml/pack	
Keterangan	: Mencegah pertumbuhan/perkecambahan biji gulma baru pada joint beton, sehingga area tetap bersih setelah treatment Sidafos (residual hingga 30-40 hari).	

1.8.

Nama Produk	: CONSOL PRIMER HYBRID EPOXY	
Packaging	: 5.4 kg/set	
Keterangan	: Consol Primer Hybrid berfungsi sebagai primer untuk memperkuat bonding beton dengan material Consol Floor 351 Ecocrete	

2. LEMBAR PERSETUJUAN

Diajukan Oleh	Diperiksa Oleh	Disetujui Oleh
 (Ilman Arif)	(_____)	(_____)
Tanggal: _____	Tanggal: _____	Tanggal: _____



CONSOL 82 LP

DESCRIPTION

CONSOL 82 LP is a solvent-free, thixotropic, 2 components structural epoxy resin adhesive. Perfect bond for new concrete surface to old concrete.

RECOMMENDED FOR

CONSOL 82 LP is used to bond fresh, plastic concrete, to hardened concrete and steel. Structural adhesive for concrete, masonry, metal, wood etc.

BENEFITS

CONSOL 82 LP is a deeply penetrative with high adhesive qualities. Other benefits are:

- Long pot life
- High strength bonding
- Excellent adhesion to most structural materials
- High early and final strength
- Insensitive to moisture before, during and after cure
- High effective, even on damp surfaces
- Can be applied with roller

PRODUCT DATA

Coverage

0.3 - 0.8 kg/m² depending on substrate condition

Colour

Light grey

Packaging

Part A : 3.33 kg
Part B : 1.67 kg
Part A+B : 5 kg set

Shelf Life

12 months when unopened and stored correctly

TECHNICAL DATA

Mix Density

~1.5 kg/Litre

Pot Life

Approx. 120 minutes

Mixing Ratio

Comp A : B = 2 : 1 parts by weight and volume

Compressive Strength

>40 MPa (7 days)

>45 MPa (28 days)

Flexural Strength

>40 MPa (28 days)

Tensile Strength

>17.5 MPa (28 days)

Bond Strength

To Concrete > 2 MPa (28 days)

INSTRUCTION FOR USE

Surface Preparation

Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, laitance, grease, curing compound, impregnation, waxes, foreign particles, disintegrated materials.

Preparation work

Concrete : Sandblast or use other approved mechanical methods

Steel : White material finish

Mixing

Pre-Mix each component. Proportion 2 parts Component A to 1 part Component B into clean pail. Mix thoroughly 3 minutes with a paddle on low speed until uniform in color.

Application

To bond fresh concrete to hardened concrete. Apply by brush, roller, or broom, place fresh concrete while **CONSOL 82 LP** is still tacky.

HANDLING PRECAUTIONS

- Avoids contact with skin and eyes
- Wear protective gloves and eye protection during work
- If skin contact occurs, wash skin thoroughly
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.



CONSOLCRETE FLOOR LEVEL

High Performance Cementitious Mortar with Micro Silica, Micro and Macro Fibre

DESCRIPTION

CONSOLCRETE FLOOR LEVEL is a high performance cementitious mortar with an additional special blend of micro silica, micro and macro fibres.

RECOMMENDED FOR

CONSOLCRETE FLOOR LEVEL is used for surface levelling of new floor of floor renovation, at high rise building, mall, exhibition hall, auditorium, etc.

BENEFITS

CONSOLCRETE FLOOR LEVEL provides the following properties of benefit such as:

- Material added with micro silica fume
- Flowing micro-concrete
- Good flow characteristics
- Easy to use, ready to mix powder
- Easy to mix, only add water
- High compressive strength
- Resistant to impact and vibration
- Non toxic and non chloride
- Non corrosive

PRODUCT DATA

Form
Powder

Colour
Grey

Packaging

CONSOLCRETE FLOOR LEVEL : 25 kg
Can be added with Aggregate (5-10 mm) : 20% - 60% (5 kg - 15 kg) by powder weight (25 kg)

Mixing Density

~2.3 kg/L (3.25 L water per 25 kg bag)

Mixing Ratio

3.25 L per 25 kg bag
(water per powder = 13% by weight)

Pot Life 30°C

60 minutes

Shelf Life

9 months when unopened

Storage

Dry, cool, shaded place

Product temperature

< 30°C

Ambient air temperature

10°C - 35°C

Substrate temperature

10°C - 35°C

TECHNICAL DATA

Chemical Base

Cement, selected fillers and aggregates, micro silica, special micro and macro fibres, additives

Flexural Strength

28 Days (ASTM C-348) $\geq 65 \text{ kg/cm}^2$

Compressive Strength

(ASTM C-109)
1 Day ~270 kg/cm²
3 Days ~400 kg/cm²
7 Days ~520 kg/cm²
28 Days ~650 kg/cm²

Bond Strength

28 Days
> 1.5 N/mm²
Concrete failure, over roughened concrete surface

28 Days

> 1.5 N/mm²
Over mechanically roughened old surface



INSTRUCTION FOR USE

Surface Treatment

Prepare surface area by cleaning. Remove oil, grease and other bond-inhibiting materials.

The surface of the concrete must be hard and targeted to get good adhesion. Before applying, surface must be wetted to saturated surface dry.

Mixing

Mix **CONSOLCRETE FLOOR LEVEL** with water, 25 kg for 3.25 liters of water. Mix continuously for 3 minutes (minimum). Use a mixing paddle or appropriately sized mortar mixer. Use a mechanically low speed drill (400 - 600 rpm).

Note : **CONSOLCRETE FLOOR LEVEL** can be mixed with Aggregate (5-10 mm): 20% - 60% (5 kg - 15 kg) by powder weight (25 kg).

Application

Apply **CONSOL 82 LP** (as a bonding agent) with notched trowel, approx. 0.5-1.0 kg/m² (depend on the surface condition). Place **CONSOLCRETE FLOOR LEVEL** while **CONSOL 82 LP** is still tacky.

Pour **CONSOLCRETE FLOOR LEVEL** after mixing to the repair area. Best to use trowel with desire result. For additional technical information of **CONSOLCRETE FLOOR LEVEL** contact the Technical Services.

CURING

Wet cure for a minimum 3 days with wet hessian, plastic sheet or apply a curing compound.

LIMITATION

Minimum applications thickness: 20 mm.

Recommended thickness in one pour is 20 mm to 100 mm.

If the application thickness exceeds 100 mm, special procedure must be taken to anticipate temperature rise. Iced water, add coarse aggregate to the mix, or both of them may used to eliminate temperature rise.

The product can be applied in sections generally up to 500 mm (mixed with Aggregate (5-10 mm)).

Keep the materials and substrate temperature lower than 30 °C.

Variations in cement could cause shade differences in colour of the mortar.

In the case of addition with coarse aggregate, it is advised to conduct trial mix to check influence of coarse aggregate addition on mortar workability and strength. 5 to 10 mm size aggregate is found to be the most suitable size for this addition.

Don't use for patch repair.

Please contact our Technical Service for suitable application.

CLEANING TOOLS

Clean all tools and application equipment with water immediately after use. Cured material/hardened can only be mechanically removed.

HANDLING PRECAUTIONS

- Avoid contact with skin and eyes
- Wear protective gloves and eye protection during work
- If skin contact occurs, wash skin thoroughly
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.



P795

SEAL'N'FLEX FC PREMIUM

ADVANCED DURABLE FLEXIBLE BUILDING AND CONSTRUCTION SEALANT

TECHNICAL DATA SHEET

BENEFITS

- 3-in-1 sealant (vertical & horizontal) & adhesive
- Bubble free curing
- Excellent toolability
- Suitable for wider joints (up to 50mm)
- Permanently elastic
- High mechanical resistance
- No shrinkage
- Adheres perfectly without primer on most, even damp, surfaces

PRODUCT DESCRIPTION

Bostik P795 SEAL'N'FLEX FC PREMIUM is a *New Generation* one component user friendly low MDI fast curing high performance and durable polyurethane sealant. **Bostik P795 SEAL'N'FLEX FC PREMIUM** will **not form bubbles** during its curing process. It has total movement capability of 100% ($\pm 50\%$) for continuous expansion and compression cycles.

APPLICATIONS

Bostik P795 SEAL'N'FLEX FC PREMIUM is specifically developed as a universal sealant for sealing construction & expansion joints, joints in pedestrian walkways and suitable for roofing applications, complies NFP 85-610. **Bostik P795 SEAL'N'FLEX FC PREMIUM** is also bonding adhesive for light fixtures and accessories.

DIRECTIONS OF USE

A joint with the correct dimensions is able to absorb movements between building materials. The joint depth should always be in the correct relationship of the joint width. A general rule is the ratio of joint depth to the width of the joint with a joint width up to 10mm is 1:1, with a minimum of 5mm in width and depth. For joints wider than 10mm, the depth is the width divided by 3 plus 6mm.

LIMITATIONS

- Not suitable for PE, PP, PC, PMMA, PTFE, soft plastics, neoprene and bituminous substrates
- Not suitable in combination with chlorides (pools)



TECHNICAL DATA

100% modulus	ASTM D 412, BTM-U023	>1.0 N/mm ²
Application temperature		+5°C to + 40°C
Base		New Generation PU
Curing time	@ +23°C/50% RH	3 mm/24 hours
Density	ISO 1183-1	1.30 g/ml
Elongation at break	ASTM D 412, BTM-U023	> 900%
Flow	ISO 7390	0 mm
Movement Capability	ASTM C 719	$\pm 50\%$
Shore A hardness	BTM-P003, ASTM C 661-15	37 - 44
Shrinkage	ISO 10563	< 10%
Skin formation	ASTM C 676	50 min.
Temperature resistance		-30°C to +80°C
Tensile strength	ASTM D 412, BTM-U023	1.69 N/mm ²

These values are typical properties and may vary +/-3%

SURFACE PREPARATIONS AND FINISHING

Application temperature + 5°C to + 40°C (applies to environment and substrates). All substrates must be solid, clean, dry, and free of grease and dust. Clean substrates with Bostik Cleaner. **Bostik P795 SEAL'N'FLEX FC PREMIUM** adheres perfectly without the use of a primer to most porous & non-porous substrates. In order to achieve maximum adhesion especially to concrete in which dust can't be avoided, Bostik Primer (or Bostik N49) is highly

recommended. Always test adhesion prior to application. Use Bostik Finisher to smooth the joint.

PAINTABILITY

Bostik P795 SEAL'N'FLEX FC PREMIUM is paintable with water based and most 2-component paints. Synthetic paints can dry slower. We recommend testing compatibility with paint prior to application.

CLEANING

Uncured material and tools can be cleaned by using Bostik Cleaner. Cured material can only be mechanically removed. Hands can be cleaned with Bostik Wipes.

COLOUR(S)

- White
- Off-white
- Light-grey
- Mid-grey
- Dark-grey
- Black

PACKAGING

- 300 ml Cartridge, 12 per box
- 600 ml Sausages, 12 per box

For product specifications, please refer to the Online Product Detail Page

SHELF LIFE

In unopened original packaging between + 5°C and + 25°C, shelf life is up to 15 months from production date, stored in a dry place.

HEALTH & SAFETY

Product Safety Data Sheet must be read and understood before use. These are available on request and via the websites.

CERTIFICATIONS

- F-EXT-INT-CC 25HM
- PW-EXT-INT-CC 25HM
- SNJF 25E
- ASTM C-920 as Type S, Grade NS, Class 50, use T, G, A, M & O as external & traffic joint sealant
- ISEGA (direct food contact)
- A+ French VOC Regulation

The information and recommendations relating to the application and end-use of the product are given in good faith and based on tests which we believe to be reliable. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. However, no warranty in respect of merchantability or fitness for a particular purpose, nor any liability arising out of any legal relationship, whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. No guarantee of their accuracy can be made because of the great range of field conditions and variation encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with limited warranty only, and on condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik be liable to anyone except for replacement of the products or refund of the purchase price.

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CONSOL FLOOR 351 ECOCRETE

A Heavy Duty, Epoxy Water Based

DESCRIPTION

CONSOL FLOOR 351 ECOCRETE is a heavy duty, 4 components, solvent free, odorless, moisture tolerant epoxy water based.

RECOMMENDED FOR

CONSOL FLOOR 351 ECOCRETE is mainly used for the following applications:

- Floor topping on damp and dry substrate
- Repair and maintenance of monolithic concrete floor
- Chemical and pharmaceutical industry
- Food and beverage industry
- Automotive and aircraft servicing facilities
- Production and packaging areas
- Commercial and industrial kitchens

BENEFITS

CONSOL FLOOR 351 ECOCRETE bring some benefits such are:

- Impact and abrasion resistant
- Chemical resistant
- Waterbased, solvent free and odourless
- Excellent adhesion to dry, damp, green or saturated surface dry concrete
- Vapour permeable
- Can be applied to fresh and damp concrete
- Resistance to thermal shock
- Adaptable thickness

PRODUCT DATA

Form

Part A : Liquid
Part B : Liquid
Part C : Powder
Part D : Mixed aggregate

Appearance

White, cream, green, grey, light grey, stone grey

Packaging

Part A	: 4.1 kg
Part B	: 5.3 kg
Part C	: 21.2 kg
Part D	: 22.5 kg
Part ABCD	: 53.1 kg/set

Storage

Dry, shaded place. Protect from direct sunlight and frost.

Shelf Life

12 months from the date of production, if stored properly in original, unopened and undamaged sealed container in dry condition between 10-32 °C. Protect from direct sunlight.

Limitation

- The "matte" of the finish can vary with temperature and the absorbency of the substrate.
- For exact color matching, ensure the **CONSOL FLOOR 351 ECOCRETE** in each area is applied from the same control batch number.

TECHNICAL DATA

Coverage

Primer:

- CONSOL PRIMER HYBRID EPOXY : $\pm 0.15 \text{ kg/m}^2$ (depend on surface condition); or
- CONSOL FLOOR 161/162 : $\pm 0.1 - 0.2 \text{ kg/m}^2$ (depend on surface condition)

Top Coat:

- **CONSOL FLOOR 351 ECOCRETE**: approx.11 kg/m^2 for $\pm 5 \text{ mm}$ layer thickness

Density

~2.2 kg/L

Pot Life (30 °C)

~15 Minutes



Curing Time

Foot traffic : 1 day
Light traffic : 2 days

Full Cure

5 Days

Hardness

Shore D hardness > 80

Compressive Strength

~20 N/mm² after 28 days

Flexural Strength

~7.5 N/mm² after 28 days

Cleaning

Use soap and water. Hardened material may have to be mechanically removed.

HEALTH & SAFETY

Some of the component of this product may be hazardous during mixing and application. Always use with suitable protective gears. Close container tightly after use. Keep out of reach of children.

For further information, refer to the product Material Safety Data Sheet, available upon request.

INSTRUCTION FOR USE

Substrate Preparation

Surfaces must be structurally sound, clean, and free from loose particles, oil, grease, and all other contaminants. The compressive strength of the substrates shall not be less than 20 N/mm², and the bond strength of the substrate must be least 1.5 N/mm².

Surface Preparation

Remove oil, grease and wax contaminants by scrubbing with industrial grade detergent or decreasing compounds followed by mechanical cleaning. Cement laitance, loose particles, mold release agents, curing membrane and other contaminants must be removed from the surface by shot-blasting, scarifying or grit-blasting followed by vacuum cleaning.

Mixing

Add part A, to a clean mixing drum. Add part B to the drum and mix for 10 second until uniform using helical spinner. Add the pigmented part C (powder) and part D (mixed aggregate) and stir for ±3 minutes to achieve a fully homogenous consistent mortar. Scrap out residue of previous mix from the sides of the drum and discard before the next pack, stir and mix well both content well with high-speed mixer (750 rpm).

Application

Apply **CONSOL FLOOR 351 ECOCRETE** within its pot life. Spread the composite matrix to thickness 5-10 mm and consolidate with steel trowel to the correct depth as desired. Immediately release air by spike roller.



CONSOL PRIMER HYBRID EPOXY

Water Based Epoxy Primer

DESCRIPTION

CONSOL PRIMER HYBRID EPOXY is two components, water based epoxy and solvent free. The system is formulated to bind to damp, dry, and green concrete.

RECOMMENDED FOR

CONSOL PRIMER HYBRID EPOXY can be used as primer and adhesion promoter for epoxy and polyurethane floor on:

- Concrete floors
- Cementitious Mortar Screed
- Epoxy Cement Floor
- Epoxy Mortar Floor
- Epoxy Concrete Floor

BENEFITS

CONSOL PRIMER HYBRID EPOXY provides the following beneficial properties such as:

- Low viscosity
- Solvent free
- Low odour
- Excellent bonding strength
- Water based
- Excellent adhesion to dry, damp, green concrete

COVERAGE

Material consumption approx. 0.15 - 0.3 kg/m² depends on substrate conditions

PRODUCT DATA

Form

Liquid

Colour

Part A : Milky white, liquid

Part B : Green to brown, liquid

Density

Part A : 1.05 kg/L

Part B : 1.05 kg/L

Bond Strength

1.5 N/mm² (Failure on concrete)

Pot Life (30°C)

Approx. 20 minutes

Storage

Dry, cool, shaded place

Shelf Life

1 years if stored in unopened original container

Packaging

Part A : 2.1 kg

Part B : 3.3 kg

INSTRUCTION FOR USE

Substrate Condition

Surfaces must be structurally sound, clean, and free from loose particles, oil, grease, and all other contaminants. The compressive strength of the substrates shall not be less than 20 N/mm² and the bond strength of the substrate must be at least 1.5 N/mm².

Surface Preparation

Remove oil, grease, and wax contaminants by scrubbing with industrial grade detergent or degreasing compounds followed by mechanical cleaning. Cement laitance, loose particles, mould release agents, curing membrane and other contaminants must be removed from the surface by shot blasting, scarifying or grit-blasting followed by vacuum cleaning.

Mixing

As Primer

Mixing use a low speed (300 rpm) electric mixer, mix part A&B for at least 3 minutes until the mix is uniform.

Mixing Ratio:

General primer : **A : B = 2.1 : 3.3**



APPLICATION

As Primer

Apply **CONSOL PRIMER HYBRID EPOXY** by squeegee or brush on to the prepared surface.

If the surface has moisture barrier, allow the moisture barrier to dry before apply **CONSOL PRIMER HYBRID EPOXY**.

Curing:

At 30 °C, foot traffic access in 6 hours, fully cured in 48 hours.

PRECAUTIONS

- **CONSOL PRIMER HYBRID EPOXY** contain certain chemicals which can cause skin irritation if exposed and respiratory reaction if inhaled.
- Keep away from open light, including welding.
- Avoid contact with skin and eyes.
- If skin contact occurs, wash skin thoroughly.
- Wear protective glove and eye protection during work.
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.
- Not classified as finishing material, and slightly color difference on result may occurred.

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