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Product overview recommendations | substructure practical instructions for balconies

Contact

Mineralit - Mineralgusswerk Laage GmbH Heinrich - Lanz - Straße 4 18299 Laage

Tel.: 038459 / 661 - 0 Fax: 038459 / 661 - 23 Web: www.mineralit.info E-Mail: kontakt@mineralit.info

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mineralit PRODUCT INFORMATION

To the present Product Information

The value and living quality of existing residential complexes are significantly increased by new construction or retrofitting with large balconies. Also in this year again numerous humans can enjoy the beautiful days in the year for the first time on the own balcony and feel a piece more quality of life.

However, it does not always depend on the mere presence of a balcony, but pleasant sizes, extravagant shapes or fashionable colors, contribute decisively to the comfort of an apartment.

The Mineralit balcony floor slab is a heavy-duty, extremely durable and aesthetic solution both for presented balcony systems and for balcony renovation or balcony extension.

The available panel thicknesses of 20, 25 and 35 mm make them particularly interesting for filigree balcony constructions and suspended balcony solutions.

Mineralit is a high-performance polymer concrete product also known as mineral casting. The most important components are quartz sand and rock granulate (94%), as well as an acrylate-based binder, which has the strength and durability of a natural stone (e.g. granite) when cast.

Mineralit balcony floor slabs have been supplied ready for installation according to your individual specifications for over 20 years. All conceivable designs can be realised, from simple rectangles or squares to trapezoidal shapes, rounded shapes or composite shapes.

This also includes unusual panel shapes and notches, e.g. for rainwater downpipes or cantilevers for the entrance area. This is exactly what makes our balcony slabs an individual, sustainable and unique product.

Mineralit balcony floor tiles are available with a wide range of decorative surfaces in addition to the natural version for the colour design of your object. A further surface treatment or an additional surface covering is not necessary, as our tile elements are both waterproof and UV-resistant.

In addition to the floor boards we have offer a lot of other interesting products with the same components.

The self-supporting stairs and landing slaps for in- and outdoor are an elegant and save alternative to grids.

This product information is intended as information for building owners, building planners and construction companies who use a Mineralit balcony floor slab or are planning to use it.

It consists of three parts, the product overview, the application recommendations with suggestions for suitable substructures and the practical instructions, in which the professional handling of our material is explained.



Product Overview

product overview

Standard Forms

			type	thik- kness	up- stand	cast- gutter	drain- hole
1	I. mineralit -		m20	20 mm			
b	alcony floor panel		m25	25 mm	without	without	without
			m35	35 mm			
-							
	2. circum		m20/4	20 mm			
	ferential upstand and		m25/4	25 mm	4-sided	without	with
	drain hole		m35/4	35 mm			
			m20/3	20 mm			
3.	three sided upstand		m25/3	25 mm	3-sided	without	without
			m35/3	35 mm			
-							
4.	three sided		m20/3/R	20 mm			
	upstand and cast-on gutter		m25/3/R	25 mm	3-sided with	without	
			m35/3/R	35 mm			

More detailed information on the individual standard shapes can be found below in our application recommendations starting on page 20.

The standard shapes are manufactured to exact dimensions according to your individual drawings or templates at the factory. They can of course also be equipped with extras such as gradients, drainage solutions etc. (see Extras).

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SPECIAL FORMS

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nera

Special Forms

The special shapes are manufactured to exact dimensions according to your individual drawings at the factory.

Of course the special forms can be fitted out with extras, e.g. upstands.

NOTE:

Uprights for rounded shapes must be agreed separately.

Trapezium/ Bevel (examples)



Radius (examples)



Combined Forms (examples)



special forms balcony floor panel



Extras



EXTRAS

Penetrations (examples))



Assembled balcony forms (examples)

If a balcony exceeds the maximum dimensions for a Mineralit balcony floor slab, several slabs can be put together.

To do this, we need a precise drawing or template that clearly shows the position of the individual panels.





extras balcony floor panel

EDGE SOLUTIONS



Slopes

Mineralit balcony floor slabs can also be manufactured with a gradient, if necessary an approval in individual cases is required. The slab thickness can be 30/40 mm or 35/50 mm, depending on the available support width. The permissible support width of the substructure depends on the lowest thickness of the balcony slab.



edge solutions balcony floor panel



Moulded Stainless Steel – Inlet Pipes with Perforated Plate Covering

For optimum drainage, we recommend at least two drains per balcony. When planning, please ensure that the substructure has a sufficient slope in the direction of the drains. The size of the inlet connection piece can be individually adapted (in case of deviations, please specify separately).

ready mineralit balcony floor panel with revolving upstand, drain hole and stainless steel inlet (extras, no standard) rectangular drain hole round upstand detail top view left: moulded stainless steel – inlet pipes (features are available mineralit, no standard) right: top view of the finish moulded stainless steel inlet pipe (bore = 5 cm)

10 drainage balcony floor panel

DRAINAGE



Mineralit Drain for Balcony Floor Panels

The mineralit drain is also available separately (i.e. independently of our balcony floor slabs). It consists of five individual parts and can be infinitely adjusted for panels from 20 to 35 mm thick by means of a locknut.

The total length of the drain, assembled, is always 80 mm.



balcony slab with pattern recess for the drain

built-in drain

drain

Suitable drain accessories for the drain bore can be obtained from Mineralit - Mineralgusswerk Laage GmbH, please state this separately.

drainage 1 balcony floor panel



Cast-on Stainless Steel Drainage with a Perforted Plate Covering

The sturdy stainless steel drainage channel is firmly integrated into the base plate and anchored with additional safety bolts. It can be placed anywhere, depending on the direction in which the water is to run off or how the gradient in the substructure is planned. For optimum rainwater drainage, we recommend a slope of up to 2% in the substructure.



The gutter height depends on the panel thickness. Of course, the gutter is closed at the side ends if it is not to be joined together with connecting elements (in the case of split balcony floor slabs).

The standard drain has a diameter of 50 mm. Drainage takes place via a slope in the substructure or, on request, with an integrated slope in the balcony slab itself, so that the water is also channelled to the gutter.

The cast-on stainless steel channel must protrude freely and must not rest on the substructure. The position of the drain connection is freely selectable.

The width of the drainage channel is freely selectable and should be adapted to the individual plate dimensions and specifications of the customer after personal consultation.





left: mineralit balcony floor panel with drainage

right: frontal view of the balcony, in front is the drain connection

12 drainage balcony floor panel

EQUIPMENT



Perforated plate channel cover made of stainless steel (V2A)

bonded fastener (Bonding with Sika®-Bond T2, white)

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Cast stainless steel drainage channel (V2A)



The stainless steel channel is connected by a glued connecting element.



Stainless steel channel at the side ends closed.

Processing Accessories

connection material

Sika [®] -Adhesive-Cleaner	1 l- can		
Sika® Primer 3 N	1 l- can		
SikaTack [®] -Panel-Adhesive	33 m role		

SikaBond® T2 600 ml sausage

joint material

Sika® Primer 3 N 1 I- can

Sika®Cord bore = 13 mm or bore = 6 mm

Sikaflex[®] PRO 3 WF 600 ml sausage

NOTE:

If you have special questions about Sika® disposable material, please ask the manufacturer at www.sika.com separately for further information, such as processing instructions (e.g. processing literature, etc.)!

equipment 13 balcony floor panel



TECHNICAL DETAILS

Technical Details

	material	mineralit; resin-bonded polymer conrete panel with reinforcement				
	material thickness	35 mm	25 mm	20 mm		
	weight	about. 80 kg/qm	about. 53 kg/qm	about. 42 kg/qm		
max sp	an length in the bearing direction	1540 mm	960 mm	640 mm		
	maximum production measure	1580 x 4000 mm	2000 x 4000 mm	2000 x 4000 mm		
S	application	single-span system	two-, multi-field/ flow system	multi-field-/ flow system		
	building material class	B1	B1	B1		
\bigcirc	attachment on substructure	bonded in accorda	nce to instructions			
	true density	2,45 g/cm ³ (DIN 104	8)			
\mathbf{O}	compressive strenght	138 N/mm² (DIN 1048)				
4	bending strenght	29 N/mm² (EN 196)				
	tensile strenght	13,8 N/mm ²				
	abrasion resistance	hardness class I (DIN 50321 by Böhme; e.g. Terrazzo = hardness class II)				
\sim	slip resistance	R9 - R11 (DIN 51097 and DIN 51130)				
\bigcirc	dimensional tolerances	by DIN 18202/				
	maximum deflection for the construction	$\leq \frac{1}{200}$				
	stiffness criteria for the substructure	deformation under concentrated load at any point: ≤ 1 mm /1 kN vibration analyses could be neccessary for bigger spans.				
0 0	surfaces storage of the balcony floor panel	rectangular, trapezium/ bevel, radius, combined forms revolving frame with minimum support 40 mm				
	intermediate layer attachtment	SikaTack®-Panel-Adhesive, B: 12 mm, self adhesive We recommend Sika® for bonding. For screw connection, please contact us (not approved)!				
	drainage	interior drainage via support system or front tray drainage via upstand profile and drip edge profile				
	colouring	see decor overview				
	upstand	trapeze upstand (col	oured decors), rectang	ular upstand (nature		
	information for instruction	decors), drip edge profile, skirting board, fillet the mineralit-balkony floor panel has no safety eyelets. Because of this, we recommend an appropriate vacuum suctioning. We offer a hire service for the equipment (please request for conditions).				

Information:

The guarantee decays, if you ignore the information for the instruction of the mineralit-floor-panel. Therefore all potential issues are to be clarified in advance. For technical progresses we reserve the right to any product changes. The information is no guarantee or warranty. The potential liability is concerning the selling price of the product.

DECORS

Mineralgusswerk Laage GmbH

Decor Overview for Mineralit Products:

Balcony floor panel mineralit 35/25/20

Balcony floor panel surfaces

Self-supporting terrace and platform elements

Self-supporting stairs

Individual products (raised beds, street furniture or plant pots)

General Information

For the individual surface design of your chosen Mineralit product, we offer a variety of decors. Please note that slight differences in colour from the original may occur due to the printing process.

For concrete building projects, we therefore recommend that you request a decorative sample from us or contact an application consultant.

The underside of our panel elements are delivered in a standard "Beige" colour tone for production reasons; normally no painting is carried out ex works. A colouring/painting of the underside with dispersion paints by the processor is of course possible after installation of the balcony floor slab.

Special wishes, such as the colour design of the side edges or the underside of the panels by the manufacturer, are to be stated separately when ordering (possibly combined with an additional charge).

In addition, our panel surfaces can also be coated in a RAL colour of your choice (note: Please note the UV resistance of the desired colour; please consult us if necessary).

Due to their special processing method, our coloured decors guarantee a particularly durable and abrasion-resistant surface that adapts perfectly to the colour of the façade of your building project.

decor 15 overview



The following Standard Decors are Available:





DECORS

dark brown



bright brown

syenit

16 colored standard decors

DECORS

The following Special Decors are Available:

Special decors Our discounts, separate

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Our discounts, separate prices on request and limited availability. Please note: Different orders may vary slightly in colour.



drozenit

grey/blue



chili



green/brown



RAL - tone 5017 trafficblue



RAL - tone 8012 redbrown

Example selection: other RAL-colours on Request

colored 17 special decors

decors | special decors



blue/brown

RAL-colours

For individual surface coatings please ask for prices separately. Please note: UV resistance for certain RAL colours.



RAL - tone 6028 pine grenn



RAL-tone 1033 dahlia yellow

RAL - tone 7035 light grey





Edge Coatings:

Standard Coating

For all panel elements without separate data, the side edges are marked in the **Standard decor RAL-colour 7035 light grey**.

For an additional charge, a RAL colour of your choice is also available. (please note notes on UV & weather resistance, if necessary ask for details)







Coated Side Edges (additional cost)

The side edges can also be coated with the surface decor on all sides, both in the standard decor and in a RAL colour of your choice.



Step Edge (additional cost)

For platform slabs or balcony slabs with a staircase for example, it is possible a **stainless steel (V4A) step edge protection** to be poured into the panel element. For a safe step, in any weather.



18 decors edge coatings



Application-Recommendations



Overview Substructure - Variants

The support width for mineralit balcony floor slabs is circumferential, at least 40 mm and also at least 40 mm for the intermediate supports. For split panels, the support in the joint area is correspondingly approx. 100 mm. The joint width is 12 mm for the 20 mm panel & 13 mm to 15 mm for the 25 mm & 35 mm panel.

When planning the substructure, we recommend providing a sufficient slope in the direction of the drain.

In the following, different systems for the substructure are explained. The choice of the system for the substructure depends on the panel thickness, panel size and the resulting support width. **Please also note** the criteria for the required stiffness of the substructure which result from the general building authority approval (Z-10.9-427).

	mineralit 35 (m35)	mineralit 25 (m25)	mineralit 20 (m20)
material thickness weight lowest cost application	35 mm about 80 kg/qm single-span system	25 mm about 53 kg/qm two-, multi-field-/ flow system	20 mm about 42 kg/qm multi-field- / flow system
maximum plate size (in one piece)	1580 x 4000 mm	2000 x 4000 mm	2000 x 4000 mm
max. span acc. general authorization	1.540 mm	all 960 mm	all 640 mm
example sketches for bearing (minimum supporting: 40 mm)			

Information for ordering:

Please send a dimensional drawing with technical details for a quick and accurate deal. Please state, when you need painted side edges.

After fitting the balcony floor panel a bottom paint with emulsion colour is still possible.

20 substructure balcony floor panel

SUBSTRUCTURE



Single - Span System – Mineralit 35

The mineralit 35 balcony floor slab is designed as a uniaxially tensioned single-span slab and can be designed up to a single support width of 1540 mm (single-span girder).





substructure

The drawing on the right shows an example of a substructure made of steel (St 37-2 or S 235) with rectangular standard profiles in plan view for a uniaxially clamped single-span slab with up to a single support width of 1540 mm.



substructure 21 balcony floor panel



SUBSTRUCTURE

Two - Span System – Mineralit 25/20

Mineralit 25 and mineralit 20 balcony floor slabs are designed as uniaxially tensioned continuous slabs. Mineralit 25 can be designed up to a single span of 960 mm, mineralit 20 up to a single span of 640 mm.





The drawing on the right shows an example of a substructure in plan view for a uniaxially tensioned continuous slab mineralit 25.

Multi - Field -/ Flow System - Mineralit 25/20





The drawing on the right shows an example of the substructure and the necessary bonding areas for the mineralit 25 balcony floor slab.

Anti - Storm Device

In accordance with DIN 1055, Part 4, Edition 08.86, buildings and structural elements must be sufficiently dimensioned and constructed to withstand the effects of wind.

22 substructure balcony floor panel

SUBSTRUCTURE





Tack-Panel Assembly Tape

The Sika® Tack-Panel assembly tape (width 12 mm & height 3 mm) from Sika® is recommended.

Further Information

In case of deviations from the general building supervisory approval (approval no. Z-10.9-427). If proof is required, it will be submitted by the manufacturer. **The costs for the proof provided shall be borne by the customer.**

Liability (Important Information)

Mineralit - Mineralgusswerk Laage GmbH is not liable for any damage that may result from this product information. At this point it is expressly pointed out that the load-bearing capacity of the substructure supporting the slab must be verified separately for each building project.

Other load loads than the planned vertical load load are not intended for the mineralit balcony floor slabs.

substructure 23 balcony floor panel



type m35 / m25 / m20

Standard Form 1 – Mineralit-Balcony Floor Panel

Standard form 1 means the use of the mineralit balcony floor slab without drain and upstands. Various substructure and drainage options are explained below.

Attention! Please always ensure flexible bonding between the lower edge of the panel and the support profile (see processing instructions starting on page 37).

1. Without Drainage

If the drainage question is of secondary importance for the planned object, the mineralit board type m35 / m25 / m20 can be stored on a statically correctly dimensioned simple box profile frame and elastically bonded.





Here a simple box profile with gutter is used for drainage.

Example 1: three-sided channel; Example 2: frontal channel with laterally welded flat iron profile



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Attention! When planning the substructure or frame construction, please pay particular attention to providing it with a sufficient gradient (recommended up to 2%) in the direction of the drain in order to avoid standing water and a corresponding source of danger as far as possible.



3. Drainage via Aluminium Profile Frame

Here the drainage is integrated into the substructure. This has the advantage that the beam and drainage are already completely integrated into the substructure.



mineralit 35/25/20 27 balcony floor panel

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type m35/4 / m25/4 / m20/4

Standard Form 2 – Revolving Upstand and Drain

This variant describes a mineralit plate with a circumferential upstand. The rainwater can be drained off through one or more drain holes. Matching outlet nozzles are available from the factory (see product overview \rightarrow accessories).

For the substructure, a standardised standard box profile made of steel or aluminium is sufficient to meet the static requirements.

Material and coating costs are significantly reduced by reducing the number of profiles on a circumferential frame.

The profiles can be screwed or welded with standardized connection angles without additional sealing work (saves time and costs).

NOTE: Please dimension the position of the discharge nozzle as specified in the approval.



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type m35/3 / m25/3 / m20/3 Standard Form 3 – Three Sided Upstand

This variant is recommended for substructures (steel or aluminium) with an existing drainage channel on site.

Attention! Care must be taken to ensure that there is a professional seal between the gutter connection and the underside of the panel so that no water can run onto the substructure and any water damage is avoided.





type m35/3/R Standard Form 4 . Three Sided Upstand and Cast-On Drainagegutter

With this variant, no drainage solution via the substructure is required any more.

Drainage takes place via a stainless steel channel cast onto the plate. (For more information on the cast-on drainage channel, see Drainage Product Overview)





Special Applications



The Refurbishment Solution for Existing Balconies The Balcony Extension with Mineralit





Advantages:

- Minimization of concrete refurbishment
- Short construction time, because ready to install fabrication in factory
- Installation independent of the weather
- Significant increase of the balcony's floor area
- Rises the value and quality of living





example for a loggia extension with mineralit

32 balcony extension

SPECIAL APPLICATIONS

Mineralgusswerk Laage GmbH

NEW: Balcony Extension with Built-On Balconies Mineralit offers optimal Solutions for the Drainage

Example for a mineralit balcony extension with built-on balconies

> featured balcony extension

> > originally existing balcony



When planning balcony or loggia extensions with presented balcony construction, the question of optimal drainage often arises. For this reason, we would like to present here some possible solutions that have proven themselves in practice.

The special feature of the balcony extension with mineralit elements is that an extension construction is placed in front of the old balcony, which is covered with self-supporting mineralit balcony floor slabs. On the old balcony, a mineralit balcony slab covering will be laid in the same décor, which at the same time serves for the simple and extensive renovation of the old balcony floor. In this way, the two new coverings also form an optical unit.

Drainage Solutions

For this purpose we offer two drainage options.

Variant 1: A stainless steel channel is cast onto the slab at the abutting edge of the self-supporting floor slab. The opposite tile covering receives a cast-on profile, which can be anchored into the channel without constraint.

Variant 1: with cast-on stainless steel drainage channel



balcony extension 33 & drainage system



Variant 2: A Z-profile is cast onto the joint edge of the balcony floor slab and the slab covering. The gutter provided by the customer allows the rainwater to be optimally and purposefully discharged.

Variant 2: with cast-on Z-profile



Finally, a cover grille is installed on site so that the entire balcony surface is connected and accessible. For both versions it is recommended to plan a slope in the middle of the gutter. The slab thicknesses are freely selectable for both balcony coverings and drainage solutions.



34 balcony extension& drainage



Suspended or Suspended Balconies

The mineralit 35/25/20 floor slab is also excellently suited as a large self-supporting balcony floor slab for suspended or suspended balcony systems due to its relatively low weight.



attached 35 balconies



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Example of Assembly





Pre-assembled balcony slabs on galvanised steel frame.



Railing and wall mounting are mounted - the prefabricated balcony element can be attached to the wall.



pre-assembled The balcony element is transported by crane.



The balcony element is mounted to the prepared wall anchorage.



Two finished towers - a balcony slab made of mineralit as a light and durable balcony base slab. This solution ensures high processing productivity, especially in larger construction projects.

36 attached balconies

In order to avoid damage to the mineralit panels due to processing or transport, the following points must be observed during storage, transport and assembly of the panels:

1. Storage

The mineralit balcony floor slabs are packed and delivered ready for dispatch in horizontal steel rental pallets. The pallets **must be stored horizontally on a level, firm, ungrown surface to avoid distortion** of the panels due to incorrect storage. (see photos) The panels are stored with anti-slip mats made of rubber granulate to prevent damage during transport.





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Packed in steel RTI's mineralit - panels

Anti-slip mats between the mineralit - plates

Storage without steel pallets is on squared lumber (approx. 100 x 100 mm). As an alternative to squared lumber, the boards can also be underlaid with rubber granulate mats. A maximum of 10 panels should lie on top of each other. The squared lumber (or rubber granulate mats) must be placed so that the corners are flush with the squared lumber.

For panels larger than 2500 mm, two additional squared lumber (or rubber granulate mats) are required in the middle (see diagram below).



storage 37 balcony floor panel



2. Transport

The total lenght of the steel pallet:4200 mm x 2200 mm maximalOwn weight of the steel pallet:200 kg bis 250 kgMaximum weight of the steel pallet with balcony floor panels: 2500 kg

Loading capacities

without upstand:

20 mm BBP: max. 9 pcs. stackable 25 mm BBP: max. 7 pcs. stackable 35 mm BBP: max. 6 pcs. stackable

with upstand:

20 mm BBP: max. 6 pcs. stackable 25 mm BBP: max. 5 pcs. stackable 35 mm BBP: max. 4 pcs. stackable

The mineralit - balcony floor panels must be transported and stored lying.

3. Discharge/Rearrangement/Installation

Discharge: The unloading of the steel rental pallets from the transport vehicle is carried out by means of a forklift. The pallets should always be lifted centrally using a fork or forklift truck.

Assembly/repositioning: The plates are repositioned and assembled using a suitable vacuum lifter. For plate lengths greater than 2000 mm, vacuum lifters with at least 2 suction heads must be used next to each other. Please note that the vacuum lifter must be designed for the respective panel weight and for use on rough surfaces. Special care must be taken to ensure that the plate on the vacuum lifter remains horizontal. (see graphics below)

Attention! The dropping, slipping down or similar heavy one-sided vibrations of the Mineralit panels must be avoided in any case, due to the high risk of cracks forming on the panel elements..



Horizontal relocation/assembly of the mineralit boards is absolutely necessary, as an inadmissible edge pressure occurs when a single edge or corner is placed, which inevitably leads to crack formation in the board (due to static overloading).

NOTE:

A suitable vacuum lifter can be borrowed from Mineralit - Mineralgusswerk Laage GmbH. The corresponding instructions for use are available.

38 transport balcony floor panel

Practical Instructions

1. Cleaning of the surfaces to be bonded and preparing an adhesive base

The one-component **Sika® adhesive cleaner** is used to clean metals, plastics and lacquers from adhesive surfaces. It is applied thinly in one wiping direction with a soft blotting paper or cleaning paper. Please turn the cloth several times to avoid spreading the dirt. With the 1 I container you can clean approx. 9 m². The **flash-off time of the adhesive cleaner is at least 15 minutes**.

The **Primer 3 N** is then applied thinly with a flat brush in one wiping direction to the entire surface of the supports.

It is essential to ensure that the primer does not get onto the surface of the plate, as this can lead to discoloration.

With Primer 3 N, approx. 5 m² per 1 I container can be applied. The flash-off time of the primer is at least 30 minutes, however, depending on temperature conditions up to **45 minutes are recommended**.

2. Fill operation SikaTack® – Panel – Assembly Tape

The **assembly tape** is used to separate the balcony floor slab from the supporting structure. It is glued all around the supports. Overlaps are not permitted (for details see diagram on next page).

3. Order construction adhesive SikaBond® T2 (white)

The one-component construction **adhesive SikaBond® T2** is sound-absorbing and vibration-inhibiting, has a high resistance to weathering and ageing, can be sanded and is non-corrosive. It is generously applied in the form of a triangular caterpillar to the supports next to the assembly line (for details see diagram on next page).

4. Placing the mineralit - balcony floor panel

A suitable vacuum lifter is used to insert or place the Mineralit balcony floor slab. For panel lengths greater than 2.000 mm, vacuum lifters with at least 2 suction heads must be used. Please note that the vacuum lifter must be designed for the respective panel weight and for use on rough surfaces. A suitable vacuum lifter can be borrowed from mineralit. The corresponding instructions for use are available.

Special care must be taken to ensure that the plate on the vacuum lifter remains horizontal. The dropping, slipping down or similar heavy one-sided vibrations of the mineralit - plates must be avoided in any case.



Horizontal relocation/assembly of the mineralit boards is absolutely necessary, as an inadmissible edge pressure occurs when a single edge or corner is placed, which inevitably leads to crack formation in the board (due to static overloading).



PRACTICAL INSTRUCTIONS

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Sketches: under construction with mounting tape and adhesive, top view (Example)

1. slab one-piece (without joint)

Adhesive SikaBond® T2 (white, circulating)

2. slab multipart (with joint)

(white, circulating) joint area ______ assembly line ______ (circulating)

A processing instruction as **video**, you find on our web page under: http://www.mineralit.info/balkonplatten/

40 mount balcony floor panel

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Mounting a Balcony Element in the Factory



The assembly tape is first applied to the prepared frame of the substructure (application of adhesive cleaner & primer).

Afterwards, a bead of SikaBond[®] T2 is applied to the frame in a continuous line. Please observe the exact processing instructions of the manufacturer.



Then position the mineralit balcony floor slab <u>horizontally</u> with a suitable vacuum lifter and carefully place it on the substructure. (Attention: Always transport the panel securely.)



The balcony floor is ready for construction site assembly.

mount 41 balcony floor panel



Movement Compensating Floor Joint

The joints between the mineralit boards are formed with the Sikaflex[®] - PRO 3 WF system. The expansion joint should be at least 12 mm (up to 15 mm depending on the panel size) with a maximum joint distance of 2.0 m (or depending on the panel size e.g. with a maximum dimension of $4 \times 2 \text{ m}$).

Attention! Please also observe the processing instructions of the manufacturer.

1. Cleaning

The joint edges must be clean, dry, free of oil, grease and loose components. Grind the surface with coarse abrasive fleece and apply Sika® - Primer 3 N primer thoroughly and without gaps.



2. Applying the Primer

Apply a thin layer of Primer 3 N with a flat brush in one wiping direction over the entire surface of the joint flanks.

The <u>flash off time of the primer is at least 30 minutes</u> is recommended, however, depending on the temperature up to 45 min flash off time.



It is essential to ensure that Primer 3N and Sikaflex[®] - PRO 3 WF do not get onto the board surface, as this can lead to discoloration on the decorative surface, and it should also be avoided to place the containers on the board.

42 joint design



Movement Compensating Floor Joint

3. Inserting the cord

Depending on the panel thickness, a round cord (Ø13mm) must be inserted for panel thicknesses greater than 20 mm, i.e. for our panel elements 25 & 35 mm. With our <u>20 mm panels two round cords (Ø 6mm) must be inserted</u>, this is necessary due to the small panel thickness and the smaller joint width (12mm instead of 13mm).

panel thickness: ≥ 25mm requires 1 x 13mm round cord!



panel thickness: = 20mm requires 2 x 6mm round cords!

4. Importing and smoothing the joint sealing Sikaflex® PRO 3 WF

After the appropriate substrate preparation and the introduction of the round cord, the joint sealant is introduced into the properly prepared joint with a suitable gun. **Care must be taken to ensure that the sealant is applied without bubbles or cavities and is in full contact with the joint flanks.** The joint surface is then smoothed off with a suitable smoothing tool or spatula, whereby the sealant must be pressed against the adhesive surfaces and the backfilling material.



joint sealant Sikaflex®- PRO 3 WF (colour gray)

round cord d=13 mm or d= 6 mm in case of 20 mm plates



NOTE: If you have special questions about Sika® disposable material, please ask the manufacturer at www.sika.com separately for further information, such as processing instructions (e.g. processing temperature, etc.)!

A processing instruction as **video**, you find on our web page under: http://www.mineralit.info/balkonplatten/

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Mineralit - Mineralgusswerk Laage GmbH

Heinrich - Lanz - Straße 4 18299 Laage

Tel.: 038459 / 661 - 0 Fax: 038459 / 661 - 23 E-Mail: kontakt@mineralit.info Web: www.mineralit.info