Storage of EUROFLEX® Products and adhesive cements

EUROFLEX[®] products should normally be stored in dry areas at constant temperature above 10°C. If stored below 10°C, store the slabs at the installation site temperature (> 10°C) for at least 2 hours before installation.

Important note: Adhesive cements must be stored at all times in dry locations above 0°C.

To avoid colour variations due to differences in sunlight exposure, leave the UV protection film on the products as supplied until just prior to installation.

Required Tools

- Steel straight edge (e.g. carpenters square 600 mm)
- Cutting knife, heavy duty, with replacement blades
- Tape measure or meter stick
- Felt-tip markers (water –soluble) or chalk, etc.
- Chalk line with refill chalk
- Application gun for dispensing adhesive cement
- Adhesive cement cartridges
- Sheet metal, plastic liner or cardboard sheet (approx. 2 L x 1,5 W of the slab dimensions)
- Hand saw, sabre saw or band saw (with blades for wood)
- Kneepads

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page 1 of 11

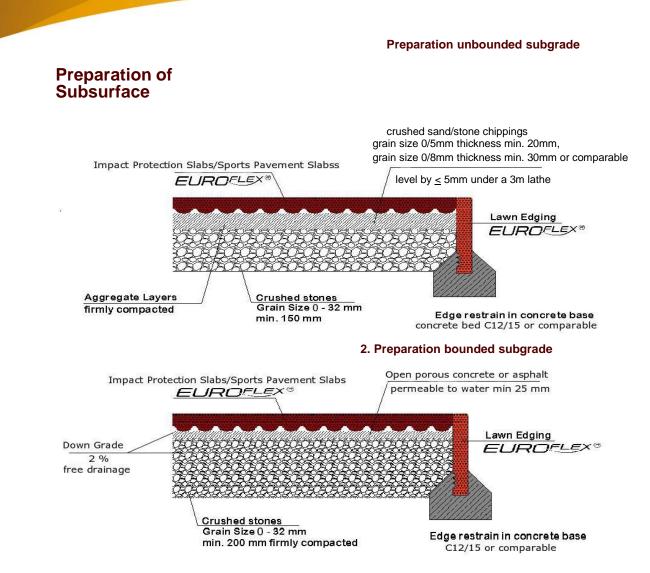






Installation Instruction Impact Protection Slabs Euroflex and **Sports Pavement Slabs Euroflex**

Nr. 9301- R - 02 Edition: July 2013



Note: The basement is taken off till attended depth plus thickness of the slabs. Through acceptance inspection for the subgrade is recommended for installation the slabs. Note: Special for installation Sport Pavement Slabs must be save that the subgrade is possible to absorption the water. The edge trim for the Sport Pavement Slabs must be flexible like the EUROFLEX® Lawn Edging no concrete!

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Subsurface Design / Acceptance Criteria

EUROFLEX[®] slabs have excellent drainage properties. The subsurface below them must therefore provide sufficient drainage as well. Paved surfaces (such as concrete or asphalt) must be level with a slope of approx. 2% and have adequate takeoff drains.

Any depressions greater than 3 mm in depth which can collect water must be leveled off by suitable materials.

Like other elastomeric materials, EUROFLEX[®] products absorb heat when exposed to direct sunlight. Their surface temperatures can be higher than asphalt surfaces exposed to the same conditions. EUROFLEX[®] products should be installed and stored in shady areas if possible to avoid overheating.

Preparation of the Subsurface

Proper construction and acceptance inspection of this subsurface before installation is extremely important.

The following instructions must be followed exactly by the contractor carrying out the subsurface preparation and by the EUROFLEX[®] slab installer in subsequent acceptance inspection. Remove the existing soil to a depth of min 300 mm plus the thickness of the slabs that will be installed.

If no edge trim enclosed is present around the area to be covered, install EUROFLEX[®] Lawn Edging for safer playing conditions.

EUROFLEX[®] slabs are elastic products with open pores. Based on optional effects of the weather, as much rain, it is possible that the dimensions change.

Should questions arise regarding soil conditions and characteristics or expected soil behavior, consult a soil mechanics engineer.

Compact each layer with a vibration compactor to 98% standard Proctor density.

Following application of the final layer, again check levelness, correct uneven spots with suitable material. Paved subsurface such as concrete or asphalt must be absolute even level without any vertical height. To avoid water collection, must have a slope of at least 2 % and must lead into a take-off drain system.

The surfaces must be free of cracks, clean and free of oil or other foreign materials. Regardless of the type of subsurface used; it must not deviate from level by more than 5 mm under a 3 m lathe.

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Crushed stones, Grain Size 0-32 mm



crushed sand/stone chippings 0/5mm, 0/8mm or comparable



Firmly compacted

Perpendicularity Check, Minimization of Dimensional Variations

Start installation by laying a chalk line parallel to and a full slab width away from one side of the surface to be covered. Lay a second chalk line exactly perpendicular (at an angle of 90°) to the first. Check that the lines are perpendicular by the 3/4/5 rule: Starting at the intersection point of the lines, measure off exactly 3 m down the first line and mark this point, then measure off exactly 4 m down the second line and mark this point. Measure the distance between the two points marked. If the lines are perpendicular, the distance between the points will exactly be 5 m.

The dimensional tolerance of EUROFLEX[®] slabs as manufactured is approx. +/- 0,8% in length and width, +/- 2 mm thickness. Dimensional variations can be caused by storage in stacks (elastic compression of the slabs due to the stack weight) and changes in thermal expansion and ambient temperature.

The following procedures are recommended to minimize dimensional variations:

- Be certain that all slabs to be laid have the same temperature over the entire term of installation.
- Spread the slabs out on the ground for 2 hours before final installation to permit them to regain their original dimensions.
- Install all slabs in a single session to ensure installation under similar conditions.

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page 4 of 11

For ideal installation conditions, the ambient temperature at the site should have been over 4°C for at least 24 hours prior to installation. If the ambient temperature at the site is below 4°C, store the slabs to be installed in a dry area at a temperature of at least 10°C for at least 72 hours prior to installation.

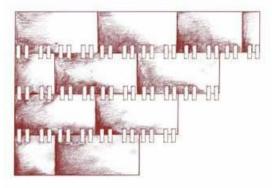
Do not install EUROFLEX[®] slabs if ambient temperatures below 4°C are expected at the installation site for an extended period of time.

Installation of EUROFLEX® Slabs

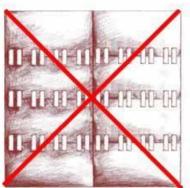
Install the first row of EUROFLEX[®] slabs by placing them precisely along the chalk line (During installation of the Sports Pavement Slabs with synthetic turf, please make certain that the blades of grass or tufting for each tile are aligned in the same direction. Doing so will provide a uniform optical appearance across the entire surface.

Start the second row (and every second row thereafter) with a half slab. Connect the slabs of the second row to the first by the integrated connector pins. The masonry-style configuration (Figure 1) provides stability of the installed slabs. Cut the last slab in each row to the required size using a heavy-duty carpet knife or a sabre saw.

Correct: "T"-joints for all types of slabs



Incorrect: cross joints



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Installation of Sport Pavement Slabs areas



If the surface to be covered is nonrectangular, cut slabs as required and install as shown.



When installing EUROFLEX[®] slabs on granular subsurface, use a sheet metal, plastic or cardboard underlay as an installation aid to keep particles out of the joints between the slabs.



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page 6 of 11

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Use the second chalk line to check the perpendicularity of installation.

Any slabs which will border on the edge limitation enclosing the surface must be cut to size very accurately to ensure a close fit.



Glue only slabs of the first and the last row and all slabs on the outer perimeter to each other and to the edge limitation enclosing the surface to secure them against uplifting or unauthorized removal.

Read the use instructions for the adhesive cement carefully prior the installation. Use only adhesive cements which are supplied or recommended by KRAIBURG Relastec GmbH & Co.KG. Suitable disposable gloves should be worn during glue application to avoid skin irritation.



<u>Attention</u>: At installation sport pavement slabs on bonded subgrade, concrete or asphalt, is a down grade approx. 2% and a free drainage always necessary. It must be sure that the slabs not any wetness absorb at the subgrade. The result would be that

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Installation of Sandwich System

The slabs in the lower layer of a Sandwich system do not have to be connected to each other with connector pins. Also, cutting to size of slabs on the perimeter of the surface does not require as close as fit as is the case in the top layer. Fill out any gaps between the slabs in the lower layer and the edge limitation with a suitable fine granular material.



Install the slabs in the top layer with a slight set to those of the lower layer.



Apart from the differences noted above, install the top layer as described for a singlelayer installation.

Please note: While manufactured under controlled conditions EUROFLEX[®] slabs may All information without guarantee, subject to change. The installation instruction is not subject to any change service. Each current and form can be recalled at www.krabburg-relaster.com/europlex/used in manufacturing.

page 8 of 11



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Application Line Paints



Application line paint on the Sports Pavement Slabs is without difficulty possible. Important is that the paint based on polyurethane e.g. Conipur (Conica sports surfaces).

Maintenance of the Installed EUROFLEX® Surface

Regular cleaning of your installed EUROFLEX[®] surface will promote a long useful life as well as attractive appearance. EUROFLEX[®] surfaces can be kept clean by sweeping with a soft-bristled broom or vacuuming with an industrial vacuum cleaner. High pressure water spraying can also be used to clean EUROFLEX[®] surfaces and provides more efficient dirt removal from the surface pores of the slabs.

EUROFLEX[®] slabs are not adversely affected by cleaning with most common household or industrial cleaners when diluted in accordance with manufacturer's recommendations. Light surface stains can be removed with such cleaners using a scrubber or a cleaning rag.

Depending on the frequency of use, EUROFLEX[®] surfaces will occasionally need deep cleaning procedures to remove dirt, stains, mold and mildew, etc. These procedures utilize a steam cleaner or power washing with or without the use of cleaning agents. Cleaning the gabs between the slabs is very important.

<u>Please note</u>: Out EUROFLEX[®] warranty is not applicable if the product has not been maintained in accordance to out maintenance instructions above.

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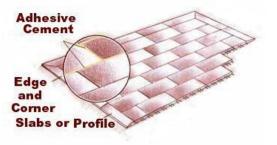






Products:

EUROFLEX[®] Impact Protection Slabs EUROFLEX® Sports Pavement Slabs **EUROFLEX®** Design Slabs EUROFLEX[®] Letter and Number Slabs EUROFLEX[®] Riding-Toy Slabs EUROFLEX[®] Protect EUROFLEX[®] Paving Block Tile EUROFLEX[®] Elastic Pavement Blocks EUROFLEX[®] Lawn Edging EUROFLEX® Step Blocks EUROFLEX[®] Edge and Corner Slabs EUROFLEX[®] Edge and Corner profile EUROFLEX[®] Edge Protectors EUROFLEX[®] Elephant/ Rhino EUROFLEX[®] Rubber Palisades **EUROFLEX®** Perimeter Panels



Required quantity of glue: 1 cartridge (310 ml) for every 3 – 4 m of joint length glued. **Type of glue**: elastic 1-component polyurethane adhesive cement e.g. Ottocoll P 83 and Ottocoll m 500 (Otto Chemie, Fridolfing/Germany, Tel. +49 (0)8684 – 908-0, Other purchasing sources: specialist retailers or your nearest KRAIBURG representative.

Preparation: The surfaces must be clean, dry and free of grease. Check adhesion to and compatibility with plastic and painted surfaces before installation.

Gluing: Apply adhesive cement from application pistol onto the substrate. The required layer thickness is dependent on the materials being joined. Within 10 minutes, put the upper material in place and apply contact pressure. Due to the pasty consistency of the cement, we recommend maintaining contact pressure until curing is complete. The required curing time is dependent on the layer thickness and the humidity of the ambient air.

Processing temperature: + 5°C until +40°C

Film after 20 min at 23°C

Curing time after 24 h at 23°C

Primer for absorbent subgrade: Designed to improve adhesion on minerals materials e.g. porous concrete is grounding recommended. e.g. OTTO primer 1225 for glue Ottocoll P 83 and M 500; for asphalt use OTTO Primer 1216 and Ottocoll P83

All information wForms of delivery: tBottle. 100nml,2500ml,5500ml,5500ml,500ml [0000ml] change service. Each current and valid from can be recalled at www.kraiburg-relastec.com/euroflex/ Application: Apply OTTO Primer smooth with a brush.







page 10 of 11

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page 11 of 11

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