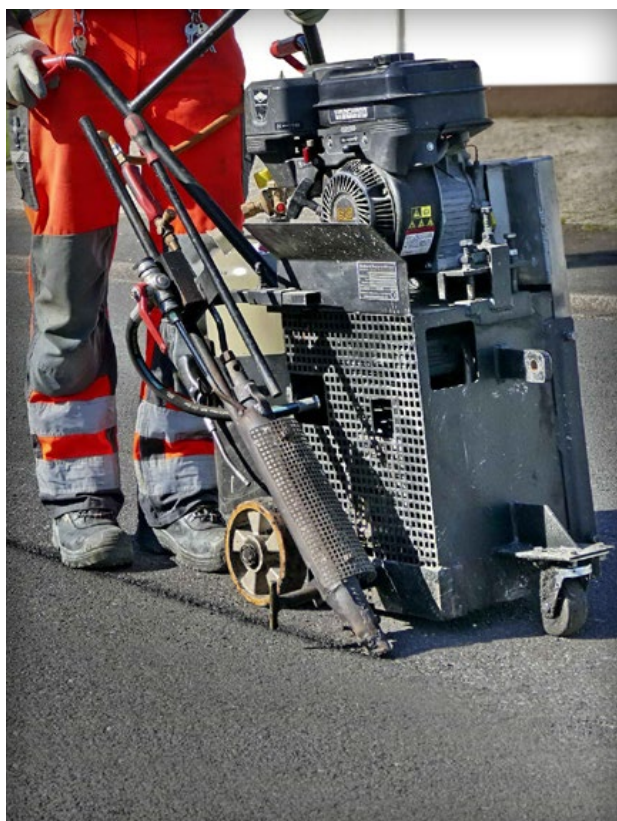




# JOINT GROUTING TECHNOLOGY

CRACK AND JOINT RENOVATION IN ASPHALT AND CONCRETE

ISS. 04/2019





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## JOINT GROUTING TECHNOLOGY

Joint grouting technology has been a major theme at Nadler right from the start. We're all fully informed about joints and cracks in road construction.

## THE COMPLETE RANGE

Innovative grouting technology from Richard Rupprecht GmbH, large kettles from Linnhoff & Henne GmbH & Co.KG and our high-quality Nadler grouting compounds make us the complete supplier.

At Nadler you will find a complete range, starting with crack and joint preparation, joint drying, through small and large joint grout kettles to the patented GranuGrip granulate for increased grip.

Draw on more than 50 years of experience and let us put together the perfect solution for your needs. At Nadler you can also rent equipment and have it demonstrated, of course.

In addition, we train your employees making you specialists in joint technology.





# CRACKROUTER HRF-L

## HYDRAULIC CRACK ROUTER



0 to 400 rpm

### DESCRIPTION

The **Hydraulic Crack Router HRF-L** enables the effortless and efficient production of routed grooves in asphalt.

Whether for the renovation of crack damage patterns, the production of connection joints or joint renovation, the **HRF-L** proves itself with practical features and is easy handling.

In contrast to fast-rotating cutting tools, the slowly rotating carbide tool produces a rough joint edge, which ensures a particularly good connection between the grout and the existing asphalt surface.

### APPLICATION AREAS

- Joint production after asphalt work for subsequent hot grouting
  - At the edge of excavations
  - for connections to existing top layers
  - joint cleaning and preparation by brushing out
- Routing cracks for subsequent hot grouting
- Removal of old joint filling during joint renovation

### ADVANTAGES

- ✓ Practically no dust production
- ✓ Removes old joint filling without lubrication
- ✓ Full hydraulic operation
- ✓ Smooth adjustment of milling depth & drive motor
- ✓ High-quality carbide tools



Edge Cutter module



Track Router module

### TECHNICAL DETAILS

Actuator	Briggs & Stratton Vanguard petrol engine
Engine output	16.9 kW - 23 PS
Revs. routing tool	Smooth from 0 to 400 rpm
Routing depth	0 - 40 mm
Routing width	10 - 15 mm
Weight	650 kg

# JOINTCUTTER RFF-A

## CRACK- & JOINT CUTTER WITH SUCTION



up to 5,000 rpm

### DESCRIPTION

The RFF-A crack and joint cutter enables effortless and efficient production of milled cuts in asphalt and concrete.

Thanks to the electro-mechanical drive, one-hand operation and the manoeuvrable chassis, even complex cracks can be prepared precisely for grouting.

High-quality diamond tools ensure high daily productivity rates. The powerful extraction system with cyclone filter frees the milling cut of any milled material and further processing can be carried out directly afterwards without any loss of time.

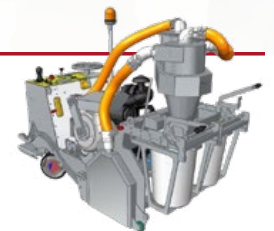
### APPLICATION AREAS

- Joint production after asphalt work for subsequent hot grouting
  - At the edge of excavations
  - for connections to existing top layers
- Cutting cracks for subsequent hot grouting

### ADVANTAGES

- ✓ Electric drive - smooth adjustment
- ✓ Powerful double cyclone extraction with fine filter
- ✓ High-quality diamond tools
- ✓ Infinitely variable cutting depth - via mechanical stop
- ✓ Safety cut-out

Container change during operation



### TECHNICAL DETAILS

Actuator	Briggs & Stratton Vanguard petrol engine
Engine output	16.9 kW - 23 PS
Revs. routing tool	Up to 5,000 rpm
Cutting depth	0 - 40 mm
Cutting width	max. 15 mm
Weight	260 kg



# HOT AIR LANCES

RISSEBOY, KOMP-MINI & KOMP SL



0-600°C

## DESCRIPTION

All-purpose tools for drying, cleaning and preparing joints and cracks for subsequent hot grouting.

The devices in the Komp series combine hot air lance and compressor in one device. The combination of powerful air compressors with the advanced design of the Rupprecht hot air lance eliminates the need for a bulky construction site compressor - without compromising quality.

## ADVANTAGES

- ✓ **Air compressor & hot air lance in one unit**
- ✓ **Best blasting results due to advanced lance design**
- ✓ **Robust and manoeuvrable construction**
- ✓ **Simple, ergonomic operation**
- ✓ **High-quality grouting results thanks to optimal preparation**

## TECHNICAL DETAILS

	Hot air lance / -edge	KOMP Mini	KOMP SL
Motor	-	4.7 kW (6.5 PS) petrol	9.7 kW (13 PS) petrol
Stroke volume	-	approx. 600 l/min	approx. 1200 l/min
Air pressure need	from 1 m³ / min at 4-12 bar pressure	-	-
Hot air temperature	0-600 °C smooth adjustment	0-600 °C smooth adjustment	0-600 °C smooth adjustment
Firing	11 kg propane gas bottle	11 kg propane gas bottle	11 kg propane gas bottle
Gas consumption	1.5 - 2 kg/h	1.5 - 2 kg/h	1.5 - 2 kg/h
Weight (without gas bottle)	approx. 30 kg	approx. 80 kg	approx. 165 kg
Dimensions (LxWxH)	1550 x 700 x 1080 mm	700 x 1150 x 1080 mm	830 x 1550 x 1300 mm
Drive motor optional	-	-	Yes

# TORNADO

HIGH PERFORMANCE JOINT CLEANER & DRYER



DRY

REMOVE

## DESCRIPTION

The TORNADO hot air blower is used for drying and de-icing joints, asphalt and concrete surfaces in road construction.

Equipped with a high-performance turbine, the unit generates a powerful, flameless hot air stream for pore-deep drying and gentle removal of temporary marking materials.

The TORNADO is delivered in a special transport and service box of EU pallet dimensions for problem-free handling.

## ADVANTAGES

- ✓ **Flameless, powerful drying of surfaces and joints**
- ✓ **Largely independent of weather conditions**
- ✓ **Reduced downtime**
- ✓ **Competitive edge**
- ✓ **Labour-saving work**

TRANSPORTBOX



## APPLICATION AREAS

- Joint drying for subsequent grouting after dew or rain.
- Drying and de-icing of asphalt and concrete surfaces before renovation work.
- Removal of temporary marking materials.

## TECHNICAL DETAILS

Temperature	500 - 750 °C
Jet velocity	1650 km/h
Output	2-level 50% or 100%
Speed range	33,000 - 119,000 rpm
Fuel type	Diesel, Shell V-Power or Aral-Ultimate (95%) + Special-Turbine oil (5%)
Weight	approx. 120 kg



# COMBIKETTLE

30 LITRE & 50 LITRE

COMBI-KETTLE - GROUT TECHNOLOGY



**ALL IN 1**  
**HEAT+ POUR**  
**WITH ONE DEVICE**

## DESCRIPTION

The Combi Kettle combines the melting and grouting processes in a single device and is used as a versatile tool for grouting joints and repairing cracks.

The clever design allows grouting work to be carried out with unmatched flexibility and quality.

The robust lightweight construction and the integrated crane and clamping lugs allow both mobile use and use as a stationary hot grouting kettle.

With the extensive range of attachments, even demanding grouting work on kerb stones or inclines can be carried out precisely and effortlessly.

## APPLICATION AREAS

- grouting of joints in asphalt and concrete surfaces
- Renovation of crack damage patterns in asphalt surfaces

## ADVANTAGES

- Fast and gentle melting of the material**
- Compact and manoeuvrable design**
- Simple, ergonomic operation**
- High-quality grouting results**
- Numerous accessories**
- Also available as lightweight aluminium kettle with agitator and temperature control**

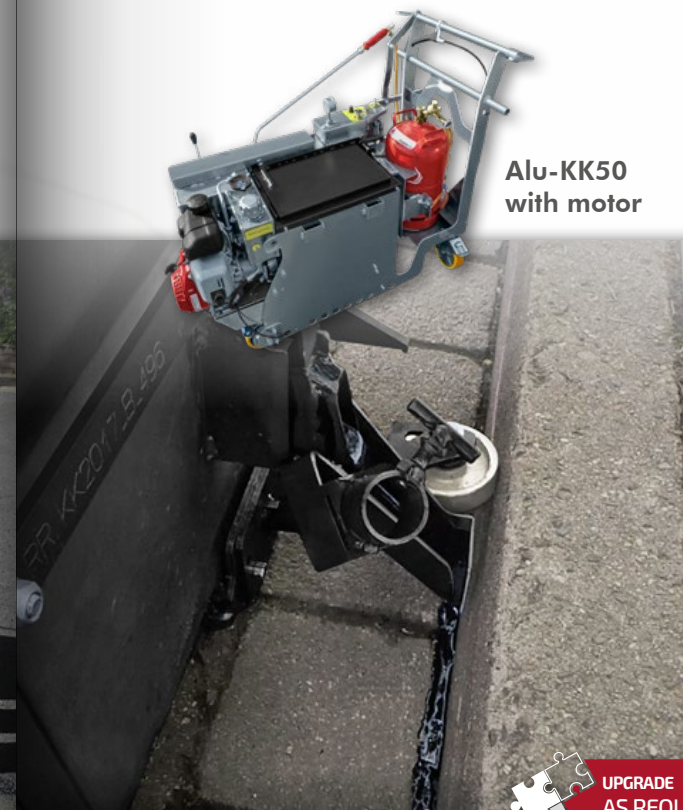
## TECHNICAL DETAILS

Model	50 l	30 l
Firing	11 kg propane gas bottle	
Dimensions (L x W x H)	approx. 130 x 60 x 120 mm	
Weight	approx. 85 kg	

# COMBIKETTLE

30 LITRE & 50 LITRE

COMBI-KETTLE - GROUT TECHNOLOGY



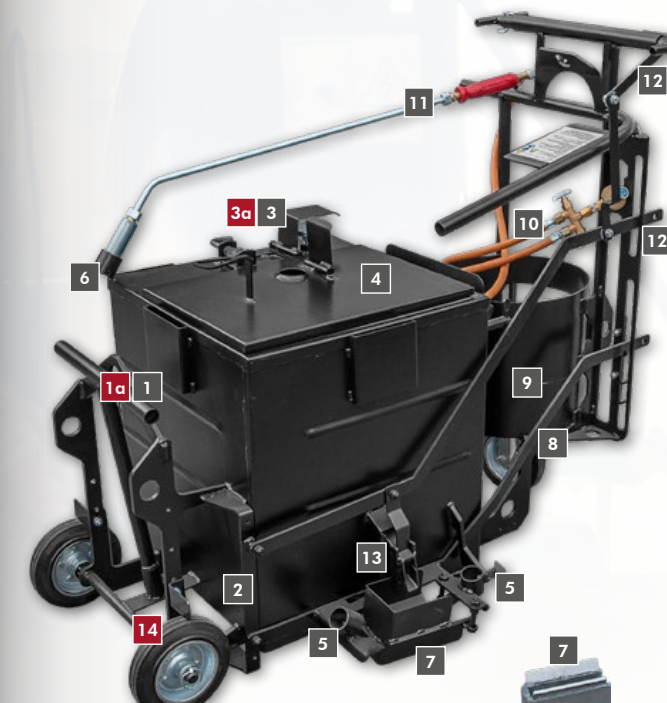
Alu-KK50  
with motor

**UPGRADE**  
**AS REQUIRED**



## SERIES EQUIPMENT

1	Manual agitator with removable operating cross
1a	Optional - hydraulic agitator
2	Indirect heating via heat protection plate
3	Temperature display
3a	Optional - temperature control
4	Extra large filling opening
5	Two burner holders on the applicator - for heating and drying the joints - or smoothing of the grout
6	Holder for burner lance
7	Two applicators (3 cm and 6 cm)
8	Height-adjusting applicator follows uneven roads
9	Gas bottle holder
10	Propane burner incl. fittings
11	Propane lance
12	Ergonomic operation of the outlet with two positions
13	Outlet for grouting compound
14	Optional - hydraulic drive



## GROUTING TOOLS



## ACCESSORIES





# GROUTINGKETTLE

UP TO 230 LITRE



**ALL IN 1**  
EVERYTHING IN ONE PLACE TRAILER

## DESCRIPTION

The agitator kettles are notable for their robust construction and fast heating times due to double-walled grouting vats with air circulation. Simple and safe operation ensures optimum performance on site.

All agitator kettles are individually designed and precisely tailored to your requirements.

## OPTIONAL ACCESSORIES

- Drive with hydraulic brake
- Fuel oil burners
- Powerful compressor
- Hydraulic platform for joint router
- Integrated hot air lance
- Rotating warning light
- LED work light
- Hose crane
- Hose reel 15m

**ALSO STATIONARY**  
AS 90 OR 120 LITRE



## ADVANTAGES

- Fast and gentle melting of the material
- Compact and manoeuvrable design
- Simple, ergonomic operation
- High-quality grouting results
- Numerous accessories
- All equipment in one place on the trailer
- Safety filling hatch with agitator stop

## TECHNICAL DETAILS

- Hot-dip galvanized frame
- Durable hydraulic hoses (few hoses)
- Individual customization
- Very robust construction
- Simple operation
- Few electronics
- Easy maintenance
- Modular design
- Hydraulic lifting axle

# GROUTINGKETTLE

UP TO 700 LITRE



**QUICK HEATING TIME**

## DESCRIPTION

Indirectly heated kettles with or without thermal oil for fast and gentle heating of bitumen hot grouting compounds. Available as truck body, truck set-down system or as trailer chassis (1 & 2-axle models possible).

## OPTIONAL ACCESSORIES

- Fully automatic pumping device
- Self-propelled drive
- Hydraulic filling hatch
- Gas or oil heated

## ADVANTAGES

- Fully hydraulic travel drive + steering
- Load on drive wheel up to 1800 kg
- Lifting axle for driving on construction sites
- Large heated preheating cabinet
- Safety brake when not in use
- Display window for material control
- Protection of the kettle base through special heat conduction

## TECHNICAL DETAILS

<b>Model:</b>	<b>LKT 052 (indirect)</b>
Filling capacity:	approx. 500 litre
Burner output:	61.9 kW
Agitator drive:	hydraulic
Thermal oil content:	approx. 70 litre
Temperature control:	electronic
Motor:	Hatz Diesel 9.8 kW Soundproofed
Actuator:	Hydraulic self-propelled (0-3 km/h)
Dimensions (L x W x H)	1900 x 1100 x 1750 mm
Weight	2,600 kg



**5" OUTLET FOR FAST REMOVAL**



# HOT GROUTCOMPOUNDS

JOINT GROUT



**TESTED  
QUALITY**



**STURDY  
PACKAGING**

## DESCRIPTION

Nadler specialised joint grout is a hot-applied joint grout, compliant with DIN EN 14188-1 Type: N2 (low flexibility).

The formula, based on polymer-modified bitumen, mineral aggregates and special additives, has particularly good adhesive properties, high resistance to weathering and ageing, as well as having excellent processing properties.

Nadler joint grout guarantees a permanently elastic joint seal up to 35 % movement absorption and meets the requirements of TL / TP Fug-StB 15.

## ADVANTAGES

- ✓ **Permanently elastic joint closure with up to 35% movement absorption**
- ✓ **Particularly high adhesive properties**
- ✓ **High resistance to weathering and ageing**
- ✓ **Excellent processing properties**
- ✓ **Resistant to water and de-icing salt**
- ✓ **Different container sizes for every purpose**
- ✓ **Extremely short melting times**

## APPLICATION AREAS

Nadler joint grouting is suitable for grouting joints in asphalt and concrete without special chemical treatment as well as for grouting cracks in asphalt.

## PRIMER

Get optimal results with  
**NADLER MULTI-PRIMER**



## TECHNICAL DETAILS

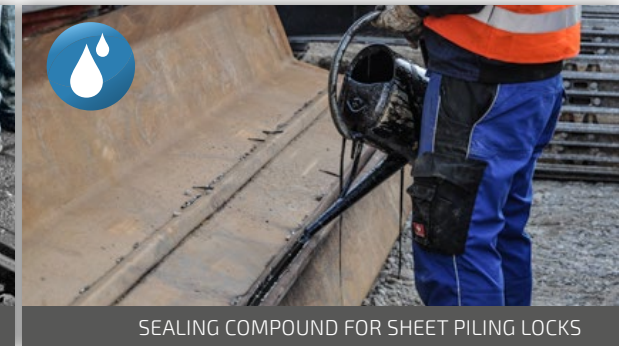
Composition	Polymer-modified bitumen, mineral aggregates and special additives
Density	1.1 g/cm³
Processing temperature	160 – 180 °C
Primer	Nadler Multi-Primer
Shelf life	24 months

# HOT GROUTCOMPOUNDS

ADDITIONAL GROUTS



PLASTER GROUT COMPOUND



SEALING COMPOUND FOR SHEET PILING LOCKS

## PLASTER GROUTCOMPOUND

Compliant with TL Fug StB 15  
**15 kg box**



## BRIDGING GROUTCOMPOUND

Compliant with DIN EN 14188-1 Type N1  
**10 kg box**



## TRACK GROUTCOMPOUND

Compliant with TL Fug StB 15  
**12 kg box**



## TRACK UNDERLAY GROUT COMPOUND

Compliant with TL Fug StB 15  
**35 kg box**



## EDGE SEALINGCOMPOUND

Compliant with to ZTV Asphalt-StB 07/13 & TL Sbit-StB 15  
**25 kg box**



## BIOGAS SYSTEMS SPECIALISED GROUT COMPOUND

DiBT approval for LAU systems  
**25 kg or 10 kg box**



## SEAM GROUTCOMPOUND

Compliant with TL Fug StB 15 & TL Sbit-StB 15  
**12 kg box**



## SHEET PILE INTERLOCK SPECIALISED GROUT COMPOUND

Compliant with DIN EN 14188-1 Type: N2 (low flexibility)  
**11 kg box**



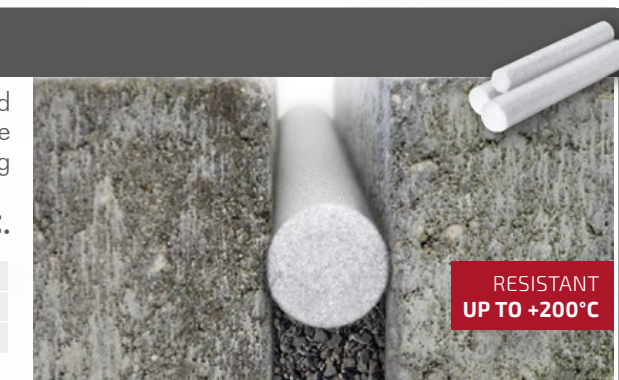
**NON WATER POLLUTING**  
Ask for our report!

## HEAT RESISTANT PE-CORD

The PE cord is a closed-cell polyethylene foam round cord for backfilling grouting joints in order to reduce material consumption. Prevents the grout from adhering to the base of the joint.

**Short-term temperature resistance up to +200 °C.**

<b>PACK</b>	Ø 10 mm / 1700 m	Ø 22 mm / 360 m
	Ø 13 mm / 1100 m	Ø 25 mm / 280 m
	Ø 15 mm / 780 m	Ø 32 mm / 190 m
	Ø 19 mm / 500 m	



**RESISTANT  
UP TO +200 °C**



# STREWING MATERIAL

GRANUGRIP



## DESCRIPTION

The first choice when it comes to permanent, non-slip spreading of hot and cold grouting compounds when repairing cracks and grouting joints in asphalt surfaces.

The innovative, highly abrasion-resistant plastic granulate produces a permanently rough surface, since it forms an optimum bond with bituminous grouting compounds and does not sink due to its lower density.

## ADVANTAGES

- ✓ permanently rough surface
- ✓ high resistance to abrasion
- ✓ melts or bonds with the casting compound
- ✓ patented

# COLDGROUT

BIOLAST SYSTEM



**OPTIMAL FOR**  
SMALL SCALE PROJECTS

## DESCRIPTION

Biolast 2K is a cold processable, 2-component grouting compound based on reactive bitumen. This innovative cold grouting compound offers not only fast and uncomplicated processing but also excellent resistance to heat, cold, ageing and weathering.

## ADVANTAGES

- ✓ Good permanent elasticity and plasticity
- ✓ Fast re-opening for traffic
- ✓ Environmentally friendly (solvent free)
- ✓ Compliant with TL Fug StB 15

# JOINT POSITIONING TAPE

A NADLER INNOVATION



## DESCRIPTION

The innovative Nadler joint positioning tape revolutionises the positioning of joints in cast and rolled asphalt surfaces. The positioning tape can be pulled out or burnt away after the asphalt has been laid. What remains is a clean joint for grouting.

Available in 40x15 mm - especially for mastic asphalt, 50x20 mm - especially for rolled asphalt and as a self-adhesive option in 40x15 mm.

## ADVANTAGES

- ✓ Subsequent joint cutting not required
- ✓ Simple and quick installation
- ✓ Suitable for cast & rolled asphalt
- ✓ Tested heat resistance compliant with TL Fug-StB 15

# TOOLS

ADDITIONAL TOOLS FOR JOINT GROUTING

## ZSK-GROUTING FUNNEL

Flexible, double-walled tool for grouting with hot grouting compounds.

**OPTIONAL:**  
Curbstone grouting device



## GROUTING TOOLS

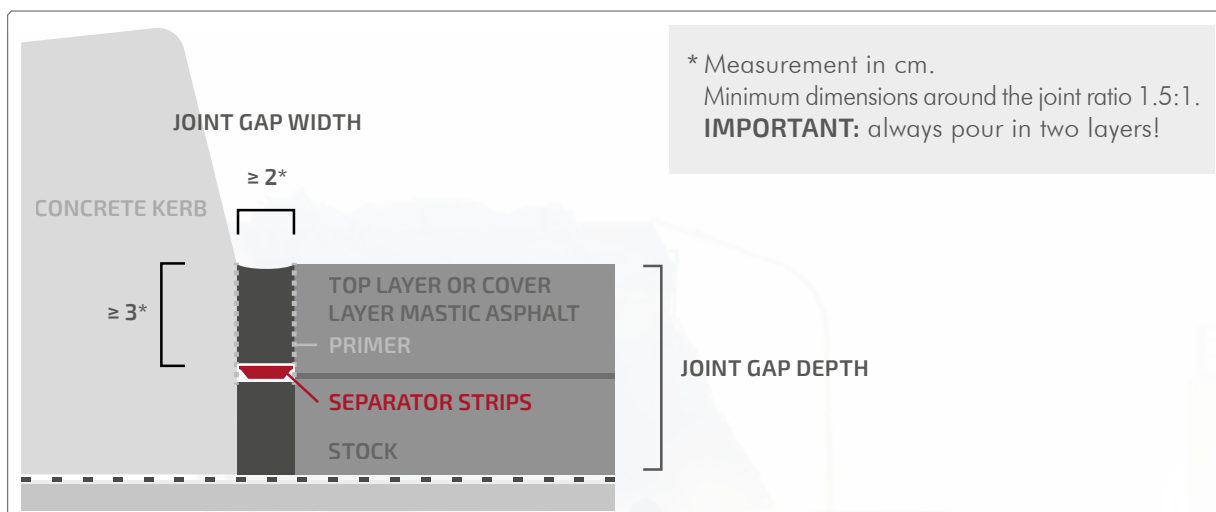
Grouting can, grouting utensils, grouting block tongs, etc.





# JOINT BRIDGING SYSTEM

COMPLIANT WITH ZTV-ING PART 7 AND ZTV-FUG STB 15



## DESCRIPTION

The Nadler joint bridging system is used in the second construction phase.

The joint separating strip made of closed-cell, cross-linked polyethylene foam in trapezoidal form ensures a correct joint ratio. It separates the cap joint of the 2 asphalt layers and thus prevents three-flank adhesion.

After pre-treating the joint with primer/pre-coat, the separating strip can be positioned manually or by means of an installation device. Resistance to the primer /pre-coat is a given.

In contrast to a round cord, the joint separation strip achieves the prescribed joint depth of 30mm and guarantees the required elasticity. The elastic bridging grout compound type N1 can then be applied in two layers

## ADVANTAGES

- ✓ Prevents three-flank adhesion
- ✓ Quick and easy installation
- ✓ rot-proof
- ✓ Free of lubricants and silicones
- ✓ Ensures a bridge joint in accordance with ZTV-ING Part 7 and ZTV-Fug StB 15



The information printed in this brochure is based on experience and the most recent research and practice, however it is non-binding and does not establish a contractual relationship.

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