



# DIAMOND

CRETE *HF high-temp*

Mechanically and chemically highly resistant polyurethane concrete as a mortar coating with very high resistance to thermal shock, low odor and low emissions, solvent-free, with jointless, matt and non-slip surface. Available in different colours.

### Application fields

Dairies and cheese production	Food and beverage industry	Commercial kitchens
Chemical production sites	Meat, poultry and fish production	Catering
Warehouses and distribution centers	Refrigerated and freezer rooms	
Wet production and working areas		

### System build-up

DIAMOND	
DIAMOND	

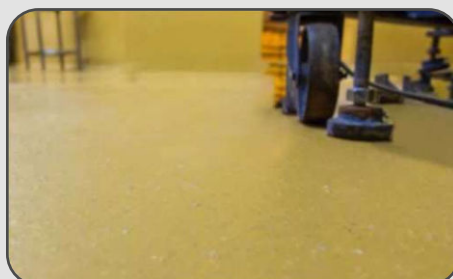


### System highlights

6.0 - 12.0 mm System thickness

<b>HACCP-certified</b>	<b>Suitable for permanent wet load</b>	<b>High impact resistance</b>
<b>ISEGA certified for food handling</b>	<b>Thermal shock resistant between - 45°C and + 130°C</b>	<b>Early water resistant</b>
<b>Low emission acc. AgBB and other standards</b>	<b>Low odor</b>	<b>Anti-slip surface R10</b>

### System pictures





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## Application and Consumption

Layer	Product	Consumption (kg/m <sup>2</sup> )	Sand broadcasting (kg/m <sup>2</sup> )	Thickness (mm)	Application
PU-Mortar	DIAMONDCRETE PU-HF	13.0 – 25.5	-	6.0 – 12.0	Pin rake, trowel, screed box, paint roller
Optional: Levelling layer	DIAMONDCRETE PU-SC	ca. 1.65 per mm	-	1.0 – 2.0	Rubber squeegee, notched trowel
Primer	DIAMONDCRETE PU-SC or others	ca. 0.8 – 1.0	OS (0.3-0.8 mm) ca. 0.5 – 0.8 (recommended)	ca. 0.5	Trowel, Squeegee
Substrate	Cementitious substrates according to the appropriate standards and approvals must be capable of bearing loads and be free of cracks and voids. Pull-off strength $\geq 1.5$ N/mm <sup>2</sup> . DIAMONDCRETE can be laid on 7-day old concrete (this to a residual moisture content of approx. 6-8% (CM)) or on 2 - 3 days old polymer-modified cement screed. For permanent rising water, please contact our technical service. Substrates with moisture from the backside special measures must be taken or a damp proof membrane must be installed. Substrate preparation e.g. grinding or shot blasting, sweeping and vacuum-cleaning is mandatory. Consumptions are calculated with quartz sands and fillers.				
Note	Detailed application instructions are available upon request or refer to the technical product data sheet.				

## Technical data

Property	Standard	Result
Slip resistance	DIN 51130	R10
Shore hardness	EN ISO 868	D 84 nach 28 d
Impact resistance	EN 13813	$\geq 4$ Nm (IR4)
Temperature resistance		- 15°C - + 100°C (6 mm) - 25°C - + 120°C (9 mm) - 45°C - + 130°C (12 mm)
Coefficient of thermal expansion	ASTM C531	$5.8 \times 10^{-5}/^{\circ}\text{C}$
Wear resistance (Taber)	EN ISO 5470-1	$\leq 25$ mg
Compressive strength	EN 196 / ASTM C109	approx. 58 N/mm <sup>2</sup>
Flexural strength	EN 196 / ASTM C109	approx. 15 N/mm <sup>2</sup>
Tensile strength	EN 196 / ASTM C109	approx. 10 N/mm <sup>2</sup>
Adhesive strength	EN ISO 4624	min. 1.5 N/mm <sup>2</sup> (depending on substrate)
Bacterial cleanability	Campdon Test TES-MB 216	Good cleanability
Fire behaviour	EN 13501-1	B <sub>fl</sub> -s1

Remark: For further information please refer to the product data sheets or contact our technical service. All data are approximate values. Therefore no liability claims can be derived from the system data sheet. As all DIAMONDCRETE data sheets are updated on a regular basis it is the users responsibility to obtain the most recent issue by contacting DIAMONDCRETE. All technical information is subject to change without prior notice.

DIAMONDCRETE products are guaranteed against defective material and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies which can be obtained on request.