

UZIN Turbolight®-System

Rapid construction and renovation system

Rapid system to create substrates prior to the installation of all types of floor coverings

- ▶ For renovating uneven surfaces and pitted substrates
- ▶ Flooring construction on critical substrates
- ▶ Flooring construction with low heights
- ▶ For levelling between pipework
- ▶ Used as a rapid system, flooring should be laid soon after



Application:

- ▶ On wooden substrates and floorboards
- ▶ On concrete subfloors
- ▶ Able to meet the demands of home, office and assembly area use (see table)
- ▶ Bonded screed layer or as a separating layer
- ▶ For all types of floor coverings (except wood blocks)
- ▶ For all types of ceramic tiles and natural stone – also for large dimensions
- ▶ Under warm water and electrical underfloor heating
- ▶ In wet rooms

Properties:

- ▶ Complete system solution
- ▶ Rapid system
- ▶ Low specific weight
- ▶ Low distributed loads (see table)
- ▶ Good sound absorption according to DIN EN ISO 140-8 (sound insulation: 10 dB/50 mm)
- ▶ High heat insulation properties
- ▶ F 60 (high flame-retardant)
- ▶ Not combustible
- ▶ Max. area of application 100 m²
- ▶ Suitable for wet rooms
- ▶ For internal and external use (observe the moisture resistance of the levelling compound, e. g. codex NC 395)
- ▶ F 90 (fire resistant with fireprotection plate)

Components of the UZIN Turbolight®-System



Application of the light smoothing mortar UZIN SC 914 Turbo

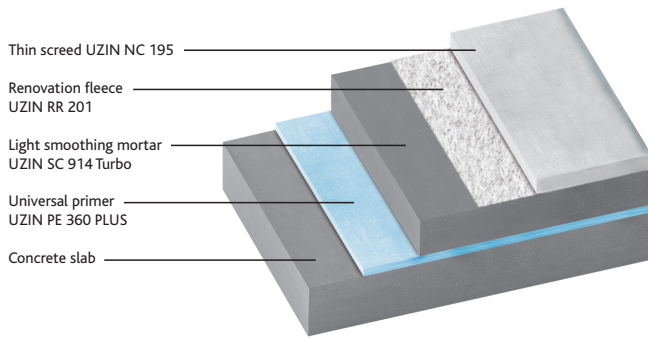


Installation of the renovation fleece UZIN RR 201

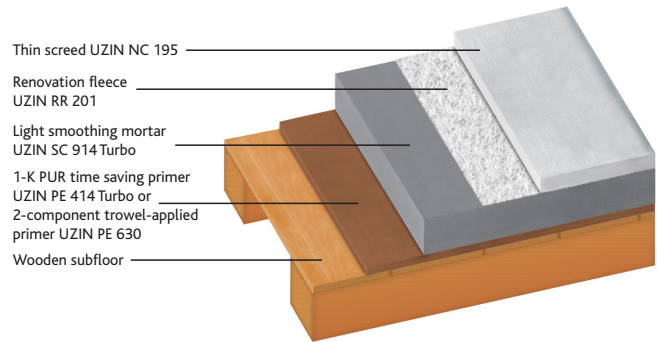


Application of the thin screed UZIN NC 195

UZIN Turbolight®-System on concrete subfloors:



UZIN Turbolight®-System on wooden subfloor:



UZIN Turbolight®-System – Technical data of the system components

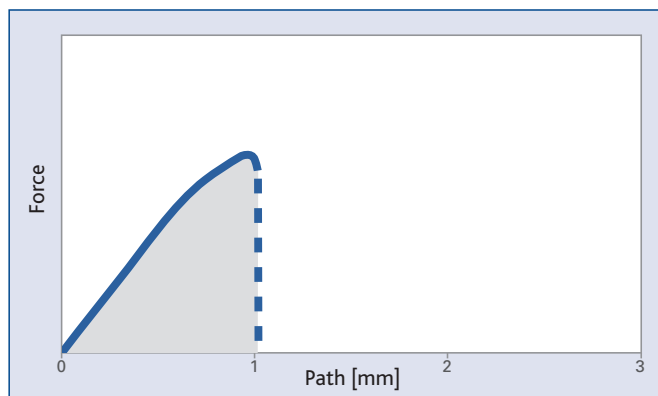
	UZIN SC 914 Turbo**	UZIN NC 195**	UZIN SC 995**	UZIN RR 201**
Specific density (cured)	0.35 kg/l	1.6 kg/l	1.7 kg/l	–
Compressive strength	0.5 N/mm ²	30 N/mm ²	25 N/mm ²	–
Flexural strength	–	7 N/mm ²	5 N/mm ²	–
Tensile strength	–	–	–	1700 N/mm ²
Thermal coefficient	0.12 W/mK	–	–	–
Flammability class (DIN 4102)	A 2	A 1	A 1	A 1
Required amount of water	approx. 11 l / bag	approx. 5 l / bag	approx. 4,5 l / bag	–
Working time	approx. 30 min.*	20 – 30 min.*	20 – 40 min.*	–
Ready for foot traffic after	10 – 12 hrs.*	2 – 3 hrs.*	2 – 4 hours*	immediately
GISCODE	ZP 1/low chromate content	ZP 1/low chromate content	ZP 1/low chromate content	none
Consumption (dry mortar)	2.6 kg/m ² x cm thickness	20 kg /m ² or 25 kg/m ²	min. 20 kg/mm ²	after m ²
Shelf life	6 months	6 months	6 months	min. 2 years
Pack size	80 l / 21 kg bag	25 kg bag	25 kg	1.05 x 75 m
Item no.	53402	47435	74810	52154

*at 20 °C / 65 % rel. hum.

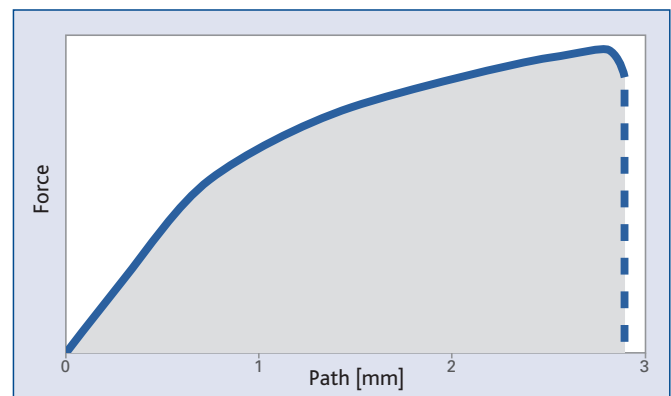
**Product data sheet retrievable at www.uzin.com

UZIN Turbolight®-System – Technical data and load bearing characteristics

Force / path diagram in pressure test



When subjected to a pressure test (based on DIN 18 555), the substructure, consisting of UZIN SC 914 Turbo and UZIN NC 195, shows a steeply rising curve. The curve terminates abruptly, i.e. the combination fails because of a **brittle fracture**. The area under the curve (grey), defining the energy absorption capabilities of the substructure, is relatively low.



The curve for the UZIN Turbolight®-System also rises steeply, indicating the system's **low level of deformation**. The displacement that occurs at higher loads reveals a **very well-tempered response** with high levels of load compensation and reserves, as a result of the energy absorbed (grey area).

UZIN Turbolight®-System – recommended max. loads

Covering	Volume UZIN NC 195	Max. area load ¹⁾	Max. point load ²⁾	Class (DIN EN 1991)
Textile / resilient flooring and laminates	20 kg/m ²	3 kN/m ²	3 kN	A, B1, B2
Textile / resilient flooring and laminates	25 kg/m ²	4 kN/m ²	4 kN	A, B, C1, C2
Natural stone less than 10 mm thick, ceramic tiles with edge length up to 10 cm	20 kg/m ²	3 kN/m ²	2 kN	A, B1
Natural stone (min. 10 mm thick) and ceramic tiles with edge length longer than 10 cm	20 kg/m ²	3 kN/m ²	3 kN	A, B1, B2
Natural stone (min. 10 mm thick) and ceramic tiles with edge length longer than 10 cm	25 kg/m ²	4 kN/m ²	4 kN	A, B, C1, C2

Covering	Volume UZIN SC 995	Max. area load ¹⁾	Max. point load ²⁾	Class (DIN EN 1991)
All types of covering (except solid wood flooring)	min. 20 kg/m ²	2 kN/m ²	2 kN	A

For higher load requirements please consult UZIN Technical.

¹⁾ After 3 days after installation of the thin screed.

²⁾ After 7 days after installation of the thin screed, after 3 days after installation of the thin screed max. 2 kN.

UZIN Turbolight®-System – weight per sqm

Application height, ¹⁾ total	Application height, UZIN SC 914 Turbo	Weight per sqm, ²⁾ UZIN NC 195	Overall weight per sqm
~ 4 cm	3 cm	20 kg/m ²	33,5 kg/m ²
~ 4,5 cm	3 cm	25 kg/m ²	39,5 kg/m ²
~ 6 cm	5 cm	20 kg/m ²	40,5 kg/m ²
~ 6,5 cm	5 cm	25 kg/m ²	46,5 kg/m ²

¹⁾ The weight increases by 3.5 kg/m² for each additional centimetre of application height.

²⁾ 20 kg UZIN NC 195 >> 23 kg/m² hardened thin screed.
25 kg UZIN NC 195 >> 29 kg/m² hardened thin screed.

UZIN Turbolight®-System – Technical Data

Properties	Value	Proof
Sound absorption according to DIN EN ISO 140-8	10 dB (5 cm installed height)	Test report MFPA Leipzig
Fire resistance	F 60 (4 cm installed height)	Certificate MFPA Leipzig
Surface tensile strength	approx. 1 N/mm ²	Test certificate Uzin Utz
Fire-resistance class	F 90 (6 cm insulation height with Promatect-H fireprotection plate 10 mm)	Certificate MFPA Leipzig

Readiness for covering* of UZIN SC 914 Turbo / UZIN SC 910 + styrofoam granulate

Thickness of UZIN SC 914 Turbo: up to 30 cm	Ready for covering ¹⁾ : 2 days
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¹⁾ Once light smoothing mortar is ready for covering, flooring should be installed within 1 – 2 days.

* At 20 °C and 65 % relative humidity.

Readiness for covering* of UZIN NC 195 and UZIN SC 995

Consumption UZIN NC 195	Covering type	Ready for covering
20 kg/m ²	Textiles / elastic coverings	5 days ²⁾
25 kg/m ²	Textiles / elastic coverings	6 days ²⁾
20 or 25 kg/m ² + UZIN PE 414 Turbo ¹⁾	Wood flooring	2 days
20 kg/m ²	Ceramic tiles	1 day
25 kg/m ²	Ceramic tiles	2 days
Consumption UZIN SC 995	Covering type	Ready for covering
min. 20 kg/m ²	Textiles / elastic coverings	7 days ³⁾
min. 20 kg/m ² + UZIN PE 414 Turbo ¹⁾	Prefinished wood flooring	2 days
min. 20 kg/m ²	Ceramic tiles	2 days

¹⁾ Priming with UZIN PE 414 Turbo two days after installation of thin screed.

²⁾ Flooring should be installed soon after. If flooring will be installed more than 7 days after the application of the thin screed of UZIN NC 195 and UZIN SC 995, prime the latter with one coat of UZIN PE 400 or UZIN PE 414 Turbo 2 days after application.

³⁾ At max. 22 kg/m²

* At 20 °C and 65 % relative humidity.

Important notes:

- ▶ For exterior use consult UZIN Technical.
- ▶ Only use light-coloured floor coverings when using ceramic tiles outside.
- ▶ Sound protection requirements are only met when the minimum thicknesses are observed. With the calculatory proof of the sound protection according to DIN 4109 a value of 2 dB must be subtracted from the test value.
- ▶ The materials used in the UZIN Turbolight®-System may exhibit hairline cracks. The fibre reinforcement means that these do not affect the capability of the overall system.
- ▶ If you are unsure about the readiness for covering of UZIN SC 914 Turbo or UZIN SC 910 due to unfavourable climatic conditions, its moisture content can be determined via CM measurement on site. With a weight of 10 g of mortar readiness for covering is reached when the moisture content is max. 10 CM-%.

Comparing properties of floor constructions

	Conventional cementitious screed	Raised floors	UZIN Turbolight®-System
Weight of floor covering	high	low	low
Compensation of undulations	no	yes	yes
Time taken to receive covering	long	short	short
High heat insulation properties	no	yes	yes
Installation effort	low	high	low
Slopes possible	conditional	no	yes
Build-up height	medium	medium	low
Sound absorption	high	low	medium

System recommendations for different floor coverings / wood flooring

