

UZIN Turbolight®-System

Rapid construction and renovation system

Problem solver as system configuration:

- ▶ For limited load-bearing capacity (statics) as light screed construction
- ▶ For limited build-up height as thin screed construction
- ▶ For sagging ceilings as supporting compensating construction
- ▶ For rapid screed construction when facing tight deadlines

Application:

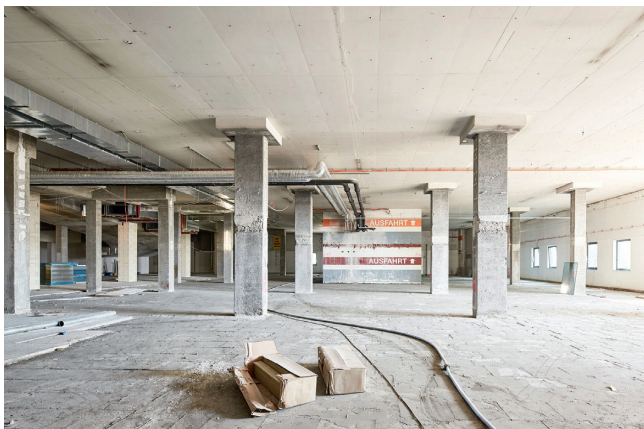
- ▶ On wooden beam ceilings and floorboards
- ▶ On concrete subfloors
- ▶ For demands of home, office and assembly area use (see "Load recommendations" table)
- ▶ Bonded and on separating layer
- ▶ For all types of floor covering (except wood blocks)
- ▶ For all types of ceramic tiles and natural stone – also for large dimensions
- ▶ Beneath hot water and electrical underfloor heating
- ▶ In wet rooms*



Properties:

- ▶ System composition from the bare floor to the floor covering
- ▶ Rapid construction system, flooring must be installed soon after
- ▶ Low weight per area
- ▶ Load recommendation up to 4 kN point load and 5 kN/m² distributed load
- ▶ Good sound absorption according to DIN EN ISO 140-8
- ▶ Good heat insulation properties
- ▶ F 60 (highly flame-retardant); No. P-SAC02/III-984
- ▶ F 90 (flame-retardant with fire protection panel); No. P-SAC-02/II-808
- ▶ Not combustible
- ▶ Max. area of application 100 m²
Max. side length / bonded: 15 m*
Max. side length on separating layer: 10 m*
- ▶ For internal and external use

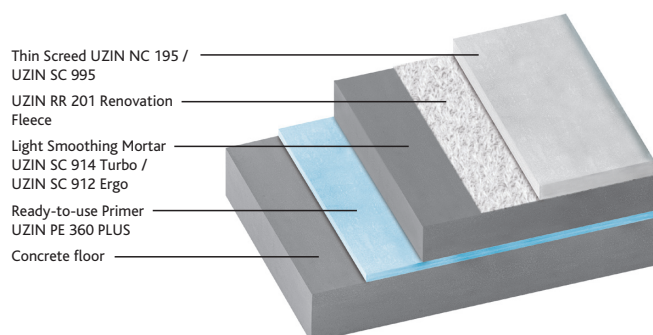
*See "Important notes".



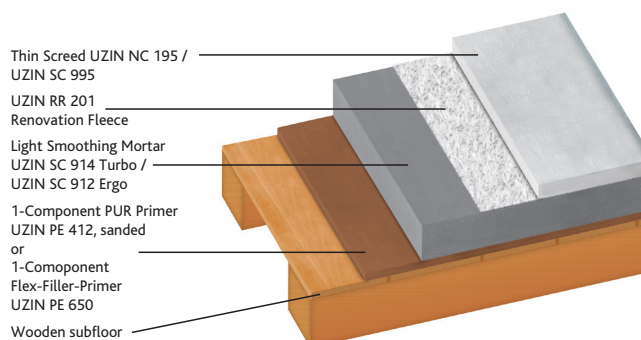
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UZIN Turbolight®-System on concrete subfloors:



UZIN Turbolight®-System on wooden subfloors:



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

	UZIN SC 914 Turbo / UZIN SC 910 + specified Styro- foam granulate	UZIN SC 912 Ergo ¹⁾	UZIN NC 195	UZIN SC 995	UZIN RR 201
Min. thickness, bonded	20 mm	6 mm	–	–	–
Min. thickness, floating	30 mm	–	–	–	–
Max. thickness	Unlimited ²⁾	100 mm	–	–	–
Specific density (cured)	0.35 kg/l	0.32 kg/l	1.9 kg/l	1.9 kg/l	–
Consumption (dry mortar)	2.6 kg/m ² /cm	2.6 kg/m ² /cm	1.7 kg/m ² /mm	1.7 kg/m ² /mm	–
Consumption (in system)	2.6 kg/m ² /cm	2.6 kg/m ² /cm	20 – 25 kg/m ²	min. 20 kg/m ²	per m ²
Thermal coefficient	0.12 W/mK	0.08 W/mK	–	–	–
Flammability class (DIN 4102)	A 2 ³⁾	A 2	A 1	A 1	A 2
Required water quantity	approx. 11 l/bag ³⁾	approx. 8 l/ bag	approx. 5 l/ bag	approx. 4.5 l/ bag	–
Working time	approx. 30 min.*	approx. 30 min.*	20 – 30 min.*	20 – 40 min.*	–
Set to foot traffic after	10 – 12 h*	10 – 12 h*	2 – 3 h*	2 – 4 h*	Immediately
Pack size	80 l/ 21 kg bag	80 l/ 21 kg bag	25 kg bag	25 kg bag	1.00 x 60 m

* At 20 °C and 65 % relative humidity.

¹⁾ can only be used in bonded

²⁾ installation height UZIN SC 910 + Styrofoam granulate: max. 300 mm

³⁾ please observe separate product data sheet of UZIN SC 910.

UZIN Turbolight®-System – recommended max. loads

Covering	Quantity UZIN NC 195	Max. distributed load ¹⁾	Max. point load ²⁾	Category (DIN EN 1991)
Textile/resilient flooring and wood flooring	20 kg/m ²	4 kN/m ²	3 kN	A, B1, B2
Textile/resilient flooring and wood flooring	25 kg/m ²	5 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	4 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	5 kN/m ²	4 kN	A, B, C1, C2

Covering	Quantity UZIN SC 995	Max. distributed load ¹⁾	Max. point load ²⁾	Category (DIN EN 1991)
All types of floor covering (except for solid wood flooring)	min. 20 kg/m	2 kN/m ²	2 kN	A

Obtain technical application advice for higher load requirements.

¹⁾ 3 days after installation of the thin screed max. 2 kN.

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

UZIN Turbolight®-System – area weight & thicknesses

Installation height total	Installation height ^{1), 2)} UZIN SC 914 Turbo / UZIN SC 910 + Styrofoam granulate	Quantity used ³⁾ UZIN NC 195	Quantity used ³⁾ UZIN SC 995	Area weight total
approx. 4 cm	3 cm	20 kg/m ²	20 kg/m ²	approx. 33.5 kg/m ²
approx. 4.5 cm	3 cm	25 kg/m ²	–	approx. 39.5 kg/m ²
approx. 6 cm	5 cm	20 kg/m ²	20 kg/m ²	approx. 40.5 kg/m ²
approx. 6.5 cm	5 cm	25 kg/m ²	–	approx. 46.5 kg/m ²

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

²⁾ Installation heights and area weights apply also to UZIN SC 912 Ergo as long as the max. installation height of 100 mm is not exceeded.

³⁾ 20 kg UZIN NC 195 / UZIN SC 995 >> 23 kg/m² cured thin screed.

25 kg UZIN NC 195/ UZIN SC 995 >> 29 kg/m² cured thin screed.

UZIN Turbolight®-System – Technical Data

Properties	Value	Proof
Sound absorption according to DIN EN ISO 140-8	10 dB (5 cm build-up height)	Test report MFPA Leipzig
Fire resistance class	F 60 (5 cm build-up height)	General test certificate by building authorities (No. P-SAC02/III-984)
Fire resistance class	F 90 (6 cm build-up height with Promatect-H fire protection panel 10 mm)	General test certificate by building authorities (No. P-SAC-02/II-808)
Surface tensile strength	min. 1 N/mm ²	Test certificate Uzin Utz

Readiness for covering* of the light smoothing mortar for UZIN NC 195 and UZIN SC 995

Thickness UZIN SC 914 Turbo: unlimited	Time till ready for covering ¹⁾ : 2 days
Thickness UZIN SC 912 Ergo: up to 10 cm	Time till ready for covering ¹⁾ : 2 days
Thickness UZIN SC 910 + Styrofoam granulate: up to 30 cm	Time till ready for covering ¹⁾ : 2 days

* At 20 °C and 65 % relative humidity.

¹⁾ Flooring should be installed within 1 – 2 days after readiness for covering of the light smoothing mortar.

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

Application amount UZIN NC 195	Covering type	Time till ready for covering
20 kg/m ²	Textile/resilient coverings	5 days ²⁾
25 kg/m ²	Textile/resilient coverings	6 days ²⁾
20 or 25 kg/m ² + UZIN PE 414 BiTurbo ¹⁾	Wood flooring	2 days
20 kg/m ²	Ceramic tiles ³⁾	1 day
25 kg/m ²	Ceramic tiles ³⁾	2 days
Application amount UZIN SC 995	Covering type	Time till ready for covering
20 kg/m ²	Textile/resilient coverings	7 days
20 kg/m ² + UZIN PE 414 BiTurbo ¹⁾	Prefinished wood flooring	2 days
20 kg/m ²	Ceramic tiles ³⁾	2 days

* At 20 °C and 65 % relative humidity.

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

²⁾ Covering should be installed soon after. If flooring will be installed more than 7 days after the installation of UZIN NC 195 and UZIN SC 995, prime the above with one coat of UZIN PE 400 or UZIN PE 414 BiTurbo 2 days after installation. A relative humidity of at least 50 % and max. 75 % must be maintained during the lying period.

³⁾ For coverings sensitive to discolouration, such as natural stone, 1 extra day should generally be allowed for until readiness for covering.

Important notes:

- ▶ Obtain technical application advice for exterior use and application in wet rooms.
- ▶ Obtain technical application advice when covering with natural stone.
- ▶ Use only bright floor covering for exterior ceramic tiles.
- ▶ Requirements on sound insulation are only met when the minimum thicknesses are complied with. A deduction of 2 dB from the test value must be taken into account when calculating the sound insulation according to DIN 4109.
- ▶ Due to the low thermal conductivity of UZIN SC 914 Turbo, special attention must be paid to high temperature differences, e.g. due to extreme exposure to light in conservatories.
- ▶ If there is uncertainty about the readiness for covering of UZIN SC 914 Turbo, UZIN SC 912 Ergo or UZIN SC 910 under unfavourable climatic conditions, its moisture content can be determined on site by CM measurement. With a weight of 10 g mortar, the readiness for covering is reached when the moisture content is a maximum of 10 CM%.
- ▶ The materials used in the UZIN Turbolight®-System may exhibit hairline fissuring. Because of the long-fibre reinforcement they do not affect the functional capability of the overall system.
- ▶ Only static loads are to be considered for the loads released here. Dynamic loads must be considered separately.
- ▶ The individual product data sheets for the products used can be found on the www.uzin.com website.
- ▶ UZIN SC 910 (2 bags per 200 l Styrofoam granulate) is technically equivalent to light smoothing mortar UZIN SC 914 Turbo.
- ▶ Hollow sound can also occur in bonded constructions. This is system-specific for the UZIN Turbolight®-System and does not indicate a defect.
- ▶ Before installing the UZIN Turbolight®-System, all finishing work should be completed, otherwise special protective measures are required.
- ▶ Joint formation: Field boundary joints can be made by cutting into UZIN NC 195 after ready for foot traffic, at the latest after 48 hours. Without thermal stress, these joints can be closed with force fit before the floor covering is installed. In case of thermal loads, application consulting should be obtained.
- ▶ If textile and elastic floor coverings are used, levelling may be necessary.
- ▶ Fastenings for installations on the UZIN Turbolight®-System must be carried out directly on the load-bearing ceiling. In the case of bonded constructions, installation can be carried out using the UZIN Turbolight®-System. In the case of constructions on a separating layer, installation must be carried out directly on the load-bearing substrate after removal of the affected floor section, observing suitable sound insulation measures.

Sample system build-up for different floor coverings / wood flooring

TURBOLIGHT®-SYSTEM	UZIN NC 195 Thin Screed Consumption approx. 20 kg/m ² or 25 kg/m ²	
	UZIN RR 201 Apply Renovation Fleece over whole area, overlap at least 2 – 3 cm	
	UZIN SC 914 Turbo Light Smoothing Mortar / UZIN Expansion strips 8/100 Spreading thickness min. 3 cm (on separating layer), tapering to granular size (bonded), consumption approx. 2,6 kg/m ² /cm	
PRIMER	UZIN PE 360 PLUS Ready-to-use Primer Spreading with foam roller, consumption approx. 100 – 150 g/m ²	UZIN PE 412 1-Component PUR-Primer, sanded Spreading with nylon fibre roller, consumption approx. 150 g/m ² or UZIN PE 650 1-Component Flex-Filler-Primer spreading with smoothing trowel approx. 80 – 280 g/m ²
	Durable dry load-bearing substrate Concrete floor	Durable dry load-bearing substrate Wooden beam ceiling