

UZIN Turbolight®-System

System for creation of substrates that are quickly ready for covering with all types of floor coverings

MAIN APPLICATION FIELD:

- ▶ light screed construction when weight capacity is limited
- ▶ thin screed construction when height is limited
- ▶ ideal for when ceilings are sagging
- ▶ rapid screed construction when deadline pressure is high
- ▶ with legal requirements on complete structures with non-flammable building materials (A1 / A2 according to DIN 4102)

SUITABLE ON / FOR:

- ▶ wood-beamed ceiling and wooden floorboards
- ▶ concrete slabs
- ▶ bonded or unbonded constructions
- ▶ all types of floor coverings (except wood block paving)
- ▶ all types of ceramic tiles and natural stone - also large sizes
- ▶ below warm water underfloor heating systems
- ▶ embedding of thin layered warm water underfloor and electrical heating systems
- ▶ in wet rooms*
- ▶ for residential and commercial areas

*see "Important Notes"



PRODUCT BENEFITS/FEATURES:

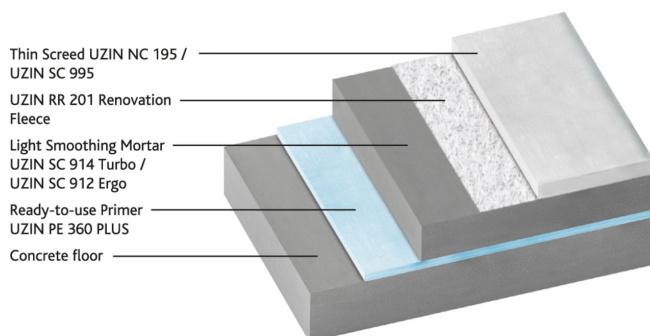
- ▶ system from the subfloor to the floor covering
- ▶ rapid construction system, floor covering can be installed quickly
- ▶ low weight
- ▶ load recommendation up to 4 kN point load and 5 kN/m² surface load
- ▶ good sound insulation according to DIN EN ISO 140 - 8
- ▶ good thermal insulation
- ▶ F 90 (fire-resistant with fire protection plate)
- ▶ non-flammable
- ▶ max. field size is 100 m²
- ▶ max. side length composite: 15 m*
- ▶ max. side length on separate layer: 10 m*
- ▶ for interior and exterior use



TECHNICAL DATA:

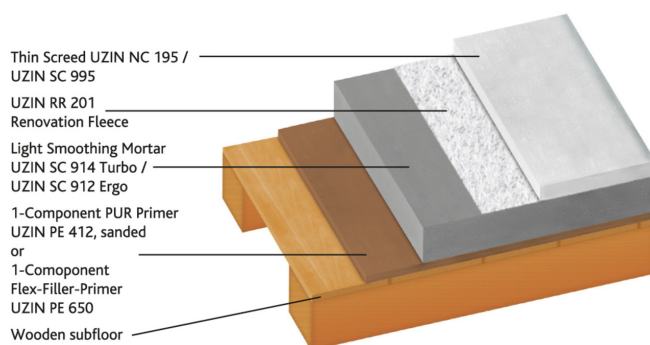
SUBSTRATE PREPARATION:

UZIN Turbolight®-System on concrete subfloors:



APPLICATION:

UZIN Turbolight®-System on wooden subfloors:



UZIN Turbolight®-System - Technical Data of the System Components

	UZIN SC 914 Turbo UZIN SC 910 + specified styrofoam granulate	UZIN SC 912 Ergo ¹⁾
Min. thickness, composite	20 mm	6 mm
Min. thickness, separate layer	30 mm	-
Max. thickness	unlimited ¹⁾	100 mm
Specific density (cured)	0.35 kg/l	0.35 kg/l
Consumption (powder)	2.6 kg/m ² /cm	2.6 kg/m ² /cm
Consumption (system)	2.6 kg/m ² /l	2.6 kg/m ² /l
Thermal coefficient	0.12 W/mK	0.08 W/mK
Building material class (DIN 4102)	A2 ³⁾	B2
Required water quantity	approx. 11 litres per bag	approx. 8 l per bag
Working time	approx. 30 minutes*	approx. 30 minutes*
Set to foot traffic	after 10 - 12 hours*	after 10 - 12 hours*
Packsize	80 l / 21 kg bag	80 l / 21 kg bag

	UZIN NC 195	UZIN SC 995	UZIN RR 201
Min. thickness, composite	-	-	-
Min. thickness, separate layer	-	-	-
Max. thickness	-	-	-
Specific density (cured)	1.9 kg/l	1.9 kg/l	-
Consumption (powder)	1.7 kg/m ² /mm	1.7 kg/m ² /mm	-
Consumption (system)	20 - 25 kg/m ²	min. 20 kg/m ²	per m ²
Thermal coefficient	-	-	-
Building material class (DIN 4102)	A1	A1	A1
Required water quantity	approx. 5 l per bag	approx. 4.5 l per bag	-
Working time	20 - 30 minutes*	20 - 40 minutes*	-
Set to foot traffic	after 2 - 3 hours*	after 2 - 4 hours*	immediately
Packsize	25 kg bag	25 kg bag	1 m x 60 m roll

* At 20 °C and 65% relative humidity.

¹⁾ Can only be used in composite constructions

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 Maximum Loads

Floor Covering	Quantity UZIN NC 195	Max. surface load ¹⁾	Max. point load ²⁾	Category (DIN EN 1991)
Textile and resilient floor coverings, wood flooring	20 kg/m ²	4 kN/m ²	3 kN	A, B1, B2
	25 kg/m ²	5 kN/m ²	4 kN	A, B, C1, C2
Natural stone below 10 mm thickness, ceramic tiles with edge length below 10 cm	20 kg/m ²	3 kN/m ²	2 kN	A, B1
Natural stone above 10 mm thickness, ceramic tiles with edge length above 10 cm	20 kg/m ²	4 kN/m ²	3 kN	A, B1, B2
	25 kg/m ²	5 kN/m ²	4 kN	A, B, C1, C2

Floor covering	Quantity UZIN SC 995	Max. surface load	Max. point load	Category (DIN EN 1991)
All types (except solid wood flooring)	min. 20 kg/m ²	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 - Surface weight and layer thicknesses

Total installation height	Installation height ^{1),2)} UZIN SC 914 Turbo / UZIN SC 910 + styrofoam granulate	Quantity UZIN NC 195 ³⁾	Quantity UZIN SC 995 ³⁾	Total surface weight
~ 4 cm	3 cm	20 kg/m ²	20 kg/m ²	approx. 33.5 kg/m ²
~ 4.5 cm	3 cm	25 kg/m ²	-	approx. 39.5 kg/m ²
~ 6 cm	5 cm	20 kg/m ²	20 kg/m ²	approx. 40.5 kg/m ²

~6.5 cm	5 cm	25 kg/m ²	-	approx. 46.5 kg/m ²
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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

Property	Value	Verification
Sound insulation according to DIN EN ISO 140-8	10 dB (5 cm installation height)	Test report MFPA Leipzig
Fire-resistance class	F 90 (6 cm installation height with Promatect-H fire protection plate)	General test certificate by building authorities no. P-SAC-02/II-808
Surface tensile strength	min. 1 N/mm ²	Test report Uzin Utz AG

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

Layer thickness of UZIN SC 914 Turbo: unlimited	Ready for covering ¹⁾ : after 2 days
Layer thickness of UZIN SC 912 Ergo: up to 10 cm	Ready for covering ¹⁾ : after 2 days
Layer thickness of UZIN SC 910 + styrofoam granulate: up to 30 cm	Ready for covering ¹⁾ : after 2 days

*At 20 °C and 65% relative humidity.

¹⁾ The floor covering should be installed within 1 or 2 days after readiness for covering.

Readiness for covering* of UZIN NC 195

Applied amount	Type of floor covering	Ready for covering
20 kg/m ²	Textile or resilient floor coverings	after 5 days ²⁾
25 kg/m ²	Textile of resilient floor coverings	after 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
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Readiness for covering* of UZIN SC 995

Applied amount	Typ of floor covering	Ready for covering
20 kg/m ²	Textile or resilient floor coverings	7 days
20 kg/m ² + UZIN PE 414 BiTurbo ¹⁾	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 2 days after installation of the 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.
- ▶ Mountings for furniture and installations on the UZIN Turbolight®-System have to be done directly on the carrying ceiling. The installation of UZIN Turbolight®-System can be carried out with composite constructions. With constructions on separate layer, the installation must be carried out after removing the affected floor area, directly on the carrying substrate by considering suitable sound insulation measures.