Technical Data Sheet

BONA **QUANTUM**

BONA **QUANTUM T**

PREMIUM PARQUET ADHESIVE





Bona Quantum and Bona Quantum T are according to DIN EN ISO 17178 hard-elastic1-component, silane-based adhesives for the installation of a wide range of hardwood- and engineered floorings, Bona Quantum T has a higher viscosity for improved green grab. Equipped with the revolutionary Titanium crosslinking technology, the adhesives showing a quick crosslinking with a high initial bonding strength. Its unique formula offers the advantages of both, hard-elastic and hard adhesive in one effective product. Ensuring a perfect result and balanced floors throughout their lifetime. Additionally, Bona Quantum can be used as a moisture barrier on concrete slabs or cement screeds with a residual moisture content up to 5 CM-% or 95 % rh**. The ease of use, the good rib stability and the green profile make Bona Quantum a premium adhesive for the day by day use. Bona Quantum T in tubular bags is perfect for the application with the Bona OptiSpread system.

- Powerful titanium crosslinking
- Floor sanding possible after 12h
- Integrated moisture barrier
- For multipurpose use
- Improved shear strength
- Can be used on metal surfaces

Technical Data

Base:	Silane modified pre-polymers
Color:	Oak tone
Open Time:	ca. 40 min*
DIN EN ISO 17178:	Hard-elastic
GISCODE:	RS 10
EMICODE:	EC1 Plus
Affset:	A+
Cleaning agent:	Bona Cleaning Wipes, Bona S100, acetone, ethanol. Hardened adhesive can only be removed mechanically.
Curing time:	24 hrs*.
Walkable:	after ca. 4-6 hrs*.
Sanding:	after ca. 12 hrs.*
Surface treatment:	after ca. 24 hrs.*
Storage / transport:	The temperature must not fall below +5°C or exceed +25°C during storage and transport. Store in a cool, dry, well ventilated place.
Pack Size:	15 kg bucket & different tubular bag sizes
Shelf life:	Bucket: 12 month / tubular bags 24 months from date of production in unopened original container/tubular bag
Disposal:	Wastes and emptied container/tubular bags, should be handled in accordance to local regulations.

* at 20°C and 55 % rH.

Additional detailed information is noted in the appropriate Safety Data Sheet.

Subfloor Preparation

The substrate must in general be even, dry**, clean, free from cracks and physically sound. The surface should also be slightly textured. Thoroughly vacuum off loose material and dust. If applicable, it must meet the requirements of local standards or codes of practice (e.g. DIN 18356 “Working with wood flooring”, Ö-Norm B2218). If necessary, it should be professionally prepared for laying. Separating layers, adhesion reducing layers such as paints, varnishes and adhesive residues, old levelling compounds, old floor coverings etc. must be sufficiently removed by brushing, abrading, grinding or shotblasting. The use of a primer is typically not needed. If the sub floor is

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problematic (weak, high residual moisture content, etc.) the use of a primer like Bona D501, R540 or R590 can improve it. Uneven substrates must be levelled with Bona H600, H610 (filling of holes), or H660. If in doubt, get in contact with your local Bona technical service. Note: Bona Quantum and Quantum T are suitable in association with under floor heating. Such floors need to pass the heating up protocol to drying up the screed! During installation and three days after the screed temperature must not pass 25°C

**moisture reading of the subfloor must be carried out in correlation with local standards and codes of practice (e.g. ASTM F 2170 Test Method, BS 8201:2011, TKB KRL method, CM-measurement, etc.)

Suitable Subfloors

- Cementitious screed (CT) according to EN 13813
- Floors levelled with levelling compounds (at least 2 mm thick, resistant against plasticizer migration)
- Calcium sulfate screed (CA) according to EN 13813
- New chipboards (P4-P7) or OSB 2 – OSB 4 boards, screwed tightly
- Other dry and sound sub floors
- Mastic asphalt screed (AS) according to EN 13813 and other sub floors which are affected by migration of plasticizers must get a protective layer of Bona R410 or Bona R540
- Can be used as well on deep cleaned metal surfaces. Please get in contact with Bona technical department for detailed processing information
- Bona underlays like Bona U310 and U340
- Concrete

Processing

Before using the adhesive, the following climatic conditions must be met (values for Central Europe): Air temperature: min. 18 °C; Floor temperature: min. 15 °C (with underfloor heating max. 20 °C); rh: max. 70 %. The adhesive itself must, if necessary, be brought to the right temperature. After opening the bucket remove the protective foil and hardened adhesive. The adhesive should be applied evenly using a notched trowel appropriate to the flooring being laid (recommendations see below).

The parquet should be laid in the adhesive and pressed down firmly during the open time of approx. 40 minutes. Apply only as much as you can cover within the open time. If the adhesive has already formed a skin, you must not install the wooden floor! Remove the adhesive and apply fresh material. Adhesive spills on prefinished surfaces should be removed with Bona Cleaning Wipes.

If some adhesive is pressed up in joints (so that it might come into direct contact with the finish) it must be carefully removed. Wood moisture content must be in accordance with local conditions and standards. Please refer also to the instruction manual provided by the parquet manufacturer.

When Bona Quantum or Quantum T are used as a moisture barrier, it is important to apply a steady amount of it by using the Bona Trowel Plus. The consumption must be calculated as an average with ca. 2.0 - 2.2 kg/m². Please note that surface conditions may influence the consumption! Only suitable in conjunction with the installation of wooden floors equipped with groove and tongue – preferably in plank format such like 3-layer engineered or solid hardwood planks. When smaller elements - such as 2-layer engineered floors - must be installed please test if the adhesive amount is suitable for the elements.

Make sure that the subfloor is fully covered with the adhesive and that a united film of adhesive is present! Max. moisture content on unheated concrete floors or cement screeds are 5 CM-% or 95 % rh **, for substrates with underfloor heating 4 CM-% or 85 % rh**.

Note: Bona Quantum and Quantum T will not prevent moisture-related damages to wood flooring originating from the top, sides or ends of flooring (water leaks, puddles, hydrostatic head, etc.) nor does it eliminate other moisture or installation related issues such as improper acclimation of flooring or the effects of jobsite temperature and humidity.

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Consumption & Parquet Types

Bona Trowel 850 F or 850 G
Usage: approximately 850 g/m²
Mosaic parquet

Bona Trowel 1000 F or 1000 G
Usage: approximately 1000 g/m²
2 layered prefinished parquet

Bona Trowel 1250 F or Bona 1250 G
Usage: approximately 1250 g/m²22 mm strip flooring
23 mm industrial parquet
3 layered prefinished parquet

Bona Trowel 1500 F or Bona 1500 G
Usage: approximately 1500 g/m²
22 mm solid planks

Bona Trowel Plus
Consumption when used as moisture barrier 2.0 to 2.2 kg/m², depending on the surface conditions.

(F = fine, G = coarse)
Use a fine trowel for small pieces of wood and/or smooth substrates, and a coarse trowel for large pieces of wood and/or less smooth and rough surfaces.

The adhesive consumption during the application with the Bona OptiSpread system depends mainly on the walking speed as well as the adjusted air pressure (OptiSpread 100, OptiSpread 2.0). Please refer to respective machine manual.

Surface Treatment

Sanding of the surface can be carried out after 12 hours. Light foot walk is possible after 4-6 hrs. After 24 hours it is possible to apply full load or stress to the floor or to apply the surface treatment.

Please note that low temperatures and low humidity will decelerate whilst high temperatures and high humidity will accelerate the curing speed and installation time.

Bona takes only responsibility for the delivered product, no responsibility can be taken for the total installed product. If in doubt, conduct a test or a trial. Observe also other Bona product datasheets.

With the publication of this data sheet all previous product information on this product lose their validity

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