

Technical sheet

Turbodec Basecoat

A fast-curing, 3-component, odourless, solvent-free casting floor.

Application area

To be applied on a substrate that has been pre-primed with EP-Rapid Primer according to technical specifications.

Contact Sidec for application on other types of substrates.



Properties

Turbodec Basecoat is a fast-curing, 3-component, odourless, solvent-free casting floor that serves as the base for a Turbodec broadcast floor. Turbodec Basecoat is filled with Turbodec broadcast gravel.

- Odourless
- Excellent flow
- High chemical resistance
- Liquid-proof
- Long processing time
- Quick curing time once broadcast

Technical data

Turbodec Basecoat is available in two versions.

- Basecoat LT: for use at a floor temperature between 0°C and 15°C
- Basecoat HT: for use at a floor temperature between 16°C and 25°C

	Turbodec LT	Turbodec HT
Mixing ratio	See table on page 2	
Pot-life A + B + C	10 min*	10 min**
Processing time A + B + C	20 min*	20 min**
Temperature range	0°C - 15°C	16°C - 25°C
Optimal conditions	8°C - 12°C, 40% - 60% RH	18°C - 22°C, 40% - 60% RH
Colour	Grey	Grey
Physical appearance	Liquid	Liquid
Viscosity A + B + C	4300 mPas* (Anton Paar MCR 92 Shear Rate 100 1/s, 12°C)	2500 mPas* (Anton Paar MCR 92 Shear Rate 100 1/s, 20°C)
Solid content	100 vol.% (= 100 wt.%)	
Density A + B + C	+/- 1.87 g/ml (20°C)	+/- 1.86 g/ml (20°C)
Adhesion strength on concrete	Greater than the tensile strength of concrete (greater than 3 MPa)	
Curing time	40 - 60 min***	
Chemically loadable	10 h*	10 h**

* At a temperature of 12°C, 55% RH, 3% initiator on A

** At a temperature of 22°C, 55% RH, 3% initiator on A

*** From the moment of broadcasting and respecting the correct mixing ratios at the used temperature

To ensure you use the correct version of Turbodec Basecoat on-site, it is recommended to perform an inspection in advance where the environmental and floor temperatures are measured. The required amounts of Turbodec Basecoat, Initiator and Max Level Filler always depend on the floor temperature.

Mixing ratio		9 kg Turbodec Basecoat (half set)			18 kg Turbodec Basecoat (full set)		
Floor and ambient temperature (°C)	Turbodec Basecoat	Initiator (kg)	Max Level Filler (kg)	Surface area per layer thickness	Initiator (kg)	Max Level Filler (kg)	Surface area per layer thickness
0	LT	0.450	25	3 mm: 6.5 m ² 3.5 mm: 5.8 m ² 4 mm: 5.2 m ²	0.900	50	3 mm: 12.9 m ² 3.5 mm: 11.5 m ² 4 mm: 10.3 m ²
5	LT	0.360	25		0.720	50	
10	LT	0.270	25		0.540	50	
15	LT	0.180	25		0.360	50	
16	HT	0.450	25		0.900	50	
20	HT	0.270	25		0.540	50	
25	HT	0.235	25		0.470	50	

Turbodec broadcast gravel consumption

3 kg/m²

Preparation and substrate check

Before proceeding to apply Turbodec Basecoat, verify that the primer layer (EP-Rapid Primer) and any installed plinths are dry. The floor temperature determines which type of Basecoat (LT or HT) should be used. Be sure to measure this in advance.

- Turbodec Basecoat can only be applied on the corresponding ‘fully and densely’ broadcast EP-Rapid Primer.
- The primer must not be sticky or deformable with a knife. Pay extra attention to areas where the primer may have been applied thicker (e.g. around drain holes or unevenness in the floor) or where a lower temperature is reached locally (e.g. in front of a doorway or cooler/freezer).
- Only when the primer is fully cured can the application of Turbodec Basecoat begin. Consult the technical sheet of the respective primer for an indication of the drying time.
- If plinths have also been installed, they must not be compressible or feel sticky. Consult the technical sheet of the plinth paste for an indication of the drying time.

If the primer layer is completely dry, the excess broadcast gravel must first be completely removed. Brush this away and then use a vacuum cleaner to remove the last loose broadcast gravel from the floor. Then check again if the primer is well broadcast everywhere.

Processing

- Prepare an amount of Turbodec Basecoat that can be spread in one go.
- To do this, start by weighing the right amount of initiator based on the measured floor temperature. Consult the above table for the correct mixing ratio.
- Mix Turbodec Basecoat well before weighing or adding the initiator.
- Combine the initiator and basecoat and mix them into a homogeneous mixture for 1 minute.
- Then add Max Level Filler and mix for 1 to 2 minutes until no lumps are visible. Pay extra attention to dry filler sticking to the wall of the tin or tub.
- Then quickly take the mixture to the floor and spread over the floor with a comb or a notched trowel with triangular points. The floor should have a thickness of 3 to 4 mm.

- Carefully spread the basecoat along the plinths to avoid smearing basecoat on the skirting.
- Always roll over the spread Turbodec Basecoat with a spiked roller to ensure optimal venting.
- Turbodec Basecoat must rest for at least 15 minutes from the moment it is applied to the floor. Within this time, you can still roll over with the spiked roller.
- After the 15 minutes of rest, start broadcasting. Walk over the floor with spiked shoes and broadcast the area ‘fully and densely’ with Turbodec broadcast gravel (3 kg/m²). A loose layer of gravel should remain on the Turbodec Basecoat for the best result. Pay extra attention to corners and edges.
- Once a section is broadcast, curing starts within a few seconds. You should therefore never walk over an already broadcast floor with spiked shoes.

Points of attention

- Always tape off the sides or drain holes before applying Turbodec Basecoat. The tape should be removed just before broadcasting. This prevents damage to the floor or the tape from being irremovable later.
- Try to make the connection to a plinth as straight as possible. This is best achieved with a floor thickness of 3 to 4 mm.
- A connection with the next mix should be made within 10 to 15 minutes maximum.
- Turbodec Basecoat needs to rest for at least 15 minutes. During these 15 minutes, it should be rolled over. This minimises the amount of air in the floor.
- Turbodec Basecoat should never be applied thicker than 5 mm. If it is, there is a high risk of immediate blistering. It is therefore best to go over with a comb just before broadcasting to redistribute Turbodec Basecoat. Otherwise, Turbodec Basecoat accumulates at the bottom of the slope, creating a very thick layer locally and so forming a blister.
- Broadcast the floor with an upward motion so that the gravel falls nicely. Throwing the gravel down towards the floor causes defects in the floor (waves).
- A loose layer of gravel should be present on the floor for optimal curing. You should therefore be sure to broadcast the full 3 kg/m².
- Depending on the size of the site, the complexity of the site, and the size of the team present, Turbodec Basecoat can be applied in one go, without needing to start broadcasting during spreading. For a floor of 0-150m², Turbodec Basecoat can first be completely applied, followed by rolling over.

Broadcasting can then begin. Do this at the latest 20 to 25 minutes after application on the floor with the prescribed amount of initiator. Not following the prescribed ratio can shorten or lengthen this time. For a floor >150 m², someone should start broadcasting in areas where Turbodec Basecoat has been lying for 20 to 25 minutes. Even with smaller areas that have many separate rooms, you can choose to have the application of Turbodec Basecoat and broadcasting occur partially simultaneously.

- Once broadcasting has started, it must not be stopped. You should therefore ensure there is a sufficient supply of Turbodec Broadcast Gravel to finish the entire floor smoothly.
- After waiting 45 minutes, you can check the hardness of the floor by gently tapping it with a broom handle. Once it is hard, you can start on the next layer. Wait at least an hour for colder parts (such as at a freezer door). You can also monitor the floor temperature to get an idea of when it has cured. It will rise from the moment the broadcast gravel hits the base layer, then reach a maximum and cool down. When it has cooled down to the temperature at the start of broadcasting, the reaction is complete.
- If the floor is exposed to large temperature fluctuations, such as at the exhaust of an oven, Turbodec Basecoat may shrink and expand. You should therefore always follow existing expansion joints in the substrate or place an expansion joint/slot in the floor yourself. You can also cut the floor afterwards and fill the slot with the suitable sealant (MS polymer with 300% elasticity).
- The broadcast layer must always be provided with a sealing coat. Leaving the floor exposed without a protective top layer causes the grains to yellow very quickly.

Packaging

Turbodec Basecoat LT	18 kg	Metal can
Turbodec Basecoat HT	18 kg	Metal can
Turbodec Initiator	5 kg	Plastic bucket
Max Level Filler	25 kg	Bag
Turbodec broadcast gravel	25 kg	Bag

Cleaning

Clean the used tools with Cleaner EP, isopropanol or acetone. Cured product residues must be removed mechanically.

Storage and preservation

Shelf life: 12 months in closed and original packaging when stored in a cool and dry place (10-25°C).

Turbodec Broadcast Gravel should be stored in a dry, cool and dark place.

Safety measures

Read the safety sheets carefully before using Turbodec Basecoat. Always wear personal protective equipment according to the applicable local guidelines and legislation. Gloves and safety glasses are mandatory.

Technical support

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The latest version of this technical data sheet is available on our website.

