

bamboo ultradensity[®]

installation & maintenance instruction
(with MOSO[®] Bamboo X-treme[®] sub beams)

Caramel	Style	Finish	Surface	Edges	Dimensions (mm)
BF-DS1060	UltraDensity [®]	-	Rough sanded	Macro Bevel	1900x160x32
BF-DS2060	UltraDensity [®]	-	Rough sanded	Macro Bevel	1900x160x20

ATEX case a n°2385, issued 'favourably' by the CSTB (French Construction Institute) with refers to use in premises classified U4 P4 E2 C2, valid until 19/12/2018; under study for obtaining the ATEc.

Tested by the FCBA (French Wood Institute).

The full MOSO[®] Bamboo UltraDensity[®] flooring system, to be installed on MOSO[®] Bamboo X-treme[®] sub-beams, with peripheral joints and surface finishing with Woca Diamond Oil Active products (oil and soaps), is intended for installation in premises classified up to U₄P₄E₂C₂ within the loading limits corresponding to this classification*. This Technical field has been registered at CSTB under the number ATE_x 2385.

* (see Note on UPEC classification and UPEC classification of premises, e-CSTB n°3509 of November 2004) Installation takes place on new or existing substrates made of concrete or cement mortar taking into account the humidity and flatness conditions defined in NF DTU 51.2. Wood-based substrates and screeds containing calcium sulfate are excluded. The use of this method is limited to Class 2 (according to Eurocode 5) and Class of use 3.1 (according to EN 335).

installation instruction bambooultradensity® flooring

(for semi-outdoor high traffic areas for installation with MOSO® Bamboo X-treme® sub beams)

before installation

- The sub-beams must be installed on a levelled, dry, clean and stable sub-floor, without cracks.
- The sub-floor must be able to handle the weight of the flooring on the sub-beams, as well as the traffic and possible machinery, such as maintenance machines.
- Flooding or water accumulation under the flooring should be avoided.
- The maximum permitted moisture content of the sub floor is 5%.
- Ideal conditions are humidity between 20-85% and temperature between 5-30°C

important

- Bamboo is a natural product! Therefore variations in colour and structure within a batch are possible. You should always mix the components from different boxes.
- Bamboo UltraDensity® comes with a slightly brushed surface to create a better slip resistance (often required in high traffic projects).
- Before installation, we advise you to inspect the flooring for moisture content, size, colour differences and damage. We cannot accept any claims regarding this once the material has been installed or further processed.
- Installation of the flooring should always be the final job in any building project, in order to avoid damaging the flooring surface. Take care when working with adhesive tape as this could damage the flooring surface.
- To protect against dust and sand, walk-off mats should be placed at all entrances to the room.

installation

The letters in parenthesis **(A)** refer to the diagram 'installation'.

- The maximum floor surface which can be installed without intermediate expansion gaps is a maximum width of 15 meters and maximum length of 100 meters. If the surface is bigger, an expansion gap of 10 mm must be created between adjacent surfaces.
- Flooring boards must run parallel to the longest side of the surface **(A)**.
- A gap of at least 10 mm between the boards and the walls or any other obstacle is necessary **(1)**. Create an expansion gap/joint of at least 10 mm between two continuous flooring surfaces of more than 15 x 100 m.
- This gap can be filled with a rubber (type Rehau ref. 353646 Veda PSR, PSO or equivalent) or with silicone suitable for the intended use.
- Before installing the sub-beams, install a PE sheet of at least 200 micron thickness on the entire subfloor as a moisture barrier. The sub-beams will be placed on top of this sheet.
- The sub-beams must be installed perpendicular to the flooring boards.

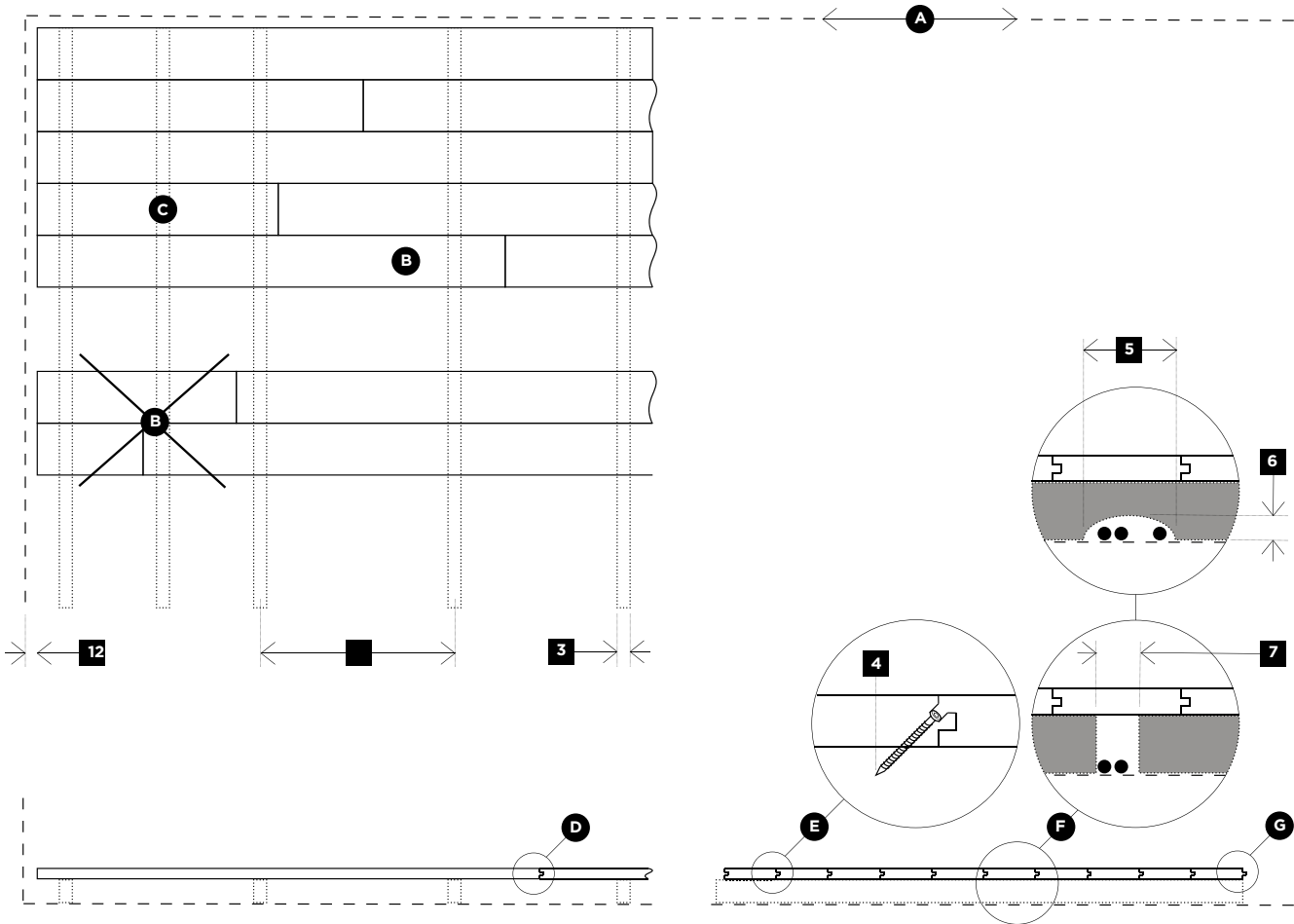
finish

- Bamboo flooring must be lacquered or oiled.
 - The recommended finish for Bamboo UltraDensity® flooring is WOCA Diamond Oil Active (Woca N°1).
 - For indoor circumstances lacquer can be applied, follow the lacquer supplier's instructions.
 - To follow the ATEX certification, WOCA Diamond Oil Active has to be applied:
 - Oil on site after cleaning and preparing the floor surface (use orbital polisher with red pad and then vacuum the floor).
 - Apply a single layer of WOCA Diamond Oil Active.
 - The recommended amount of oil is one liter per 80-100 m².
 - For optimal application, pay close attention to the humidity and the ambient temperature: 30-70% humidity and temperature of 15-25°C => Avoid winter installations.
 - Drying time at 20°C: 4 to 6 hours.
- The sub-beams must be placed directly on the PE moisture barrier sheet on the sub floor, and leveled with nylon wedges that should be fixed to the sub-beams. We do not recommend installing on pedestals.
 - It is recommended that MOSO® Bamboo X-treme® sub-beams are used. The sub-beams should have a minimum width of 40 mm **(3)**. The height of the sub-beams may vary depending on the individual installation but always with a minimum of 30 mm height.
 - The distance between sub-beams / joists **(2)** depends on the thickness of the boards (20 or 32 mm) and the load applied on the boards, which can be found in the table (field of use).
 - The flooring boards can be installed on the sub-beams in a random pattern. The end joints (end of boards) do not necessarily have to be supported by the joists.
 - The boards must always be supported by at least 3 sub-beams **(B)**. An intermediary sub-beam can be installed when the board is shorter and is not supported by at least 3 joists **(C)**.
 - Always use the tongue and groove end joint to connect the boards together in the length **(D)**. It is not necessary to leave a gap between the boards.
 - Pre-drill at a 45° angle **(4)** into the top of the tongue at the edge of the board with a drill that has a diameter equal to 80% of the diameter of the screw (eg: if the diameter of the screw is 5 mm then the diameter of the drill for the pre-drilling will be of 5 mm x 80% = 4 mm).
 - Drill a hole with a countersink to sink the head of the screw into the floorboard.
 - Use stainless steel screws A2. Recommended screws: Spax outdoor screw 40x5 mm for 20 mm thickness and 50x5 mm for 32 mm thickness; stainless steel A2.
 - The flooring boards must be supported by the sub-beams across the entire width of the boards **(G)**.
 - There are some exceptions when you wish to place cables underneath **(F)**, for which two solutions are possible:
 - Cut a hole on the bottom of the sub-beams with a maximum width of 100 mm **(5)** and a maximum height equivalent to half of the height of the joist **(6)**.
 - Leave a maximum space of one third of the width of the floorboards (60 mm) between the ends of each sub-beam **(7)**.

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diagram installation



field of use

- The mechanical properties of BF-DS1070 and BF-DS1060 are tested following EN 310 and EN 1533.
- For BF-DS2060 (thickness 20 mm) a table is available on request.

Category of use	Spread load kg/m ²	Concentrated load kg/m ²	Space between sub beams (2)				
			300 mm	400 mm	500 mm	600 mm	700 mm
A - Residential							
A1 - Floors	150	200	●	●	●	●	●
A2 - Balconies	250	200	●	●	●	●	●
A3 - Stairs	350	200	●	●	●	●	●
B - Office areas	250	400	●	●	●	●	●
C - Areas where people may congregate:							
C1 - with tables (e.g. restaurants, cafés, ...)	250	300	●	●	●	●	●
C2 - with fixed seats (e.g. areas in churches, theatres or cinemas...)	400	400	●	●	●	●	●
C3 - without obstacles for moving people (e.g. museums, exhibition rooms...)	400	400	●	●	●	●	●
C4 - with possible physical activities (e.g. dance halls, gymnastic rooms...)	500	700	●	x	x	x	x
C5 - susceptible to large crowds (e.g. train stations, airports, concert halls...)	500	450	●	●	●	●	x
D1 - General retail shops	500	500	●	●	●	x	x
D2 - Department stores	500	700	●	x	x	x	x

maintenance instruction bambooultradensity® flooring

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maintenance with WOCA

MOSO® recommends the following maintenance with WOCA Diamond Oil Active:

Daily treatment:

- Use the orbital polisher with a red pad, without any additional cleaning product, not even water (if needed, use the WOCA or BONA Cleaner for resistant stains such as food, coffee ...).
- Vacuum or sweep.
- When the floor begins to darken due to superficial impurities, switch to the refreshment treatment.

Refreshment treatment: Frequency to be defined according to the traffic: 1 or 2 per year.

- Use the orbital polisher with a red pad, with WOCA or BONA Cleaner in spray format.
- Vacuum or sweep the entire floor.
- Re-oil with WOCA Maintenance Oil Diamond Active using an orbital polisher equipped with a red pad.
- Proceed by areas of approximately 40 m² at a time. Remove excess maintenance oil using a white pad.

Notes:

- For optimal application, pay close attention to the humidity and the ambient temperature: 30-70% humidity and temperature of 15-25°C => Avoid winter installations.
- Drying time at 20°C: 4 to 6 hours.
- It is possible to oil a specific area, where there is very high traffic, without redoing the entire floor.
- Do not use a cleaner or any product other than those listed above.
- For the replacement of the MOSO® flooring boards, please follow the instructions on the drawings on this page (repair and replacement).

cleaning with WOCA

MOSO® recommends the following cleaning with WOCA Diamond Oil Active:

- First step: use the orbital polisher without soap or water, use the red pad at 200 revolutions per minute.
- Result: the darker stains on the flooring fade easily.

If there are persistent stains:

- The most effective product is WOCA or BONA Cleaner.
- Beware, the re-oiling should always be done with the product WOCA Maintenance Oil Diamond Active. Otherwise, there is a risk of incompatibility between the oils.

Important note:

- The Bamboo UltraDensity® flooring should not be cleaned with water and soap/detergent as this will destroy the protective oil layer and the floor will darken prematurely.

storage

MOSO® Bamboo UltraDensity® boards and MOSO® Bamboo X-treme® sub-beams must be stored in a dry place protected from dirt and direct sunshine.

additional note

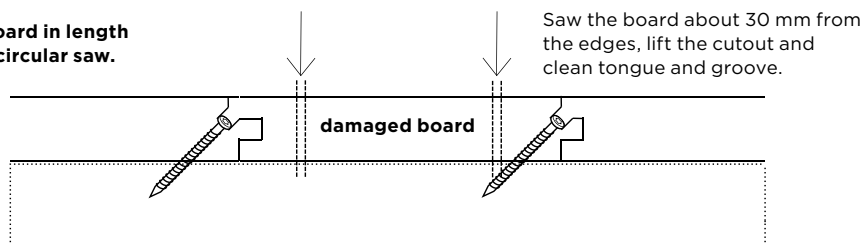
For all further information, contact your distributor. These installation instructions may be changed without prior notice. To ensure that you are in possession of the latest version, please contact your distributor.

These instructions are subject to change. For the latest version go to: www.moso-bamboo.com/ultradensity

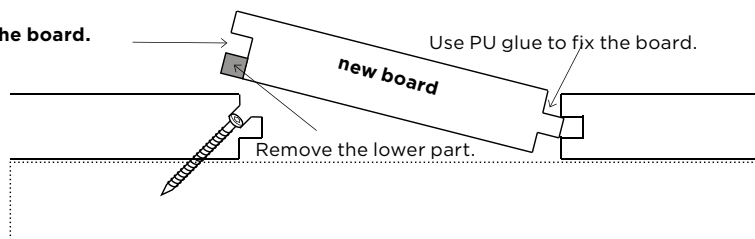
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repair and replacement

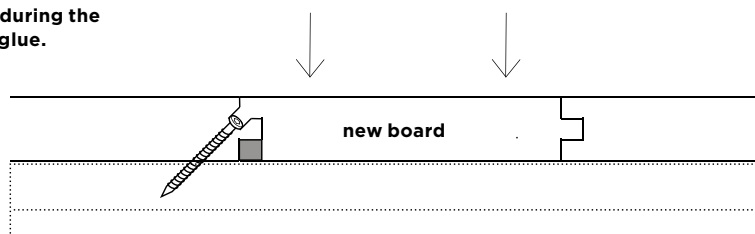
- 1** Cut through the board in length direction, using a circular saw.



- 2** Use PU glue to fix the board.



- 3** Keep the pressure during the drying time of the glue.



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