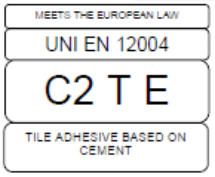
# PRODUCT DATA SHEET

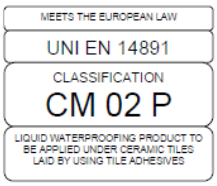
ITEM CODE: SEE DN
ISSUE DATE: 25/02/2022
REVIEW: NO. 7

CE

GEV-EMICODE EC 1 PLUS very low emission

## BOND CEMENT




### DESCRIPTION OF THE PRODUCT

Two-component, waterproof, cementitious adhesive for installing ceramic tiles, porcelain stoneware (grès), and natural stone on floors and walls, both indoors and outdoors, including overlaid applications. Formulated by WINKLER Research & Development Laboratories, **BOND CEMENT** is an improved cement-based adhesive classified as **C2TE S2**, offering enhanced performance **(C2)**, reduced slip **(T)**, extended open time **(E)**, and high deformability **(S2).**

The product has obtained the **EC1 PLUS** certification, identifying **EMICODE-certified** materials with extremely low emissions of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs).

### FIELDS OF USE

Product designed for waterproof bonding of ceramic flooring and wall coverings, both indoors and outdoors. It is ideal for balconies, swimming pools, bathrooms, steam rooms, terraces, and cement screeds.
Also suitable for overlaying existing ceramic coverings, it can be applied in a single coat without the need for reinforcement mesh.
**BOND CEMENT** is resistant to fungi and algae.

### SURFACE PREPARATION

Ensure that the substrate is homogenous, properly cured, free of cracks, and compliant with the requirements specified in **UNI EN 11493-1.**
Thoroughly clean the surface to remove salts, dust, loose or friable material, and any substances that could impair adhesion. Dampen the substrate before application.

For uneven substrates, use self-levelling products **WINLIVEL** or **WINLIVEL RAPID** for horizontal surfaces. For vertical surfaces, use **WR05 WINTONAC**.
For screeds, use **WINPLAN 370**, a quick-drying screed, or **WINPLAN PRO**, a quick-drying screed with low water absorption.



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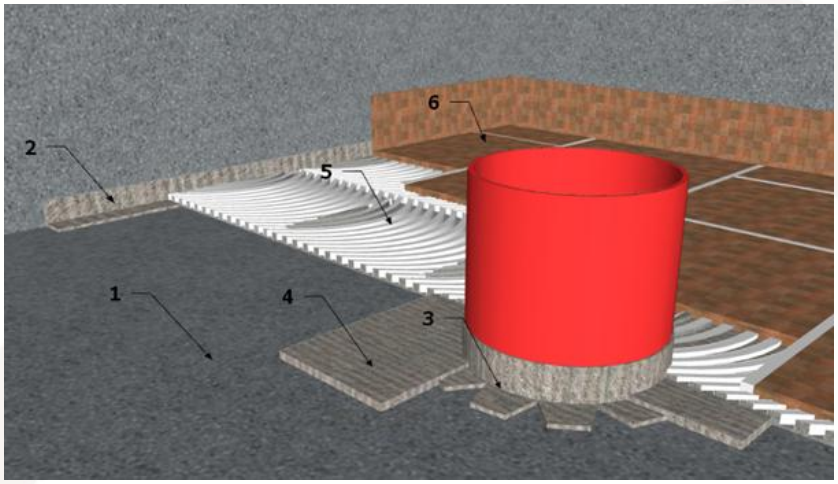
For reinforcing and sealing corners, it is recommended to apply **BC SEAL BAND**, a waterproof butyl tape coated with polypropylene non-woven fabric.
For waterproofing pipe penetrations, outlets, drains, and similar protrusions, use **BC SEAL PAD**, a self-adhesive square waterproofing butyl sheet.
To ensure effective waterproofing, **BOND CEMENT** must be applied in a continuous and uniform layer.

**AREATOR DETAIL**




LEGEND:
1. Structural support
2. **BC SEAL BAND**, Self-adhesive band for sealing corners
3. Collar shaped **BC SEAL BAND**, to seal the drain.
4. **BC SEAL PAD**, self-adhesive square pad;
5. **BOND CEMENT**
6. New flooring

**SURFACES WITH JOINTS**
For the design and creation of joints, refer to the provisions of **UNI EN 11493-1**.

**SEALING OF JOINTS UP TO 1 CM WIDE**
Joints up to 1 cm width should be sealed using **WINJOINT BAND** joint-covering strips (waterproof elastic strips made of rubber and polyester fabric, suitable for waterproofing joints), as described below.

After creating new joints or restoring existing ones, apply **BOND CEMENT** along the sides of the joint over a width greater than that of the joint-covering strip.
Lay the joint-covering strip by pressing the perforated side onto the pre-treated area while the **BOND CEMENT** is still fresh to ensure proper adhesion and waterproofing.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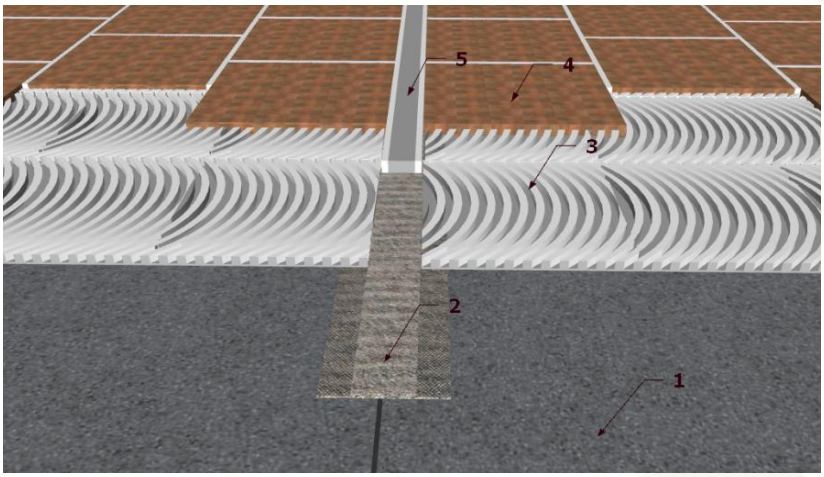


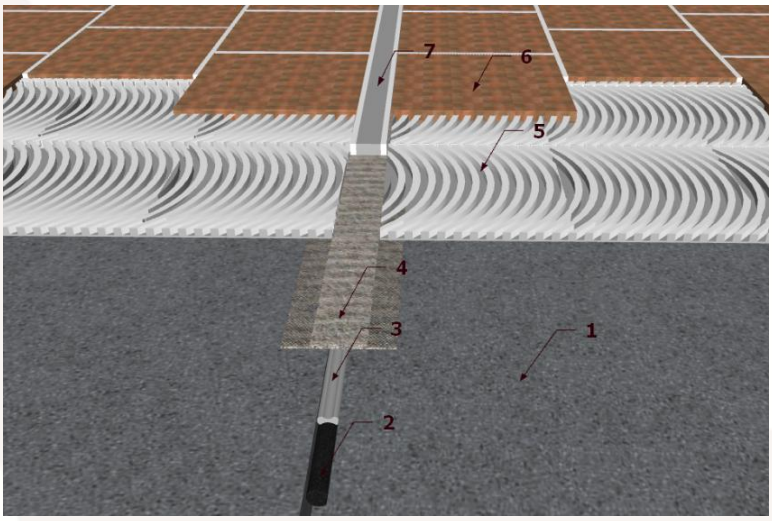

LEGEND:
1. Concrete substrate
2. **WINJOINT BAND**
3. **BOND CEMENT**
4. New flooring
5. Pre-shaped structure

**SEALING OF JOINTS WIDER THAN 1 CM**

Joints wider than 1 cm should be sealed using a system composed of **WINJOINT FOAM** (compressible joint backing), **WINJOINT SEAL** (polyurethane sealant), and **WINJOINT BAND**, as described below:

After creating new joints or restoring existing ones, insert **WINJOINT FOAM** inside the joint to the desired depth, then extrude **WINJOINT SEAL** along the entire length of the joint.

Once the sealant has dried, apply **WINJOINT BAND** as previously described.




LEGEND:
1. Concrete Substrate
2. **WINJOINT FOAM**, compressible polyethylene foam backer rod
3. **WINJOINT SEAL**, polyurethane Sealant
4. **WINJOINT BAND**
5. **BOND CEMENT**
6. New flooring
7. Pre-shaped structure

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**RECOMMENDATIONS**

Do not add cement or additives.
Do not use the product if the packaging is damaged.
Do not add water once the mixture begins to set.
Do not apply on asphalt surfaces or those treated with bitumen (except **WINGRIP BITUMINOSO**).

**WARNINGS**

Apply the product at temperatures between +5°C and +35°C.
Surfaces treated with **BOND CEMENT** must not be exposed to rain or washing for at least 24 hours after application.
Due to the elasticity of the product, it is recommended to use **WINSTUCCO FLEX** for joint grouting. Joints must have a minimum width of 3 mm, and any subsequent grouting should not be carried out until at least 24 hours after the application of **BOND CEMENT**.
Tiles must be positioned within 20 minutes of applying **BOND CEMENT** to ensure proper adhesion.
If **BOND CEMENT** is used as a grout, any excess material should be removed after approximately 25 to 30 minutes after application to facilitate cleaning.

**PRODUCT PREPARATION**

Before use, shake **Component B** thoroughly. Pour **Component B** (white liquid) into the bucket provided, then slowly add **Component A** (white powder) while mixing continuously at low speed with a drill. Continue mixing until a homogenous, lump-free mixture is obtained. Allow the mixture to rest for approximately three minutes, then mix again for about two minutes before proceeding with the application.


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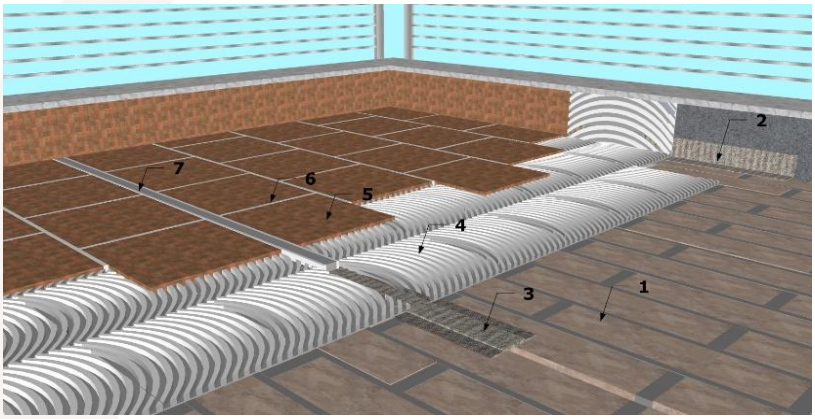
## APPLICATION

### WATERPROOFING AND BONDING ACTION FOR SMALL TO MEDIUM-SIZE COATINGS (Surfaces smaller than 900 cm²)

After thoroughly mixing the product as previously described, apply a continuous layer on the substrate with a uniform thickness to ensure complete coverage and full wettability of the tile back. On undamaged surfaces, a layer of approximately 2.5 mm is sufficient.
Use the toothed side of the trowel to press lightly and create ridges.
To guarantee effective waterproofing, it is essential to maintain continuity in the layer of **BOND CEMENT** applied.

### WATERPROOFING AND BONDING ACTION FOR LARGE-SIZED COATINGS (Surfaces over 900 cm²) AND FOR WATERPROOFING OF ALL SURFACE SIZES IN SWIMMING POOLS AND BASINS

To ensure optimal bonding performance, **BOND CEMENT** must also be applied to the backside of the tile (double coating), in accordance with **UNI EN 11493-1**. For enhanced waterproofing, **BOND CEMENT** can also be used as a plaster for grout lines.




LEGEND:
1. Old flooring
2. **BC SEAL BAND**, self-adhesive sealing band
3. **WINJOINT BAND**, joint cover band
4. **BOND CEMENT**
5. New tiled flooring
6. **WINSTUCCO FLEX** water-resistant grout
7. Expansion grout

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**SWIMMING POOL COVERING**
In the case of slight counter-pressure moisture, first apply **WINPOX CEMENT TIXO**, a three-component epoxy-cement system.
Before applying **BOND CEMENT** over **WINPOX CEMENT TIXO**, lightly sand the surface to ensure proper adhesion.

**CONSUMPTION**
Standard application:
waterproof coating with bonding ridges – approx. 3.5 kg/m$^2$
Double-spread application:
waterproof coating with bonding ridges – approx. 4.5-5.0 kg/m$^2$

**PACKAGING**
Component A (powder): 15 kg
Component B (liquid): 5 kg

**STORAGE**
The product in its original and undamaged packaging, can be stored for up to 12 months. Store at temperatures between +5°C and 35 °C. The product is not frost-resistant.

## SAFETY INSTRUCTIONS

**PRECAUTIONS**
For safety information, the user must refer to the latest Safety Data Sheet (SDS), prepared in accordance with applicable regulations. The SDS contains detailed information on the physical, toxicological, and safety characteristics of the product.

**DISPOSAL AND ENVIRONMENTAL PRECAUTIONS**
Do not release the product or empty containers into the environment. For detailed disposal instructions, refer to the most recent Safety Data Sheet (SDS).


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**TECHNICAL FEATURES**
**(average value)**

| FEATURES | Component A | Component B |
|---|---|---|
| Appearance | Powder | Liquid |
| Colour | White | White |
| Solid content | 100 % | 44 % |
| Mix ratio | A: 100 + B: 33 | |
| Mix colour | White | |
| Consistency | Trowel-applicable tixotropic paste | |
| Working time at +20°C | 70 minutes | |
| Traversability after application at +20°C | 48 hours | |

**CERTIFIED RESISTANCES OF THE PRODUCT IN SERVICE ACCORDING TO UNI EN 12004-2017 - Product type determined by the SOCOTEC ITALIA s.r.l testing laboratory based on tests performed on samples**

| FEATURES | RESULT |
|---|---|
| Tensile adhesive strength (UNI EN 1348) | |
| • Initial: | ≥ 1.0 N/mm$^2$ |
| • After thermal ageing: | ≥ 1.0 N/mm$^2$ |
| • After immersion in water: | ≥ 1.0 N/mm$^2$ |
| • After freeze-thaw cycles: | ≥ 1.0 N/mm$^2$ |
| Extended open time – adhesion after 30 min. (UNI EN 1346) | ≥ 0.5 N/mm$^2$ |
| Slip resistance (UNI EN 1308) | ≤ 0.5 mm |
| Deformability (UNI EN 12002) | ≥ 5.0 mm |
| Wetting ability (UNI EN 1347) | |
| After 10 minutes:<br>After 20 minutes:<br>After 30 minutes: | 95.30 %<br>60 %<br>45 % |

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## CERTIFIED OPERATIONAL PERFORMANCE OF THE PRODUCT ACCORDING TO UNI EN 14891

| FEATURES | | RESULT |
|---|---|---|
| Tensile adhesion | | |
| • Initial: | | ≥ 1.0 N/ mm² |
| • After thermal ageing: | | ≥ 1.0 N/ mm² |
| • After immersion in water: | | ≥ 1.0 N/ mm² |
| • After freeze-thaw cycles: | | ≥ 1.0 N/ mm² |
| • After contact with lime water: | | ≥ 1.0 N/ mm² |
| Waterproofing | | |
| • Positive counter-thrust resistance: | | No infiltration (>1.5 bar) |
| • Negative counter-thrust resistance: | | No infiltration (> 1.0 <1.5 bar) |
| Crack bridging (UNI EN 14891) | | |
| Temperature | Obtained result | Requested |
| +23°C | 1.39 mm | ≥ 0.75 mm |
| -5°C | 1.05 mm | ≥ 0.75 mm |
| -20°C | 1.00 mm | ≥ 0.75 mm |

## OTHER OPERATIONAL FEATURES

| FEATURES | RESULT |
|---|---|
| Water absorption (ASTM D 471) | |
| 24 hours | 5.4% |
| 7 days | 10.5 % |
| Chlorine – proofing<br>(28 days in 10% NaCl solution) | Very good |
| Sulphate-proofing<br>(28 days in 10% $K_2SO_4$ solution) | Very good |



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## VOLATILE ORGANIC COMPOUNDS EMISSION

| PARAMETER | MAX. ALLOWED CONCENTRATION (µg/m³) |
|---|---|
| TVOC after 3 days | ≤ 750 |
| TVOC after 28 days | ≤ 60 |

Test performed by the EUROFINS Institute according to EN 16516, ISO 16000-3/6/9/11 and ASTM D5116-10. Test report n. 392-2017-00404102_G_EN_02.

The product complies with the requirements of Directive 2003/53/EC.

**PRODUCT FOR PROFESSIONAL USE ONLY**





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