

# FASSASIL NTR PLUS

## DATA SHEET

Neutral alkoxy crosslinking silicone sealant with low modulus of elasticity, broad-spectrum protection against growth of algae and mould species



Interior/Exterior



Interior/exterior flooring



Extrusion

## Advantages

- Excellent elasticity and durability
- Sealant featuring broad-spectrum protection against growth of algae and mould species
- Solvent free
- Optimum adhesion on absorbent and non-absorbent substrates
- Odourless

## Composition

FASSASIL NTR PLUS is a neutral, one-component, water-hardening silicone sealant available in various colours.

## Supply

- Boxes containing 12 special cartridges, 300 ml ea.
- Tints: available clear and in 17 colours (see table of colours)

## Use

FASSASIL NTR PLUS is a neutral, non-corrosive one-component sealant for elastic joints between glass, metals, ceramics, cement, rigid plastics and wood.

FASSASIL NTR PLUS is suitable for application on walls and walkable floors, interiors and exteriors, to create perimeter, control and expansion joints on terraces, balconies, flat roofs, exterior paving, connecting joints between precast elements, etc. The product can be applied on façades, on glazed surfaces, in sanitary environments and areas used as pedestrian walkways.

FASSASIL NTR PLUS is classified F25LM and G25LM according to EN ISO 11600.

FASSASIL NTR PLUS complies with EN 15651 standards (Parts 1, 2, 3 and 4).

## Joint preparation

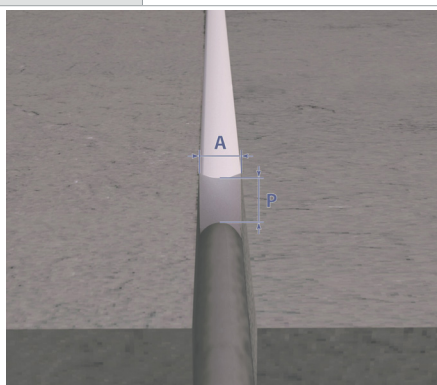
The joint to be sealed must be free of dust, dirt, oil, grease, wax, non-adherent materials in general, etc. Glass, metals and other non-absorbent surfaces must be cleaned with solvent beforehand.

In order to perform its function, the joint must be appropriately sized in terms of width and depth by the designer. As specified in the UNI 11493-1 application standard, the width of the joint must be between 5 mm (less extreme situations) and 10-12 mm. In addition, the expected movement should not exceed the sealant movement capacity, which is 25% of the width.

To ensure free movement of the sealant in the joint, this must not adhere to the bottom of the joint. Consequently, place FASSAFOAM compressible closed cell polyethylene foam cord (bottom of the joint) at the right depth. The cord also has the purpose of sizing the depth of sealant (D).

For proper sealing, the following joint configuration guidelines must be observed:

| Joint width A   | Sealant depth D |
|-----------------|-----------------|
| From 5 to 10 mm | $A=P$           |
| > 10 mm         | $P= A/2$        |



To avoid protrusions, it is recommended to place adhesive paper tape along the edges of the joint, removing it immediately after smoothing over the sealant. FASSASIL NTR PLUS has excellent bonding capacity on most common building materials adopted for the intended uses. Primer is not required if applying on suitably-prepared and consolidated non-porous substrates. In any case, given the possible variety of materials and surface treatments, some difficulties in bonding may occur. For this reason, preliminary tests are recommended. On porous surfaces, with the exception of natural stone and marble, it is recommended to apply a polyurethane-based adhesion promoter. If using primer, apply it to both ends of the joint, waiting the drying time needed to prevent the solvent from being incorporated and that, in the event of an increase in temperature, may cause bubbles to form inside the sealant itself when not yet completely hardened.

The perimeter skirting will be glued to the walls, placing suitable spacer wedges on the floor in order to leave a minimum space of 3 mm (as specified by the UNI 11493-1 standard); this space can be sealed manually using FASSASIL NTR PLUS.

Before extruding the product into the joint, it is recommended to protect the edges with masking tape.

## Application

After cutting the threaded end of the cartridge, screw on the plastic spout supplied and then cut it at 45 degrees, depending on the size of the joint. On suitably-prepared substrates, apply the elastic sealant using a dispensing gun, extruding it into the joint and avoiding subsequently adding extra product and thus incorporating bubbles of air.

Moisten a spatula or other suitable tool with a soapy water to smooth off the sealant and ensure contact along the edges, removing any excess before the surface film forms. Remove the masking tape before the product hardens. Once hardened, the product can only be removed mechanically.

## Warnings

- Product for professional use.
- Always consult the safety data sheet before use.
- Do not use FASSASIL NTR PLUS in extended or permanent contact with chlorinated water (swimming pools).
- In view of the different types of stone material belonging to the same mineral group, staining or haloing phenomena cannot be ruled out for some types of material. To prevent these issues, it is recommended that a preliminary test be performed before proceeding with the entire intervention.
- Check the resistance of FASSASIL NTR PLUS to contact with chemicals in exposure conditions.
- The product is water-hardening: allow sufficient air exposure of the product.
- The product's polymerisation time depends on the temperature and humidity conditions during curing and the thickness of the sealant.
- The product cannot be painted over.
- Do not use FASSASIL NTR PLUS on driveways.
- Do not use FASSASIL NTR PLUS in environments subject to chemical aggression (strong acids, etc.).
- If repairing joints that are damaged and/or subject to algae/mould, completely remove the elastic sealant and disinfect the joint using specific products, to prevent the mould from proliferating again.
- Do not use directly on construction materials that may ooze oils or plasticisers (such as coatings or membranes made from bitumen or tar, plastics, etc.).
- The fresh product can be removed using normal solvents (alcohol or acetone); once hardened it can only be removed mechanically.
- Comply with national standards in force.
- Store at temperatures between 5 and 25°C.

**FASSASIL NTR PLUS it must be used in its original state without the addition of foreign materials.**

## Storage

Keep in a dry place, away from sources of heat and direct sunlight, for no longer than 12 months. Once the product has expired, it must be disposed of in accordance with current legislation.

## Quality

FASSASIL NTR PLUS is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

## Colour range

### in-CLASSIC

|                 |  |
|-----------------|--|
| F63 Transparent |  |
| F01 White       |  |
| F03 Light grey  |  |
| F05 Ice         |  |
| F07 Manhattan   |  |
| F09 Quartz grey |  |
| F11 Grey        |  |
| F13 Sand        |  |
| F15 Anthracite  |  |
| F17 Black       |  |

### in-WOOD

|                 |  |
|-----------------|--|
| F19 Pergamon    |  |
| F21 Jasmine     |  |
| F23 Beige       |  |
| F25 Anemone     |  |
| F27 Light sand  |  |
| F29 Powder pink |  |
| F31 Caramel     |  |
| F33 Brown       |  |

All Fassa Bortolo sealants used to fill joints between ceramic tiles and stone materials meet the requirements of EN 13888.

The colours reproduced are purely indicative and may vary for reasons due to printing, reproduction and conversion of the images.

It should also be noted that colour rendering is affected by several other factors, including, by way of example: natural light, which is not uniform or constant; artificial light, affected by the colour temperature of the light source or CCT - Correlated Colour Temperature; and the colour of adjacent surfaces. The display of colours by computers is also affected by the user's display settings.

For a more meaningful colour match, refer to the grouting samples provided in the colour chart.

In any case, the final colour obtained on site will depend on the processing, application and cleanliness of the sealant and the type and colour of the tiles adjacent to the joints, and may also be subject to changes over time, including for reasons relating to environmental conditions (humidity, light, etc.).

For all of these reasons, Fassa Srl offers no guarantee whatsoever relating to the colour of Fassa Bortolo sealants and the product's correspondence to the images and samples provided, as well as to the final result obtained on site, declining all liability pertaining to this attribute.

## Technical Data

|   |   |
|---|---|
| Appearance  | Thixotropic paste                       |
| Colour  | Available in 17 colours and transparent |
| Working time at +23° and 50% RH (formation of "skin")                             | approx. 20 minutes                      |
| Odour   | Odourless                               |
| Polymerisation  | Water-hardening                         |
| Reticulation speed at 23°C and 50% RH   | 2 mm / 24 h                             |
| Shore D hardness (ASTM D 868)   | 20-30°                                  |
| Specific weight   | 1.00 ± 0.02 kg/l                        |
| Modulus of elasticity at 100% elongation (ISO 8339)                               | ≥ 0.61 MPa                              |
| Tensile strength (ISO 8339)   | ≥ 0.7 MPa                               |
| Elongation at break (ISO 8339)  | ≥ 300%                                  |
| Application temperature   | from +5° to +40°C                       |
| Temperature resistance  | From -40° to +150°C                     |
| EN ISO 11600 - Jointing products - Classification and requirements for sealants   | F-25LM                                  |
|   | G-25-LM                                 |
| <b>Joint sealants for non-structural use in buildings and pedestrian walkways</b> |   |
| Complies with EN 15651-1 - Sealants for facade elements                           | F EXT - INT - CC                        |
| Complies with EN 15651-2 - Sealants for glazing                                   | G - CC                                  |
| Complies with EN 15651-3 - Sealants for sanitary joints                           | XS1                                     |
| Complies with EN 15651-4 - Sealants for pedestrian walkways                       | PW EXT - INT - CC                       |

## Environmental sustainability certifications and protocols

|                    |   |
|--------------------|---|
| LEED V4.1 protocol | MR Credit – Construction and Demolition Waste Management    |
|                    | EQ Credit – Low-Emitting Materials                          |
|                    | EQ Credit – Construction Indoor Air Quality Management Plan |
| BREEAM protocol    | HEA 02 – Indoor Air Quality                                 |
| WELL v2 protocol   | X01 – Material Restrictions                                 |
|                    | X06 – Voc Restrictions                                      |
| GEV Classification | GEV EMICODE EC 1 <sup>Plus</sup> - very low emission        |

## Consumption

The consumption data shown depend on the width and depth of the sealed joints, and refer to the number of linear metres of joint that can be sealed using one 300 ml cartridge

| Size of joint (mm) | Metres per cartridge |
|--------------------|----------------------|
| 5x5                | 12                   |
| 10x5               | 6                    |
| 10x10              | 3                    |
| 15x10              | 2                    |
| 20x10              | 1.5                  |

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: [area.tecnica@fassabortolo.com](mailto:area.tecnica@fassabortolo.com), ES: [asistencia.tecnica@fassabortolo.com](mailto:asistencia.tecnica@fassabortolo.com), PT: [assistencia.tecnica@fassabortolo.com](mailto:assistencia.tecnica@fassabortolo.com), FR: [bureau.technique@fassabortolo.fr](mailto:bureau.technique@fassabortolo.fr), UK: [technical.assistance@fassabortolo.com](mailto:technical.assistance@fassabortolo.com)).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.