# ER 2000

## **PRODUCT DESCRIPTION**

SER 2000 is a one-part silicone sealant reacting with the moisture of the air, fast curing. Excellent elasticity, low modulus, compatible with a great variety of materials used in building industry. It's suitable for use in sanitary areas.

## **PRODUCT CHARACTERISTICS**

- Primerless adhesion to glass, metals, many painted surfaces, porous materials like concrete, plaster, many plastics, ceramic.
- Neutral reaction.
- Paste, easy application.
- Low odour and no metal corrosion.
- Excellent ageing resistance. ٠
- Flexible at low (-40°C) and high temperatures (+150°C).

## **USES** (professional)

- For metalwork.
- For glazed surfaces.
- For perimetral sealing of door and window frames.
- Sealing of expansion joints in prefabrication. ٠
- For sealing joints in sanitary areas.







## LIMITATIONS

- SER 2000 must not be used for insulating glass applications nor for structural glazing bonding.
- It is not recommended for the production of aquaria nor for longterm use under water.
- Not suitable for joints in swimming pools and adjacent areas that are in continuous contact with pool water.
- It should not be used in contact with marble, natural stones. ٠
- It should not be used in contact with materials bleeding oily matters or plasticizers, nor on surfaces to be overpainted.
- It is not suitable for use in food contact applications.
- The sealant is not recommended for use in totally confined joints not exposed to air moisture nor for use in joints submitted to abrasion.
- Do not use in extreme temperature conditions, or on damp, frozen, contaminated surfaces.
- Do not use on excessively acidic or basic substrates. It is not suitable for use as a mirror adhesive.
- For any application not listed in this document please contact our Technical Service.

## **TECHNICAL DATA**

Polymers the curing system:	100% silicone, alcoxy
Consistency:	tixotropic, non-slumping paste
Application temperature:	+5°C / +40°C
Specific gravity:	1,02 - 1,03 g/cm <sup>3</sup>
Skin forming time (23°C / 50 % R.H.):	25 minutes
Curing time:	1 - 5 days depending on temperature and humidity and on cross section of applied sealant cord
Shore A Hardness (ISO 868):	24
100% Modulus (ISO 8339-A):	0,37 N/mm²
Tensile strength (ISO 8339-A):	0,70 N/mm²
Ultimate elongation (ISO 8339-A):	>300%
Movement capability (ISO 9047):	50%
Tear resistance (ISO 34-C):	4,5 N/mm
Service temperature range:	-40°C / +150°C

The values in this table must not be considered as specifications.



Fratelli Zucchini S.p.A.

Via C. Colombo, 6 Tel. +39 0532 782711 info@zucchini.it 44124 Ferrara - Italy Fax +39 0532 732121 www.zucchini.it

MPANY WITH QUALITY SYSTEM = ISO 9001=



# **SER 2000**

### APPROVALS

SER 2000 has been tested and certified by EUROFINS according to:

Regulation or protocol	Conclusion	Version of regulation or protocol
French VOC Regulation	A +	Regulation of March and May 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	Pass	Regulation of April and May 2009 (DEVP0908633A and DEVP0910046A)
Italian CAM Edilizia	Pass	Decree 11 October 2017 (GU n.259 del 6-11-2017)
ABG	Pass	Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes (ABG), Entwurf 31.08.2017/August 2018 (AgBB)
Belgian Regulation	Pass	Royal decree of May 2014 (C-2014/24239)
EMICODE *	EC 1 PLUS	apr-19
Indoor Air Comfort®	Pass	Indoor Air Comfort 6.0 of February 2017
Indoor Air Comfort GOLD®	Pass	Indoor Air Comfort GOLD 6.0 of February 2017
Blue Angel (DE-UZ 123)	Pass	DE-UZ 123 for "Low-Emission Sealants for Interior Use", (January 2019)
BREEAM International	Exemplary Level	BREEAM International New Construction v2.0 (2016)
BREEAM <sup>®</sup> NOR	Pass	BREEAM-NOR New Construction v1.2 (2019)
LEED	Pass	v 4.1 July 2019

\* This test report does not alone entitle to use the protected trademark label EMICODE.

#### Standard compliance

ISO 11600 F-EXT-INT CLASS 25 LM, G- CLASS 25 LM.



**15651-1: F-EXT-INT-CC 25 LM** Sealant for façade for interior and exterior application (intended for use in cold climates). **EN 15651-2: G-CC 25 LM** Sealant used for sealing glazing applications (intended for use in cold climates). **EN15651-3: XS 1** Sealant for joints in sanitary areas.

## METHOD OF USE

NEUTRAL SILICONES

Surface preparation: the substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material, dust, dirt, rust, oil and other contaminants.

Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth.

Remove residual solvent before it evaporates with a fresh clean, dry cloth.

SER 2000 has a good adhesion onto materials commonly used in building, otherwise on to cement, aluminium and painted surfaces, the use of Primer can be suggested, appropriate preliminary tests are always recommended. See table of Primers for silicone sealants.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials.

Incompatible substances like coating materials (paints, varnishes and glazes) or organic plasticizer containing rubbers (EPDM, butyl and neoprene) can lead to discoloration or other impairments like loss of adhesion of the sealant.

Materials in direct contact with the applied sealant like cleaning agents and materials in indirect contact like gaseous emissions can damage the sealant in its function or change its appearance.

Because of the multitude of these materials, Fratelli Zucchini S.p.A. cannot make a general statement to the compatibility of materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

Recommended joint dimension (see picture): joint depth is to be designed so that to produce

a sealant cord of depth not below 5 mm and not over 10 mm.

Depth of sealant should always be less than joint width.

With butt joints, the width should be almost twice expected total movement, in overlap joints equal or greater. Expansion joints should be dimensioned in order to allow insertion to the joint back of our **FILTENE**, a closed cell polyethylene foam round profile, available in several diameters.

Application: apply by hand or by gun. Tooling can be carried out soon before curing.

**Solvent wiping:** dirty tools can be solvent wiped with **Solvente ST/512**. After curing **SER 2000** can be removed mechanically.

SER 2000 can't be overpainted.

## SAFETY AND HEALTH

See Safety Data Sheet. During vulcanization ethanol is released, use SER 2000 in well ventilated areas.



FRATELLI ZUCCHINI

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 Tel. +39 0532 782711

 44124 Ferrara - Italy
 Fax +39 0532 732121

info@zucchini.it www.zucchini.it COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV G = ISO 9001=



## **SER 2000**

#### **STORAGE STABILITY**

310 ml. cartridge 12 months from the date of manufacture. 600 ml bag. 12 months from the date of manufacture. 20 kg drum 6 months from the date of manufacture.

Store the sealed product in the original packaging, in a dry place at a temperature between +5°C and +25°C.

### PACKAGING

Code	Colour	Packaging	Unit
1005985	transparent	310 ml. cartridge	24
1005987	white	310 ml. cartridge	24
1006008	grey	310 ml. cartridge	24
1006010	black	310 ml. cartridge	24
1006009	dark brown	310 ml. cartridge	24
1005904	aluminium grey	310 ml. cartridge	24
1004597	ivory grey	310 ml. cartridge	24
1006040	light grey	310 ml. cartridge	24
1005902	light brown	310 ml. cartridge	24
1005901	copper	310 ml. cartridge	24

Other sizes available on request.



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All recommendations relating to application and use of Fratelli Zucchini S.p.A. products have been given based on Fratelli Zucchini S.p.A. knowledge and experience, for products appropriately stored, handled and applied in suitable conditions, as indicated in their respective Technical Datasheets. The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written or verbal recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Fratelli Zucchini S.p.A., of its products, services, recommendations and suggestions for the specific application need, and must accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end-user. Fratelli Zucchini S.p.A., therefore, cannot be fit considered liable for any damage, direct or indirect even for possible wrong, incorrect and unfit use of the products.