

CHEMFIT SILICONE 3205C

Silicone Weather Seal for Construction Joints – To Seal, Bond & Mend in Concrete Applications, Movement and Connecting Joints

PRODUCT DESCRIPTION

ChemFit Silicone 3205C is a high-performance, one-part, **neutral cure silicone weather seal**. Unlike acetoxy silicones which release acetic acid, this neutral cure formulation is ideal for use on sensitive or alkaline substrates such as concrete, mortar, and natural stone, as it does not cause corrosion or staining. It cures upon exposure to atmospheric moisture to form a durable, permanently flexible, and weatherproof rubber seal. This product meets the requirements of **ISO 11600** and **ASTM C920**, making it suitable for sealing movement and connecting joints in demanding construction applications.

PRIMARY APPLICATIONS

ChemFit Silicone 3205C is recommended for use in conditions such as:

- **Weatherproofing:** Sealing movement and connection joints in concrete facades, curtain walls, and building envelopes.
- **Concrete Applications:** Designed to seal, bond, and mend cracks and joints in concrete structures without staining.
- **General Construction:** Suitable for sealing joints between masonry, brick, stone, glass, and metal.

KEY FEATURES AND BENEFITS

- **Neutral Cure:** Non-corrosive; safe for use on concrete, natural stone, and sensitive metals (unlike acetoxy silicones).
- **High Movement Capability:** Conforms to ISO 11600 and ASTM C920, accommodating dynamic joint movement.
- **Excellent Weather Resistance:** Highly resistant to UV radiation, rain, ozone, and extreme temperatures.
- **Primerless Adhesion:** Adheres well to most common construction substrates without a primer.
- **Paintable:** Can be overcoated with water-based paints (specific grades only; test first).

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Chemical Base	Silicone
Color	Grey, White, Black, Limestone (typically)
Density	~1.50 – 1.55 kg/L
Consistency	Non-sag / Thixotropic
Skin Formation (23°C/50% r.h.)	10 – 30 minutes
Cure Rate (23°C/50% r.h.)	~2.5 mm per 24 hours
Movement Capability	±25% to ±50% (ASTM C920, Class 25 to 50)
Shore A Hardness	25 – 35 (after 28 days)
Service Temperature	-40°C to +150°C
Application Temperature	+5°C to +40°C

PACKAGING AND STORAGE

Packaging:

- 300 mL cartridge
- 600 mL foil pack (sausage)

Storage:

- Store in original, unopened packaging in a cool, dry environment between +5°C and +25°C.
- Protect from direct sunlight and frost.

Shelf life: 12 – 15 months from date of manufacture when stored properly.

DOSAGE AND COVERAGE RATES

For a standard 300 mL cartridge / 600 mL foil pack:

Joint Width (W)	Joint Depth (D)	Approx. Joint Length (300 mL)	Approx. Joint Length (600 mL)
10 mm	10 mm	~3.0 meters	~6.0 meters
12 mm	12 mm	~2.1 meters	~4.2 meters
15 mm	15 mm	~1.3 meters	~2.6 meters

NOTE: Joint design must follow the manufacturer's recommended width-to-depth ratio (typically 2:1 for dynamic joints).

APPLICATION GUIDELINES

Surface Preparation:

- Substrate must be sound, clean, dry, and free from dust, oil, grease, laitance, and any loose particles.

Priming:

- **Primerless for most:** Excellent adhesion to concrete, glass, aluminum, and masonry without primer. For highly porous stone or underwater applications, test or use primer.

Application:

- Insert a closed-cell polyethylene backing rod to control depth and act as a bond breaker.
- Apply sealant firmly into the prepared joint to ensure contact with the sides.
- Tool the surface immediately with a spatula moistened with soapy water.

Curing Times (23°C/50% r.h.):

- Skin formation: 10 – 30 minutes.
- Rain resistant: Immediately after skin forms.
- Through cure: ~2.5 mm per 24 hours. Full cure for large joints may take 7-14 days.

HEALTH AND SAFETY

During curing, this product releases a small amount of alcohol (or other neutral byproduct). Use in a well-ventilated area. May cause eye and skin irritation. If eye contact occurs, rinse with water for 15 minutes and seek medical attention. Use gloves and safety glasses. Refer to the Safety Data Sheet (SDS) for detailed information.

CLEANING OF TOOLS

Clean tools and equipment with mineral spirits or a suitable silicone cleaner immediately after use. Cured silicone requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit Silicone 3205C complies with the following standards:

- **ASTM C920** – Standard Specification for Elastomeric Joint Sealants (Class 25 to 50)
- **ISO 11600** – Building construction – Jointing products – Classification (F-25E or F-25LM)
- **ISO 9001** – Quality management system certified

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: www.chemfitchemical.com

Email: chemfit.pro@gmail.com