

PRODUCT DATA SHEET

Date: 01.05.2023

FINOTECH® SQ-110

Structural Glazing Silicone Sealant

Description

FINOTECH® SQ-110 Silicone Sealant is a two-component Silicone Structural Glazing Sealant is a two-component high-modulus silicone sealant. As supplied, the base is a smooth, white paste and the curing agent is a black paste. Once mixed, the material cures to form a high-modulus, flexible silicone rubber that is suitable for use in structural glazing and curtainwall production.

Features

- Silicone Durability-Excellent weatherability, virtually unaffected by sunlight, rain, snow, ozone.
- Neutral Cure-excellent unprimed adhesion to a wide variety of substrates including coated, enameled, and reflective glasses; anodized and polyester coated or painted aluminum profiles including most fluoropolymer-based paints
- Availability of suitable FINOTECH® primers for critical surfaces
- High tensile strength-increase safety factors in SSG designs
- Meets international Structural Glazing standards like as GB 16776-2005, ASTM C920 12.5 CLASS, ASTM C1184.

Product Characteristics

FINOTECH® SQ-110 Uncured Properties			
Property	Component A	Component B	
Color	White	Black	
Specific Gravity, g/ml	1.42± 0.04	1.06 ± 0.02	
Mix Ratio by weight	11:1 ± 10%		
Mixed Compound Properties (11:1 mix ratio by weight, 23°C,50% RH)			
Property	Method	Unit	Value
Color			Black
Specific Gravity		g/ml	1.39± 0.04
Snap Time		min	55±15
Extrudability	ISO 9048	s	2~5
Sag/Slump	ASTM D2202	mm	0
Heat Weight Loss	GB 16776	%	2~4
Cured Properties (7 days after mixing, 23°C,50% RH)			
Durometer Hardness	ISO	24h	>30

Shore A	7619	7 Days	45±5
Tensile Strength:			
At 10% extension	ASTM C1184	MPa	0.10~0.13
At 20% extension	ASTM C1184	MPa	0.22~0.30
At 40% extension	ASTM C1184	MPa	0.40~0.47
Ultimate Tensile Strength	ISO 8339	MPa	0.70~1.00
Ultimate Elongation	ISO 8339	%	100~150
Application Temperature Range		°C	-5~40
Service Temperature Range		°C	-50~150
Test result TUV SUD according to ASTM C 920			
Staining and Color Change	ASTM C510		No staining and no color change
Extrudability	ASTM C 1183	ml/min	>10
Flow Properties	Vertical	ASTM C 639	0
	Horizontal		No Deformation
Heat Aging	Weight Loss	ASTM C1246	0.6
	Cracking and Chalking		No cracking or chalking
Accelerated Weathering	ASTM C 793	No cracks	Accelerated Weathering
Peel	On Mortar	ASTM	N 76.3



strength	On Glass	C 794		90.8
	On Aluminum			71.5
Hardness		ASTM C 661		40
Tack Free Time		ASTM C 679	h	<72
Cycle Movement		ASTM C 719	12.5%	No bond failure

Approvals/Specifications

Meets the requirements of GB 16776-2005, ASTM C920 12.5 CLASS, ASTM C1184.

Application

FINOTECH® SQ-110 should be mixed and dispensed using two-component mixing equipment which is readily available from several international accepted equipment manufacturers. This equipment is specially designed to meter proper proportions of A base and B curing agent, mix in an air-free environment and dispense at the proper pressures and volumes to insure air-free mixed material. Hand mixing is not recommended. The FINOTECH technical team will consult its customers upon request regarding pumping equipment start-up and shutdown procedures which cover proper operating pressures, mixing devices and purging requirements. FINOTECH secures an utmost consistency of their products. Kit matching of the A and B FINOTECH® SQ-110 is not required. The B curing agent component is moisture sensitive and should not be exposed to the atmosphere. The curing agent may require minimal hand mixing before placing container in pumping equipment. Cure rate may be adjusted by changing the A base to B curing agent ratios. FINOTECH® SQ-110 may be used with A to B ratios from 10:1 to 12:1 by weight. Prior to production use, a sample of base (A component) and curing agent (B component) should be taken from each lot of material to be used, weighed to proper A to B ratio, hand mixed, and checked for proper tack-free time and thick section cure rate prior to placing in production. Before applying FINOTECH® SQ-110 all surfaces should be cleaned and free of grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings. The joint design should be confirmed by the FINOTECH team or the aluminum system of choice to secure the capacity for accommodating the structure loads of the facades. The compatibility of spacer tapes, weather sealants, gaskets and further products being in contact with FINOTECH® SQ-110 have to be confirmed prior to the application. After application the façade elements should be stored in horizontal position until the structural glazing silicone has built its specified mechanical strength. Pls. involve at early stage the FINOTECH technical team for a proper usage of FINOTECH®

SQ-110 in structural glazing applications.

Packaging

FINOTECH® SQ-110 Silicone Sealant is available in

- 1) Component A (Base) in 250kg drums and
- 2) Component B (Catalyst) 25 kg pails

Shelf-life and Storage

When stored at or below 30°C in the original and unopened packaging, FINOTECH® SQ-110 has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Manufacturing Date".

Handling Precautions

Product safety information required for safe use is not included in this document. Before handling, read product and material safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the FINOTECH Website (www.finotech.ch).

Health and Environmental

To support Customers in their product safety needs, FINOTECH has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available. For further information, please see our website www.finotech.ch or consult your local FINOTECH representative.

Limited Warranty

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestion of use shall not be taken as inducements to infringe any patent. FINOTECH's product warranty confirms our products will meet always the technical data sheets values for the duration of the granted shelf-life if all advises given by FINOTECH through application, storage and handling guidelines have been followed up correctly. Customers can be asked to protocol and proof that the guidelines were followed. FINOTECH specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability others than described in our technical data sheets. FINOTECH's product warranty disclaims liability for any incidental or consequential damages. Further building project warranties could be given at particular request by the clients following the FINOTECH SQM Building Warranty testing and consulting procedures.