

## PRODUCT DESCRIPTION

WEIDU™ WD-366 FireStop Silicone Sealant is a ready-to-use, gun-grade, one-component silicone elastomer that cures upon exposure to atmospheric humidity to form a flexible firestop seal. WEIDU™ WD-366 FireStop Silicone Sealant helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly.

WEIDU™ WD-366 FireStop Silicone Sealant firestops dynamic construction joints, blank openings and penetrations passing through fire-rated floor, floor/ceiling or wall assemblies and other fire-rated interior building construction. The sealant remains elastomeric, bonds to most common construction materials and exhibits excellent weatherability during construction. No mixing is required.

## APPLICATIONS

WEIDU™ WD-366 FireStop Silicone Sealant is a flexible firestop ideal for sealing dynamic joints in fire-rated construction. In addition, WEIDU™ WD-366 FireStop is used in mechanical, electrical and plumbing applications to firestop openings and penetrations through fire-rated floor or wall assemblies. Typical penetrants include: metallic pipe, conduit, power and communication cable and telephone or electrical wiring. WEIDU™ WD-366 FireStop is also used to firestop blank openings and static construction joints.

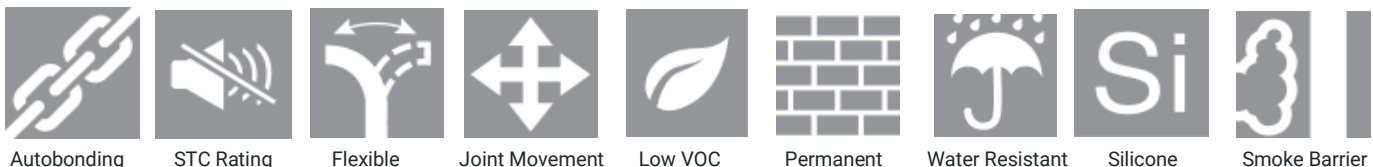
## FEATURES & BENEFITS

- ☑ Recommended for firestop sealing of interior and exterior building and construction movement joints or openings, where a fire rating of up to 4 hours is required.
- ☑ Extremely high mechanical strength
- ☑ Odorless and Non-corrosive cure byproduct  
Neutral cure – suitable for use on coated glass, galvanized steel, masonry and other porous and non-porous substrates.
- ☑ Extraordinary adhesion power to glass, aluminium and steel
- ☑ Primer less adhesion, Bonds to most conventional substrates and finishes including: glass, glass coatings, ceramic frits, fluoropolymer and powder coated paints, conversion-coated and anodized aluminum.
- ☑ Excellent long-term resistance to natural weathering including: sunlight, rain, snow, ultraviolet radiation, heat and humidity, ozone and temperature extremes.
- ☑ Resistant to UV Degradation, Yellowing and Weathering
- ☑ Cures to form an extremely tough elastomeric rubber ensuring a durable, flexible, watertight bond

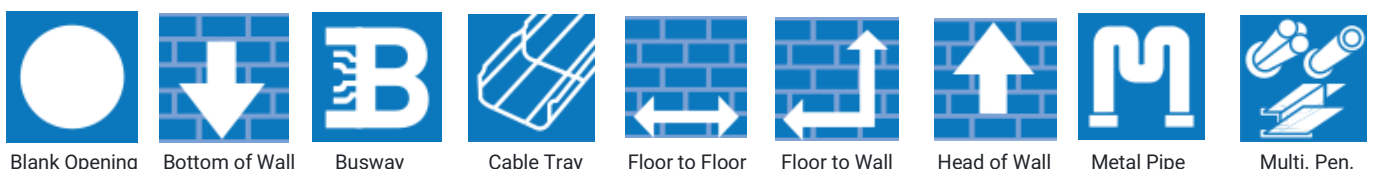
## CONFORMS, MEETS & EXCEEDS

WEIDU™ WD-366 FireStop Silicone Sealant has been internally tested and is designed to meet the requirements of SR FV-0 (3.0mm) 12.5E of GB/T 24267-2009 "Flame retardant Sealant for Building" standard.

### Properties



### Application





## PACKAGING INFORMATION

WEIDU™ WD-366 FireStop Silicone Sealant is supplied in 300ml Cartridges

## STORAGE & SHELF LIFE

WEIDU™ WD-366 FireStop Silicone Sealant should be stored in cool and dry conditions. Prolonged storage at high temperatures may affect shelf life and ultimate performance. The shelf life of WEIDU™ WD-366 is 12 months from the date of manufacture when stored below 25°C and below 50% relative humidity. In countries where high heat and humidity are a factor, special precautions must be taken to store the product in a covered, well-ventilated warehouse and avoid excessive heat conditions.

## PRODUCT INSPECTION REPORT

Product Inspection Items	Detection Based on Test methods	Refers to the mark	The inspection results	Individual Assessment
Appearance	GB/T 24267-2009 flame retardant sealant for building 5.2	Fine, uniform paste or sticky body, there should be no bubbles, clumps, crusts or gels, all easily dispersed precipitates	Fine and uniform paste, no bubbles, agglomerations, crusts and gels, no precipitates that are not easy to disperse	Qualified
Sagging degree Vertical mm The level of	GB/T 13477.6-2002 Test methods -- Part 6: Determination of fluidity	3 or less There is no deformation	0 There is no deformation	Qualified Qualified
Table dry time, H	GB/T 13477.5-2002 Part 5: determination of dry time"	3 or less	1.5	Qualified
Extrusion	Q/CTCSZ/CTR073-2018 (GB/T 13477.3-2002) Part 3: Determination of extrudability of sealing materials using standard instruments	P 80	639	Qualified
Elastic recovery rate	Q/CTCSZ/CTR081-2018 (GB/T 13477.17-2002) Part 17: Determination of elastic recovery rate"	40 or higher	88	Qualified
Constant elongation bond	Q/CTCSZ/CTR078-2018 (GB/T 13477.10-2002) Part 10: Determination of fixed extension bond	There is no damage	There is no damage	Qualified
Adhesion after cold drawing and hot pressing	Q/CTCSZ/CTR016-2019 (GB/T 13477.13-2002) Part 13: Determination of adhesion after cold drawing and hot pressing	There is no damage	There is no damage	Qualified
Adhesion property after immersion	Q/CTCSZ/CTR079-2018 (GB/T 13477.11-2002) Part 11: Determination of fixed extension bond after immersion"	There is no damage	There is no damage	Qualified
Mass loss, % (Quality loss)	Q/CTCSZ/CTR082-2018 (GB/T 13477.19-2002) Part 19: Determination of mass and volume change"	25 or less	3	Qualified
Flame Retardant Performance	GB/T 24267-2009 "Flame retardant sealant for building" 5.3			
	The ignition time of each specimen (t <sub>2</sub> +t <sub>3</sub> ), S	10 or less	0, 0, 0, 0, 0	Qualified
	For any state adjustment condition, each group of five specimens has the total flame burning time and t <sub>1</sub> , S	50 or less	0	Qualified
	For each specimen, the flame after the second flame application plus the flameless burning time (t <sub>2</sub> +t <sub>3</sub> ), S	30 or less	0, 0, 0, 0, 0	Qualified
	Each specimen with or without flame combustion spread to fixture phenomenon	There is no	None, none, none, none, none	Qualified
	Droplet ignites absorbent cotton phenomenon	There is no	None, none, none, none, none	Qualified
<b>Note: Test substrate: glass, anodized aluminum plate.</b>				

# WEIDU WD-366

High Performance Architectural Grade Firestop Sealant

## TECHNICAL DATASHEET



### TYPICAL PROPERTIES – UNCURED

Information on this data sheet can change without notice and it is therefore not recommended that these figures be used in spec writing. If you have any questions contact manufacturer's sales and technical service department.

Properties	Value	Test Method
Appearance	No Grain & No Agglomerations	ISO 11600
Color	Black, White & Grey	
Consistency	Paste	
Chemical base	One-component Fire Rated silicone	
Basis	MS-Polymer	
Cure Type	Alkoxy Neutral	
Total VOC content	< 30 g/L	
Conforms to	GB/T 24267-2009	
Density at 25°C	g/cm <sup>3</sup> 1.44	ISO 1183
Work Life (Tooling time)	10 minutes	
Tack Free Time	60 minutes	ASTM C679
Sag/Slump	0, Non sag	ISO 7390

### TYPICAL PROPERTIES – CURED

Properties	Value	Test Method
Hardness, Shore A	45	ASTM D-2240-97
Ultimate Tensile Strength	0.75, MPa	ISO 8339
Ultimate Elongation, %	300	ISO 8339
Heat weight loss,%	3	ISO 10563
Joint Movement Capability	±25%	ASTM C719
Extrudability, g/min	600	
Service Temperature Range (after cure)	-40°C to +150°C	
Application temperature (ambient)	+5°C to +50°C	
Cure Rate / Day (deep section)	2 mm	
Full Cure (most common bead sizes)	7-14 days	

## METHOD OF APPLICATION

### SURFACE PREPARATION

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond.

Isopropyl Alcohol (IPA) is commonly used and has proven useful for most substrates. Xylene and Toluene have also been found useful on many substrates.

### CLEANING PROCEDURES

- Use clean, white cloths free of lint or other lint-free wiping materials.
- Do not use detergent to clean the substrate as residue may be left on the surface.
- Clean only as much area as can be sealed in one hour. If cleaned areas are again exposed to rain or contaminants, the surface must be cleaned again.

**Note:** When using any solvent, always provide adequate ventilation. Avoid heat, sparks and open flames. Use solvent resistant gloves. Observe and follow all precautions listed on solvent container label.

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High Performance Architectural Grade Firestop Sealant

## TECHNICAL DATASHEET



### MASKING

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Remove masking immediately after application of silicone or as soon as possible.

### PRIMING

WEIDU™ WD-366 FireStop Silicone Sealant adheres to most common construction materials without primer. However, a preliminary adhesion test is recommended on every surface. Sometimes, it may be necessary to treat the joint surfaces with a primer to obtain better adhesion performances.

### INSERTING BACKING MATERIAL

Use the closed cell polyethylene backer foam as a back-up material to limit the sealant joint depth and avoid the sealant to adhere to the joint base. Choose the right backing strip diameter (at least 25% wider than the joint width)

### SILICONE SEALANT APPLICATION

After substrate preparation, apply the sealant with a professional caulking gun, evenly and without bubbles. Observe the eventually used primer's open time before filling the joint.

### TOOLING AND FINISHING

The joint should be tooled and smoothed before skin formation. Press the sealant and smooth it ensuring good contact with the surfaces to seal. Use neutral soapy water as a tooling agent. Remove masking tape. Uncured product may be easily removed with solvents such isopropyl alcohol or "white spirit". Cured sealant must be removed mechanically.

### CAUTION/SAFETY

Please refer to the SDS for the corresponding product for information regarding safety and handling. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The Material Safety Data Sheet is available upon request.

### LIMITATIONS

**WEIDU™ WD-366 FireStop Silicone Sealant not be used, applied or is not recommended to the following applications:**

- Not recommended for food direct contact applications.
- In designs where the silicone is encapsulated and without access to atmospheric moisture (this material requires atmospheric moisture to cure from paste to rubber).
- Under exceedingly hot or cold conditions. Cold temperature and low humidity will slow curing.
- Underwater or in applications where the product will be in continuous contact with water.
- For contact with strong acids or bases.
- On bituminous substrates, substrates based on natural rubber, chloroprene or EPDM or on building materials which might bleed oils, plasticizers or solvents.
- Not for structural glazing

### WARRANTY INFORMATION

WEIDU™ warrants that its product complies, within its shelf life, to its specification.

If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is over understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

### LIABILITY

The information in this document, in particular recommendations regarding the application and final use of our products, are given in good faith based on our knowledge and is the result of tests and experience and are intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for the application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient previous trials.

The property rights of third parties must be respected.

This TDS replaces and supersedes all previous data sheets on the same product.

Manufactured & Imported By

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Hunan Weidu Energy Saving Material Co., Ltd

IN CONFORMITY WITH QUALITY MANAGEMENT SYSTEM STANDARDS: ISO 9001, ISO 14001 & ISO 45001