Product Data Sheet

willseal® 250 HORIZONTAL SEAL WITH TRAFFIC GRADE SILICONE

DESCRIPTION

Willseal 250 is a pre-compressed, self-expanding foam joint sealant with a traffic grade silicone coating engineered to perform in primary horizontal applications that may be subject to solvents and fuels such as those found in parking garages, and airport runways. Willseal 250, with its silicone cap, provides a primary seal and is waterproof to rain and snow, making it an optimal primary joint. Willseal 250 is specifically designed to provide a maximum seal in structures with shear and rapid movement. Willseal 250 is manufactured at the highest levels of quality and finely engineered to the maximum performance for every joint size.

MATERIAL

Willseal 250 consists of 3 construction elements: a foundation of super-resilient micro-cell cross-linked polyurethane foam that is self exstinguishing, hydrophobic acrylic emulsion, and a factory applied coating of traffic grade silicone (other coatings are available by special order). Willseal 250 is supplied at our highest level of compression for ease of installation and for best performance. Willseal 250 is delivered in two meter sticks with a specially formulated epoxy for adhesion to the substrate and a special adhesive for the splice.

COLOR

Concrete Gray, Traffic Grade Silicone

DIMENSIONS

- Joint sizes from 1/2" to 6" in sticks*
- Custom sizes available upon request

UNIQUE PROPERTIES

- No unbonded laminations
- Allows for up to 100% (±50%) movement from mean joint size.
- Designated as a dual expansion joint seal
- Advanced acrylic impregnation without heavy fillers that reduce performance
- True tensionless system
- * For joints larger than 4", consult Willseal for design considerations



APPLICATIONS

- Primary horizontal expansion joints with vehicular traffic
- Parking garages
- Plaza decks on grade
- Other joints requiring a watertight seal

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	VALUE
Impregnation	N/A	Proprietary, hydrophobic acrylic
UV resistance	DIN 18542	Pass
Ultimate Elongation	N/A	Exceeds rated maximum extension without tension
Surface Temperature Range	ASTM C711	-40°F to 190°F
Silicone Elongation	N/A	Never under tension and exceeds maximum movement range (>1000%)
Silicone Flexibility	N/A	Excellent
Temperature Stability Range	No transfer of sealant	-40°F to 185°F
Resistance to Compression Set	Full cycle tested in an environmental chamber through the stated temperature stability range	No bleeding when compressed to minimum of claimed movement of nominal size and when simultaneously heated to 190°F for 3 hours
Compression set	Full cycle tested in an environmental chamber through the stated temperature stability range	Will not delaminate due to thermal shock or compression set

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ADVANTAGES

- Accommodates rapid rates of joint movement
- Supplied in pre-compressed state for ease of installation
- Excellent compression recovery
- Permanently conforms to varying joint contours
- Used for joints up to 6" wide*
- Not limited to -25%, +35% (+/-55%) movement which require larger joints or are subject to tensile or compressive failure
- Consistent depth of product
- Impregnated foam meets DIN 18542
- Resilient and flexible to -20°F (long term)
- Designed for exposure to common automotive oils and fuels as well as jet fuel per FHA PLO6

NOT INTENDED FOR

- Joints continuously submerged in water
- Joints in roofing applications or areas with occupied space

LIMITATIONS

- Joints must be sized by measuring every 5-7ft. (1.524 – 2.137 meters) to ensure gap opening is uniform and depth is sufficient for the supplied material
- Do not install when substrate or ambient temperatures are below 40°F (4.5°C) or above 95°F (35°C).
- Will not adhere to surfaces contaminated by oil or grease.
- If ambient storage temperatures are below 50°F (10°C), store material at a minimum of 68°F (20°C) for a minimum of 24 hours prior to installation, regardless of temperature at location of installation
- Store material in a dry, enclosed area, off the ground, and out of direct sunlight
- Do not install when raining or snowing

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PREPARATION FOR INSTALLATION

- Verify that the joint is clean, sound, and will provide an appropriate surface for installation of the joint sealant
- Check material for the appropriate lengths, widths, and depths
- Lay out the material in the order it will be installed
- Apply a 1/16" 1/8" coating of the epoxy mixture to both sides of the joint to a depth of the sealant material plus 1/2" to ensure complete bonding

STICK INSTALLATION

- When fully prepared to install, open the sealant material by removing the shrink packaging and strapping
- Remove the release liner on both sides of the material
- Insert the material into the joint while pressing the material to the side of the joint

CLEAN UP

- Remove any excess silicone left on the surface of the material or substrate
- Remove all waste materials from the job site
- Do not reuse waste material
- Leave site to the satisfaction of the owner/ architect