TECHNICAL DATA SHEET

WILLSEAL WJS

Thermoplastic Gland for the Willseal Wing Joint System

PRODUCT DESCRIPTION

Willseal WJS is a waterproof expansion joint system that combines an elastoprene rubber seal with Willcrete, an impact absorbing elastomeric concrete, to create a continuous seal with concrete decks. Willseal WJS glands can be supplied in continuous sizes and lengths to assure a continuous seal in any deck-to-deck or deck-to-wall applications. The Willseal Wing Joint System creates a high performance monolithic sealing system that will prevent water intrusion. The extended movement capability provided by Willseal WJS accomodates joint openings that become larger due to long-term shrinkage and creep.

BASIC USES

Willseal WJS is designed for sealing traffic bearing expansion joint openings in parking structures, stadiums, plaza decks, and other open-air structures that require a watertight seal.

FEATURES & BENEFITS

Willseal WJS is capable of withstanding thermal, seismic, vertical and lateral shear movement, providing an exceptionally durable seal under vehicular traffic loads and extreme weather conditions. It is resistant to UV exposure, extreme temperatures, and most chemicals normally present in vehicular structures. Additionally, the seal design contains a tire impact damper.

Combining Willseal WJS with the Willcrete nosing material will provide a long-lasting, continuous watertight anchoring system that is ADA compliant and low profile. The rubber surface of the Wing Joint System has minimal top gaps, which reduces tripping hazards and the collection of debris in the joint. The specially designed low profile wing-seal does not rise above the concrete deck surface when installed, making it less likely to be damaged from normal, everyday traffic and aggressive snow-plowing. Additionally, the compartmentalized wing-seal provides secondary protection against leakage if the seal is punctured at the surface. The thermoplastic rubber of Willseal WJS is highly puncture resistant, but is easily repairable if damaged.

- System is integral with the concrete deck
- Low profile seal design accomodates post tension cables and conduit
- Glands can be heat welded or adhesive rubber bonded

Willcrete is a highly durable elastomeric concrete material that does not require a primer to achieve a tenacious bond to concrete, aluminum, and steel. After curing, Willcrete forms a hard, elastic, and abrasion resistent material that flexes with deck loads, providing a long lasting system seal when combined with the Willseal Wing Joint System glands.

- Pre-measured 3 component mix is user-friendly and easy to use
- Moisture insensitive formula
- Non shrinking

AVAILABILITY

Willseal WJS is available from your authorized Tremco or Willseal Sales Representative, Tremco or Willseal distributor or warehouse. For more information contact Customer Service by phone at 800-274-2813 or email custserv@willseal.com.

SKU / PART NUMBER	NOMINAL WIDTH		MINIMUM WIDTH		MAXIMUM WIDTH	
	in	*cm*	*in*	*cm*	*in*	*cm*
WJS-200	2.00	5.08	1.00	2.54	3.00	7.62
WJS-300	3.00	7.62	1.50	3.81	4.50	11.4
WJS-350	3.50	8.89	1.75	4.45	5.25	13.3
WJS-400	4.00	10.2	2.00	5.10	6.00	15.2

COLORS

Willseal WJS is available as an all Black gland.

LIMITATIONS

The concrete blockout and structural joint opening must be clean of foreign matter, sound, dry, and free of any laitance or curing agents. Prepare all surfaces, including metal surfaces by abrasive blasting to ensure they are free from foreign material and clean.

Installation temperature must be 40 °F (4.4 °C) and rising and at least 5 °F above the dew point. Willseal WJS has been engineered for automobile traffic traveling at speeds less than 15 mph (24 km/h) and is not intended for use in highways.

WARRANTY

A repair or replacement warranty is available on all Willseal products. Visit https://www.tremcosealants.com/warranties/ for details.

TYPICAL PHYSICAL PROPERTIES – ELASTOPRENE RUBBER SEAL

PROPERTY	TEST METHOD	TYPICAL RESULTS
Tensile Strength	ASTM D412	1,000 psi
Ultimate Elongation	ASTM D412	445%
Hardness, Shore A	ASTM D2240	65 ± 3
Tear Strength	ASTM D624	140 pli (24.5 kN/m) at 73 °F (23 °C) 58 pli (10.2 kN/m) at 212 °F (100 °C)
Compression Set (168 hours)	ASTM D395	25% at 73 °F (23 °C) 38% at 212 °F (100 °C)
Ozone Resistance	ASTM D1149	No Cracks
UV Resistance		Very Good
Brittle Point	ASTM D746	-76 °F (-60 °C)

**Willcrete will cure in 2-6 hours, but actual cure time will vary depending on temperature and other environmental factors. Do not allow vehicular traffic to pass over the joint in the first 24 hours; vertical deck deflection may cause Willcrete to debond from the rubber seal or concrete deck if it occurs before Willcrete is fully cured.*

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Willseal Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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