

Iso-Flex® Winged Expansion Joint Sealing Systems

PRODUCT DESCRIPTION

Iso-Flex "J" Series Winged Expansion Joint Sealing System consists of a thermoplastic prefabricated, compartmentalized, elastomeric, compression type of seal with integral perforated wings.

Iso-Flex "K" Series Winged Expansion Joint Sealing System consists of a thermoplastic elastomeric, membrane strip type of seal with integral perforated wings.

Both expansion joint seal types are continuously bonded into a concrete blockout with Iso-Flex 900 Elastomeric Concrete header material.

BASIC USES

The Iso-Flex "J" and "K" Winged Expansion Joint Sealing Systems are used to seal expansion joints exposed to wheel and/or pedestrian traffic in parking structures, stadiums, plazas, and other types of concrete structures where watertightness is required.

ADVANTAGES

- The winged seal is bonded into a flexible, elastomeric concrete header that provides a continuous watertight anchoring system.
- The seal provides a relatively low profile surface exposure minimizing the top opening, which reduces tripping hazards and the collection of debris in the joint.
- The compartmentalized nature of the "J" seal provides secondary protection against leakage if the seal is punctured at the surface. Additionally, in the unlikely event that the top of the seal is punctured, since the seal is made of a thermoplastic rubber, repair is simple.
- The limited top exposure area of the seal and its unique design, does not allow the seal to rise above the surface of the adjoining concrete, hence making it less susceptible to damage from normal, everyday traffic and abusive snowplowing practices.

LIMITATIONS

- Performance of the Iso-Flex Winged Expansion Joint Sealing System is closely tied to preparation and installation techniques as well as structural behavior of the expansion joint.
- Maintaining close tolerances is essential to the success of the expansion joint system. Correct installation of this system is critical and should be performed only by an authorized applicator of products manufactured by LymTal International, Inc.

INSTALLATION

Preliminary: Blockouts to receive the Iso-Flex J & K Winged Expansion Joint Sealing System must be clean, dry, sound, relatively smooth and free of voids, ridges, and sharp projections. Joint openings and blockouts must be properly sized.

LABORATORY TECHNICAL DATA

(Field Properties May Vary)

Property	Test Method	Seal	Iso-Flex 900
Tensile Strength	ASTM D412	1010 psi (67A) 1280psi (73A)	1680 psi
Elongation @ break	ASTM D412	450% (67A) 490% (73A)	240% min
Tear Strength	ASTM D624	138(67A) 159(73A)	195 lbs/inch
Brittle Point, °F	ASTM D746	-76 (67A) -76 (73A)	_____
Compression Set 168 hrs. @ 73°F	ASTM D395	23% (67A) 26% (73A)	_____
Compression Set 168 hrs. @ 212°F	ASTM D395	32% (67A) 44% (73A)	_____
Hardness	Shore A	_____	80± 3
Compress. Strength 5% deflection Resilience, %	ASTM D695	_____	1442 psi min. 96% min.
Adhesion Properties Bond to concrete		_____	422 psi min.
Ozone Resistance	ASTM D1149	No Cracks	No Cracks
Water Absorption	ASTM D570	_____	2%
U.V. Resistance	_____	Excellent	Excellent

Preparation: The blockouts must be sandblasted just prior to application of the Iso-Flex Primer #10. The primer must be applied to all concrete surfaces that will come in contact with the Iso-Flex 910 Tack Coat and the Iso-Flex 900 Elastomeric Concrete header material.

Installation: Begin by installing the seal into the joint opening. The Primer is then applied to all areas of the blockout. When the primer is dry, the Iso-Flex 910 Tack Coat material is gunned under the wings in sufficient amount to rise through the perforations. After the Tack Coat is firmed up, the Iso-Flex 900 Elastomeric Concrete Header can then be mixed installed and tooled to a smooth surface.

PRECAUTIONS

To ensure safe installation of the Iso-Flex Winged Expansion Joint Sealing Systems, please refer to the

Material Data Safety Sheet for detailed health and safety information prior to use.

MAINTENANCE

Iso-Flex J & K Winged Expansion Joint Sealing Systems may be easily repaired while in service using methods recommended by the manufacturer.

WARRANTY

LymTal warrants that its products are manufactured free of defects and conform to the technical data listed. Under this warranty we will replace, at no charge, any material proven defective when applied in accordance with our written instructions for applications recommended by us as suitable for subject product. LymTal shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of the product.

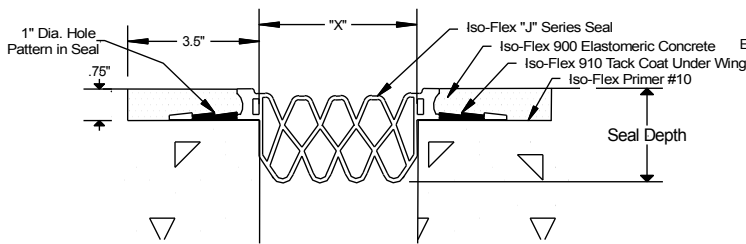
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DIMENSIONAL & MOVEMENT CAPABILITIES CHART

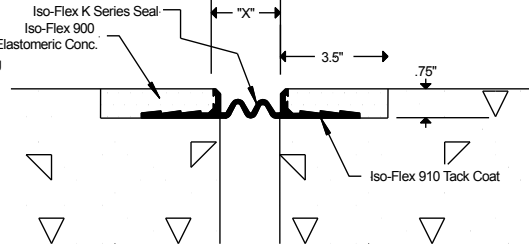
SEAL TYPE	MOVEMENT RANGE	SYSTEM DEPTH	Thermal Movement Range		INSTALLATION WIDTH			Allowable Shear +/-	Excess Movement
			Minimum (x)	Maximum (x)	Minimum	Median	Maximum		
J23L	2.000	2.250	0.625	2.625	1.000	1.500	2.375	0.656	3.675
	<i>50.800</i>	<i>57.150</i>	<i>15.875</i>	<i>66.675</i>	<i>25.400</i>	<i>38.100</i>	<i>60.325</i>	<i>16.669</i>	<i>93.345</i>
J30L	2.750	2.500	0.750	3.500	1.500	2.000	3.250	0.875	4.900
	<i>69.850</i>	<i>63.500</i>	<i>19.050</i>	<i>88.900</i>	<i>38.100</i>	<i>50.800</i>	<i>82.550</i>	<i>22.225</i>	<i>124.460</i>
J40L	3.000	2.750	1.500	4.500	2.000	3.000	4.250	1.125	6.300
	<i>76.200</i>	<i>69.850</i>	<i>38.100</i>	<i>114.300</i>	<i>50.800</i>	<i>76.200</i>	<i>107.950</i>	<i>28.575</i>	<i>160.021</i>
J50L	3.750	3.000	1.750	5.500	2.500	4.000	5.250	1.375	7.700
	<i>95.250</i>	<i>76.200</i>	<i>44.450</i>	<i>139.701</i>	<i>63.500</i>	<i>101.600</i>	<i>133.351</i>	<i>34.925</i>	<i>195.581</i>
J60L	4.250	3.000	2.250	6.500	3.500	5.000	6.250	1.625	9.100
	<i>107.950</i>	<i>76.200</i>	<i>57.150</i>	<i>165.101</i>	<i>88.900</i>	<i>127.001</i>	<i>158.751</i>	<i>41.275</i>	<i>231.141</i>
J70L	5.500	3.250	2.250	7.750	3.500	5.000	7.250	1.938	10.850
	<i>139.701</i>	<i>82.550</i>	<i>57.150</i>	<i>196.851</i>	<i>88.900</i>	<i>127.001</i>	<i>184.151</i>	<i>49.213</i>	<i>275.591</i>
K15	2.000	0.750	0.500	2.500	1.000	1.500	2.000	0.625	3.000
	<i>50.800</i>	<i>19.050</i>	<i>12.700</i>	<i>63.500</i>	<i>25.400</i>	<i>38.100</i>	<i>50.800</i>	<i>15.875</i>	<i>76.200</i>
K20	3.250	1.250	0.750	4.000	1.500	2.125	2.750	1.000	4.800
	<i>82.550</i>	<i>31.750</i>	<i>19.050</i>	<i>101.600</i>	<i>38.100</i>	<i>53.975</i>	<i>69.850</i>	<i>25.400</i>	<i>121.920</i>
K80	8.750	1.250	1.250	10.000	1.500	6.000	8.000	2.500	12.000
	<i>222.251</i>	<i>31.750</i>	<i>31.750</i>	<i>254.001</i>	<i>38.100</i>	<i>152.401</i>	<i>203.201</i>	<i>63.500</i>	<i>304.801</i>

Notes:

1. Inches in **Bold Type**
2. Millimeters in *Italics*
3. "Thermal Movement Range" assumes the system functions entirely in the ocmpression mode, no stretching of the rubber seal past it's nominal molded dimension.
4. "Installation Width" is the recommended range of expansion joint gap width experienced at the time that the system is to be installed.
5. "Excess Movement" is the extension movement maximum capability of the rubber seal that can be accommodated in limited coniditons such as in seismic events.
6. The range of "Installation Width" covers only the Thermal Movement Range, and does not incorporate any Excess Movement.



J Series System



K Series System

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