

WE ARE EXPERTS IN RUBBER

Trelleborg have over a hundred years' experience in the manufacture of rubber products. We make major investments in R+D. Our sales representatives, chemists and engineers are striving to find better solutions for our customers through the ongoing development of new compounds, materials, designs and production methods. The Trelleborg Group has more than 22.000 employees and is established in over 40 countries

A comprehensive programme for construction :
Structural Bearings, Deck Joints for Bridges (Transflex®), Piping Compensators (Teguflex®), Special Hoses, Rubber-Metal Mouldings.



TRANSFLEX®

EXPANSION JOINTS FOR BRIDGES



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In 1964 the American rubber manufacturer General Tire developed a system of expansion joints for bridges called "TRANSFLEX®". It registered the patent of invention and the trademark worldwide. In 1971 the Expandite Division carried out the first installation in Spain with TRANSFLEX® material (Bailen-Ferraz flyover in Madrid). In 1997 the Trelleborg Group integrated the Expandite Division into its organisation. At the present time Trelleborg IESA, a company within the TRELLEBORG Group, has the rights of ownership of the trademark, manufacture and distribution, which are carried out through its Expandite Division.



Our installations at Izarra, where the TRANSFLEX® joint is manufactured.

Brief description of the product

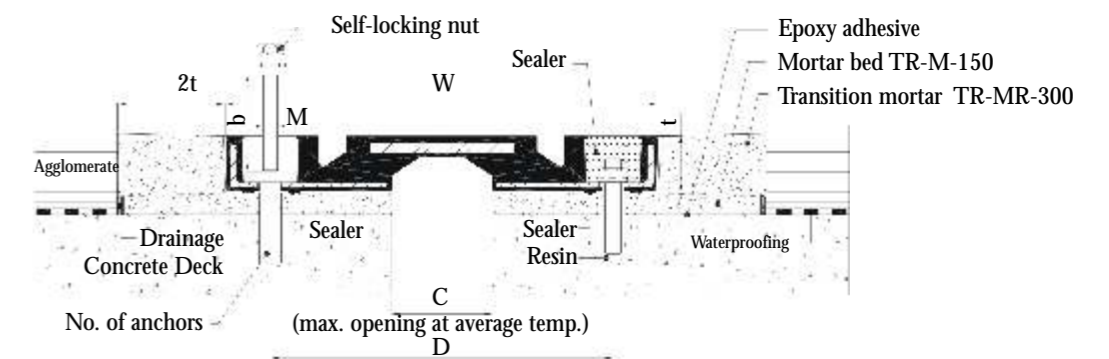
The TRANSFLEX system consists of rubber moulded modules reinforced with steel. TRANSFLEX is supplied in modules of a specified length and are anchored to both sides of the structural joint. There is a wide range of modules that absorb movements up to 330 mm in length, including those produced by skew joints. Their main functions are to absorb these movements, ensure quiet traffic and provide effective sealing of the joint on the road surface.

Characteristics

- The joint absorbs movements up to 330 mm in length
- Modules are rubber coated to protect the reinforcements
- They ensure comfortable travel over the joint
- Extraordinary durability.
- Possibility of absorbing skew movements.
- Easy, fast assembly when replacing old joints
- The impact loads are fully absorbed by the system.

TRANSFLEX® 150-300 expansion joint

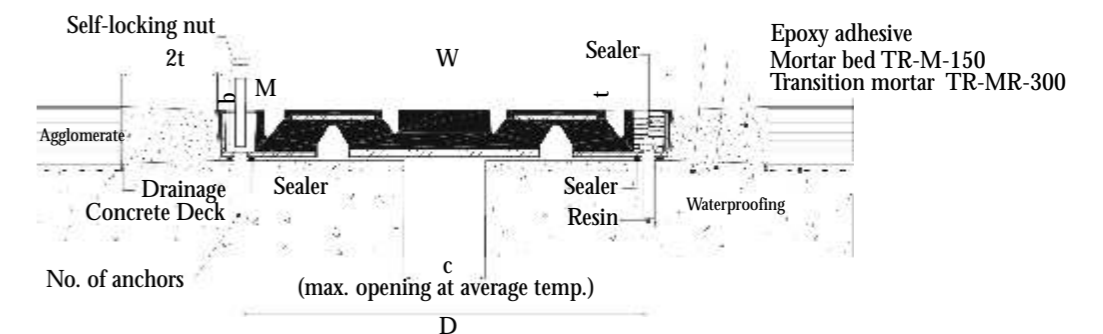
(Manufactured under ISO-9002, Certificate No. 57596)



Model	Length (mm)	L (mm)	W (mm)	t (mm)	c (mm)	b (mm)	M	D(trans) (mm)	n (uds)
Transflex 150	38	1750	240	35	39	150	M12	190	14
Transflex 200	50	1830	274	40	51	150	M14	220	12
Transflex 200	65	1830	356	46	67	150	M14	279	12
Transflex 300	80	1830	432	54	88	170	M16	342	12

TRANSFLEX® 400-1300 expansion joint

(Manufactured under ISO-9002, Certificate No. 57596)

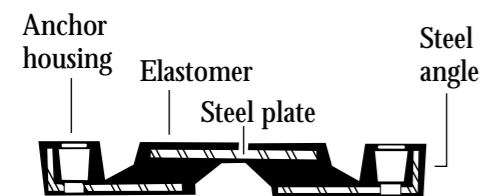


Model	Length (mm)	L (mm)	W (mm)	t (mm)	c (mm)	b (mm)	M	D(trans) (mm)	n (uds)
Transflex 400	102	1830	590	54	152	170	M16	498	12
Transflex 650	165	1830	724	75	203	200	M20	618	12
Transflex 900	230	1830	890	93	273	220	M24	787	12
Transflex 1300	330	1220	1207	127	381	270	M27	1080	8

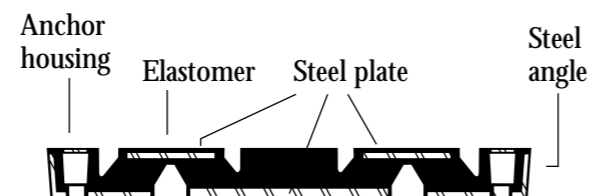


1.- Composition

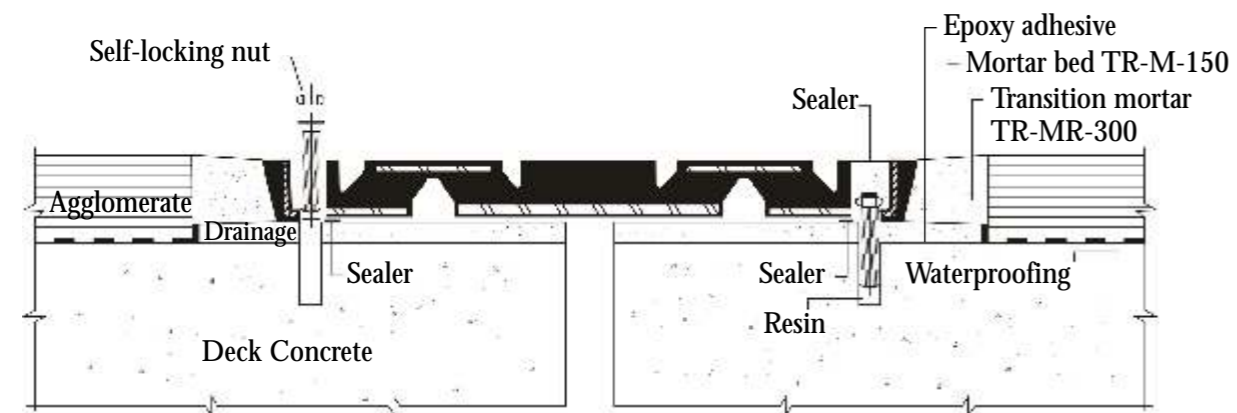
Models 150, 200, 250 and 300



Models 400, 650, 900 and 1300

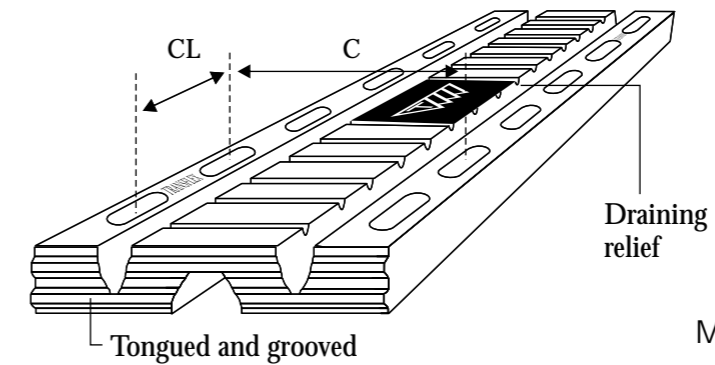


2.- Detail of installed joint

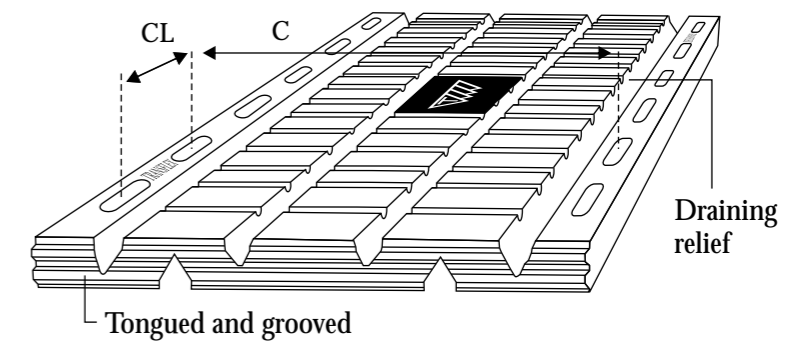


Models	Length of movement	Length of the module	Height of the module	Width of the module	Weight of the module	Diameter of the bolt
150	38 mm (+-19)	1750 mm	35 mm	240 mm	28 Kg	12 mm
200	50 mm (+-25)	1830 mm	40 mm	274 mm	45 Kg	14 mm
250	65 mm (+-33)	1830 mm	46 mm	356 mm	62 Kg	14 mm
300	80 mm (+-40)	1830 mm	54 mm	432 mm	88 Kg	16 mm
400	102 mm (+-51)	1830 mm	54 mm	590 mm	150 Kg	16 mm
650	165 mm(+83)	1830 mm	75 mm	724 mm	260 Kg	20 mm
900	230 mm (+-115)	1830 mm	93 mm	890 mm	375 Kg	24 mm
1300	330 mm (+-165)	1220 mm	127 mm	1207 mm	438 Kg	27 mm

Models 150, 200, 250 and 300



Models 400, 650, 900 and 1300



NOTE: Model 1300 has four (8) anchors per module

Length of the bolt	Max. height of the bolt on the floor	Tightening torque	Max. width of the joint at average temp.	Max. width of the joint	Anchor transition width	Distance between anchors (transv.) C	Distance between anchors (longit.) CL
150 mm	27 mm	45 Nm	39 mm	58 mm	70 mm	190 mm	250 mm
150 mm	32 mm	100 Nm	51 mm	76 mm	80 mm	220 mm	305 mm
150 mm	40 mm	100 Nm	67 mm	98 mm	92 mm	279 mm	305 mm
170 mm	42 mm	175 Nm	88 mm	126 mm	108 mm	342 mm	305 mm
170 mm	42 mm	175 Nm	102 mm	152 mm	108 mm	498 mm	305 mm
200 mm	51 mm	190 Nm	121 mm	203 mm	150 mm	618 mm	305 mm
220 mm	60 mm	275 Nm	158 mm	273 mm	180 mm	787 mm	305 mm
270 mm	70 mm	300 Nm	216 mm	381 mm	260 mm	1080 mm	305 mm

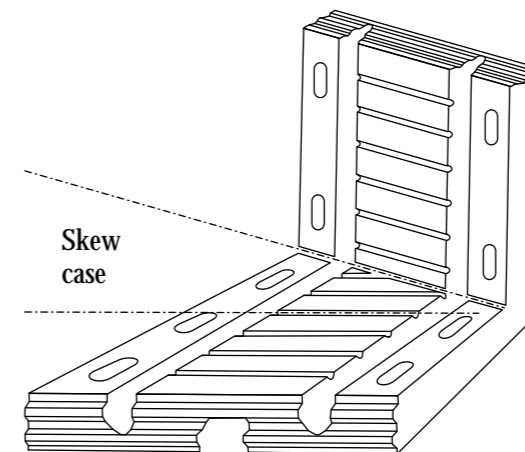
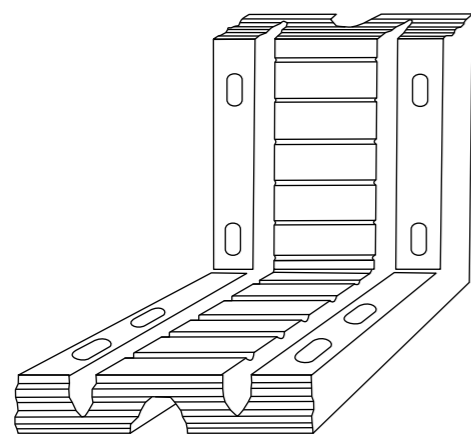


Special parts.

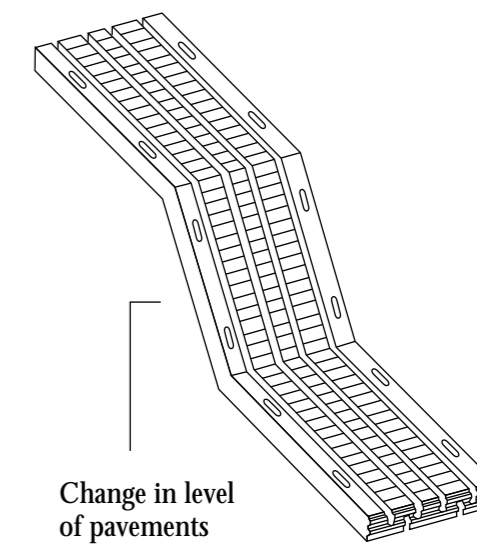
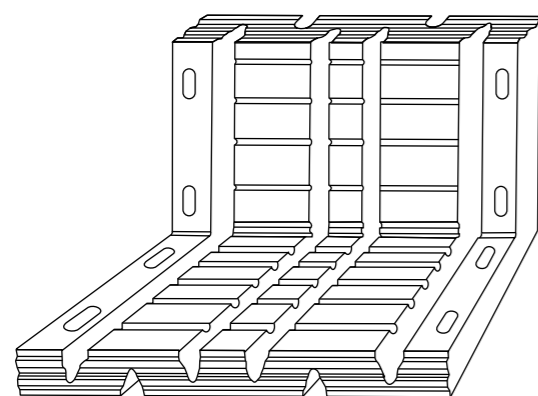
The formation of special parts for kerbs, pavements or other reliefs is offered for all the Transflex® models to ensure continuity of the sealing.

Examples:

Transflex, modules 150, 200, 250 and 300



Transflex, modules 400, 650, 900 and 1300

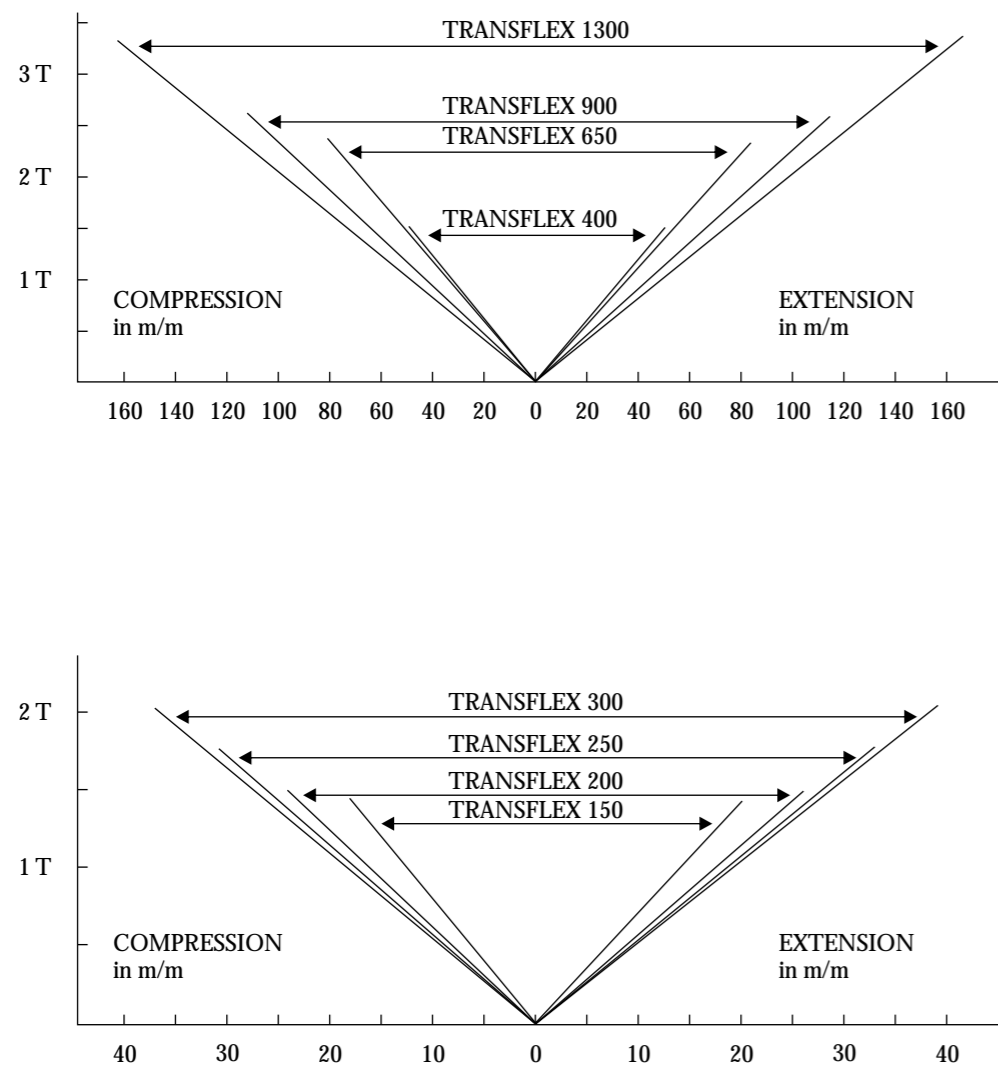


To order the manufacture of these parts it is essential to specify all the dimensions.

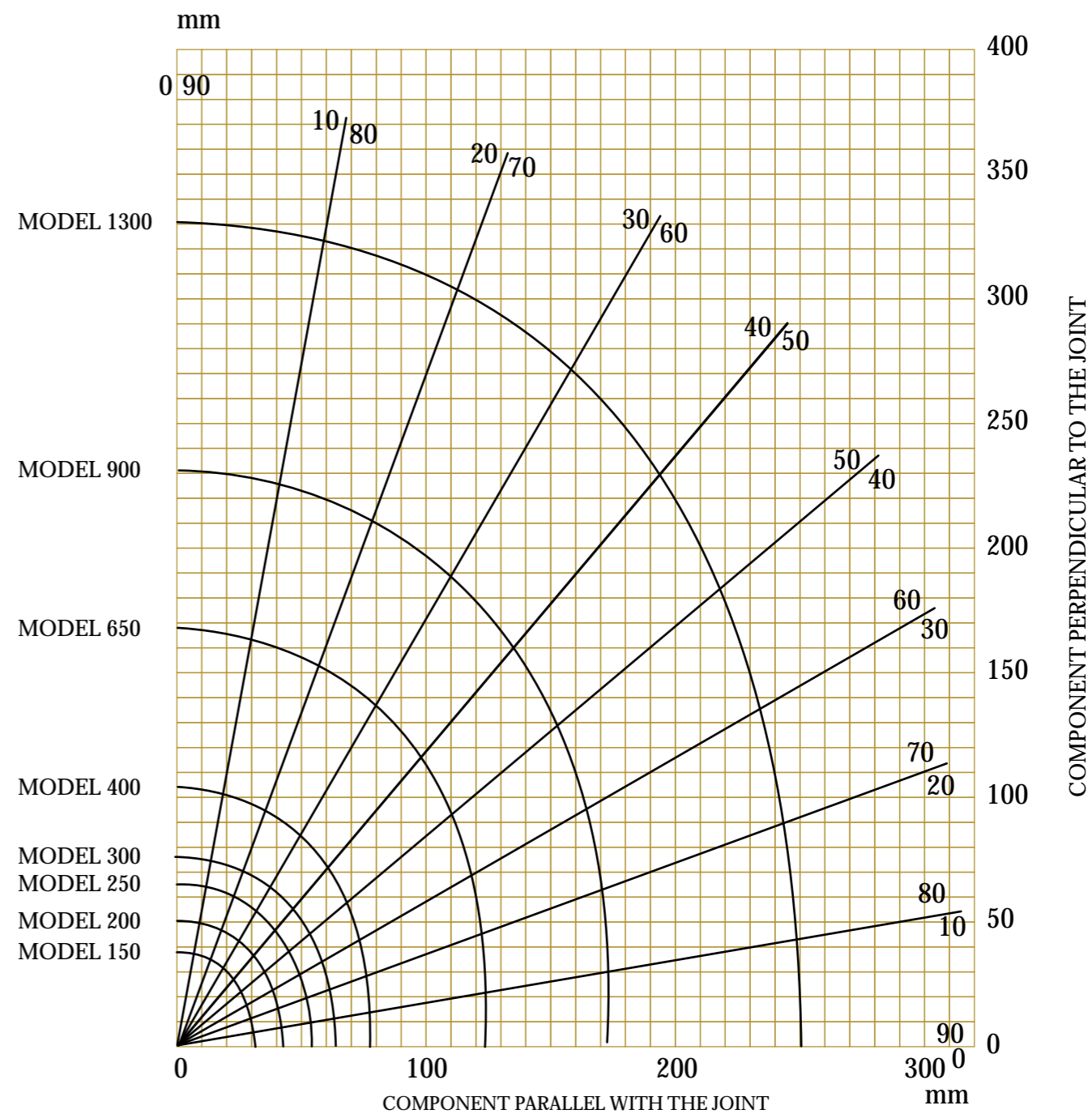




Load/deformation curves for Transflex®, per module



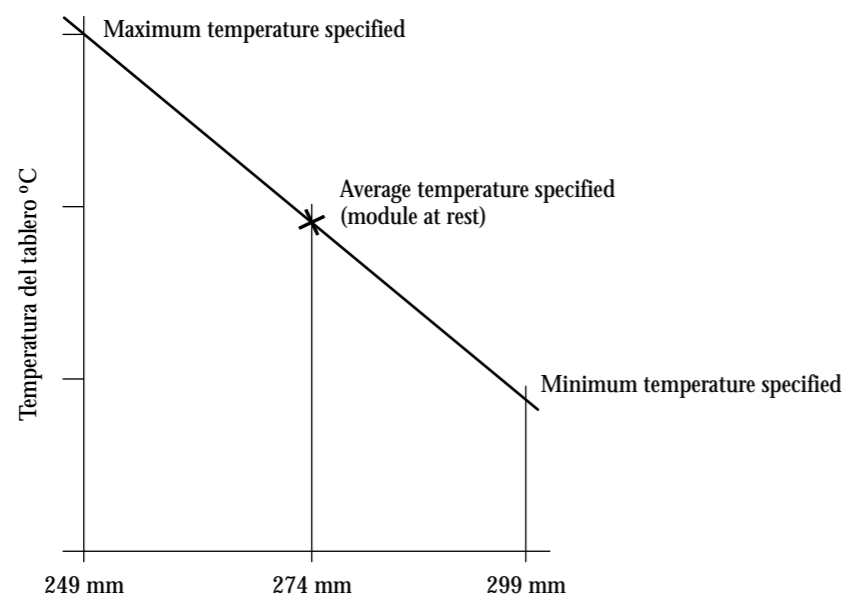
Graph of maximum movements absorbed by the different modules according to the angle formed by the joint with the longitudinal axis of the floor.





Guide to adjustment according to temperature.

Example based on Transflex 200



(Remanent irreversible movements are not included).

TECHNICAL DATA

ELASTOMER	Value	Units	Test method
Indentation hardness	60±5	Shore A	ASTM D2240
Rupture load	>150	Kgs/cm ²	ASTM D412/NFT46002
Elongation at rupture	>425	%	ASTM D412/NFT46002
Rubber-steel adhesion	>11,8	N/mm	ASTM D429 Method B
Low temperature resistance	-30	°C	ASTM D1329
Ozone resistance	Without cracks		ASTMD1149 Method B 25ppcm (48 hours at 38°C)
Remanent deformation	35	% maxim. def.	ASTM D395 Method B (24 hours at 70°C)
Thermal aging	5 -15 -25	Shore A % Inc. Load % Inc. Elongation	ASTM D573 by hot air (70 hours at 70°C)

STEEL

Components manufactured to:	ASTM Type A36 DIN 17-100 Type ST 37-2
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NOTE:

All reasonable care has been taken to provide the correct technical data on our products. All recommendations or suggestions regarding their use are made in good faith and are based on our experience. However, it is the responsibility of the user or designer to ensure that each product is suitable for the purpose for which it is intended and that the conditions of use are appropriate.