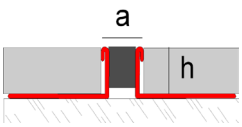
Novojunta® Metallic
Stainless steel

Novojunta® Metallic Stainless steel is a profile for expansion joints consisting of two stainless steel profiles with a central body made of high quality EPDM rubber. The excellent properties of this EPDM rubber, allow Novojunta® Metallic to absorb expansion and contraction movements proceeding from floorings and avoid the apparition of several pathologies. It is available in a wide range of heights and different widths. It is delivered with protective film on its visible side to avoid damage during handling and transport.

General Features



Material:	Stainless steel + EPDM rubber
Length:	8ft2in / 2,5 lm
Packaging:	20 u./box
Finishes:	 02

Dimensions:

h:	8 5/16"	10 3/8"	12.5 1/2"	15 9/16"
a:	8 5/16"			
A.M.:	+1 / -2 +0.039" / -0.079"			
A.T.M.:	3 mm / 0.125"			

A.M.: Allowed movement (mm.) A.T.M.: Allowed total movement (mm.)

Applications

Novojunta® Metallic Stainless steel is a solution for expansion joints whose main function is to absorb expansion and contraction movements proceeding from floorings or tiled walls to avoid the apparition of pathologies. It can be installed vertically and horizontally in floorings or tiled walls.

Technical Features and Tests

Alloy	AISI-304 Composition test of each batch		AIMME
Corrosion resistance	Salt spray test + 504 hours without change (stainless steel)	UNE 112017:92	AIMME

Materials

Stainless steel

Novojunta® Metallic Stainless steel is a profile made of AISI-304 stainless steel. All material batches are tested under the composition test to determine that they fulfill the specification of the alloy. The stainless steel in Emac® products has also been tested under the salt spray test, exceeding 500 hours of exposition without signs of corrosion.

Stainless steel is a highly durable and resistant material, with an excellent appearance that does not degrade along the time. The finish available is high brightness. All the finishes are slightly porous and smooth, making easier the hygiene of the installation.

EPDM rubber

The central body of Novojunta® Metallic is made of high quality EPDM rubber. EPDM is an elastomer polymer with excellent mechanical properties. It has good resistance to abrasion, wear and impact, is a good insulator, and resists weathering, common chemicals and has a wide working temperature range.

Its excellent compression set is the main feature in absorbing the deformations and geometric variations of constructive elements.

Installation

Emac®, in his awareness for the correct execution of the ceramic systems, took part in the committee for the elaboration of the UNE 138002: 2017 standard "General rules for the execution of ceramic tile systems by adhesion". In that UNE standard the recommendations of installation for expansion joints were defined as follow:

Installation	Separation distance / Area	Joint width (mm)
Linear expansion joints		
Outdoor walls	Each 3 - 4 ml max. Regular areas max. 16 m^2	>= 8 mm
Outdoor floors	Each 2,5 - 5 ml max. Regular areas max. 16 m^2	
Indoor floors	Respect open contraction joints Each 8 ml maximum Regular areas max. 40 m^2	>= 5 mm
Singular points	Door treshold Floor changes	>= 8 mm
Perimeter expansion joints		
Indoor walls	Perimeter joints Wall / Ceiling Wall / Wall	>= 5 mm >= 8 mm
Outdoor walls	Indoor / outdoor edges	>=8 mm
Indoor floors	Perimeter joints and encounters with elements	
Outdoor floors	Perimeter joints and encounters with elements	
Singular points	Encounter joints with joinery	>= 5 mm

These recommendations are the minimum dimensions to take into account. The particularities of each project could make necessary to place the joints at less distance. The expansion joints should be planned since the project phase. The correct design and dimensionement of the expansion joints, together with an adequate choice of materials and a correct installation execution, will help to prevent from the apparition of pathologies.

Calculation of thermal variation

Novojunta® Metallic allows a total movement of 3 mm. Is is recommended to calculate the thermal variation of the installation to confirm is the suitable profile for the project.

For example, we'll take the example of Novojunta® Metallic h:10 mm with a visible side of 8 mm and a total movement of 3 mm.

	a	Expansion/contraction movements	Total movement
	8 mm.	**+1/-2 mm**	**3 mm**
[1] Thermal variation calculated considering an outdoor installation with coefficient of thermal expansion 0.007mm*ºC/m. with the joints placed to a maximum distance of 5 lm	[1] The considered installation allows an expansion movement equal to an increase of 57ºC counting from the temperature of installation, and a contraction equal to - 28,5ºC counting from the temperature of installation. **Total thermal variation: 85,5ºC**		
[1] Thermal variation calculated considering an outdoor installation with coefficient of thermal expansion 0.007mm*ºC/m. with the joints placed to a maximum distance of 8 lm	[1] The considered installation allows an expansion movement equal to an increase of 35ºC counting from the temperature of installation and a contraction equal to -18ºC counting from the temperature of installation. **Total thermal variation: 53ºC**		

The correct calculation of this value is highly important to distribute and dimension the expansion joints in a correct way. From our Technical Department, as specialists in expansion joints, we offer advice for the calculation of the expansion joints of your project with no obligation.

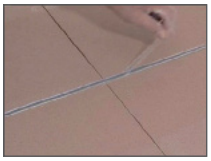
Please, contact us in **tecnico@emac.es** and we'll offer you a customized solution depending on the features of your project.

Installation

1. Spread a big amount of thin-set mortar on the surface to be tiled.
2. Then, place the profile and press it so the thin-set mortar could pass through the holes of the anchoring wing.
3. Place a tile over the anchoring wing and press it to get an optimal joint between the thin-set mortar and the profile.
4. Repeat the last step placing tiles along the profile (both sides) until the installation is finished. Before the mortar dries, hit the profile softly with a rubber hammer to align the profile with the tiles.
5. Finally, clean the leftover material, remove the protective film and let dry.

To see the video, capture this image with your mobile phone (QR code reader software is necessary) or click on it.

* If the floor needs polishing, install this profile slightly below the tile to avoid possible damage.

1  2  3  4  5 

Cleaning and maintenance

It's necessary the immediate cleaning of the material after its installation to avoid that remainings of mortar, concrete or iron particles from wool or tool could cause corrosion.

For outdoor applications, such as facades, the rain is an efficient cleaner. Pay special attention to difficult access areas and be sure you remove all the remainings of dust and the rest of elements. You can do this cleaning once per month.

For indoor applications, you can use water with detergent or liquid soap to remove dirtiness and possible fingerprints marked on the surface. In highly brilliant finishes, you can use a glass cleaner. There are specific cleaners in the markets for stainless steel which clean the material and reduce possible stains. Whenever you clean stainless steel, ensure you rinse it well and dry totally to prevent fogging.

Steel wool or similar products, are not recommended because they could scratch the surface and create pitting corrosion. Pay special attention while using materials containing chlorides, they are not indicated because could oxidize the material. Hydrochloric acid or iron products in a long contact with the material are neither recommended. Do not use cleaners for common steel for the cleaning of stainless steel.

Technical Information

You can find out more information about the technical features of Emac®'s products by downloading their Technical Files in **www.emac.es.**

If you have any query, please contact our Technical Department in **tecnico@emac.es.**

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