

Movement joints

Cerfix[®] Projoint DIL

NT - ST



Description

PROJOINT DIL is a line of expansion joints created for setting ceramic flooring that is normally subject to expansion. These profiles are particularly recommended, for large surfaces, in correspondence of the underlying foundation to lessen and/or absorb floor vibrations.

NT: expansion joints for ceramic floors, PVC or glued LVT, subject to intense passage, be it pedestrian or vehicular.

Made of aluminum (NTA), stainless steel (NTI) and brass (NTO), encasing an elastic section of polished EPDM.

NTA, NTI and NTO are suitable for the floor heating.

The perforated anchor tabs ensure a perfect grip between: the concrete topping, which had previously been fractioned, PROJOINT DIL and tiles.

The height of the profile must be equivalent of the tile thickness, and never superior to this thickness.

The joint can work in compression and expansion with a range from +2 to -2 mm.

ST: these are profiles for elastic and fractioned joints when using plaster to lay ceramic flooring.

Made of aluminum (STA), stainless steel (STI) and brass (STO), encasing an elastic section of polished EPDM.

The joint can work in compression and expansion with a range from +2 to -2 mm.

The requirements concerning the joints and the design of the distance between them must be indicated by the designer. (UNI 11493-1 sez. 8.7)

Materials

Natural aluminum

Al-Mg-Si Alloy heat treated to T6 temper (6060 T6).

The external surface must be protected from scratches and rubbing. They are well-resistant to chemical and atmospheric agents. Wet cement and its derivatives produce alkaline substances that, when left to act on the surface, can corrode metal (formation of aluminum hydroxide). For this reason, the visual surface of the profile must be cleaned thoroughly of cements, adhesives and materials used for leaks and detergents.

Stainless Steel

AISI 304 - DIN 1.4301

Featuring a substantial resistance to the principal chemical and atmospheric agents, lime and mortar, as well as adhesives for tiles and cleaning agents. Recommended for use even in the food industry, hospitals, pools, general exterior environments, etc.

Natural Brass

Alloy CW624N UNI EN 12167

The external surface must be protected from scratches and rubbing. They are well-resistant to chemical agents and mechanical stress. On the visible surface, brass is nevertheless subject to the oxidation phenomenon that causes a surface patina. When exposed to strong atmospheric

humidity or corrosive agents, brass is subject to an elevated rate of oxidation and can present surface stains and spots. Whenever necessary, the initial natural look can be recovered with abrasives or specific polishing products.

General note on metals

Aluminium, Brass, Stainless Steel AISI 304 - DIN 1.4301 are not resistant to all chemical compounds and it would thus be necessary to keep them away from particularly aggressive products such as hydrochloric acid (HCl) and phosphoric acid (H₃PO₄).

Products that can be used for cleaning stones, ceramics and gres, namely muriatic acid, ammonia, bleach or sodium hypochlorite damage the surface finish of the metal and may cause intense corrosive reactions. Therefore, it is necessary to always remove, and as fast and gently as possible, residues of cement, adhesives and materials for caulking and stopping from the surface of profiles.

In case you used an adhesive tape to mask the profiles, we recommend to remove the tape within 1 hour.

Laying

Laying instructions using adhesive

Remove the profile from the packaging.

Check that the thickness of the covering to be laid corresponds with the height of the selected profile (see the label).

Remove, wherever present, the protection (protective and/or thermo-shrink film) covering the finish of the profile.

Verify the necessary length and cut the profile to the required measurement, using the proper tools. With a toothed-spatula, spread the adhesive on the laying surface.

Press the profile so that the previously applied adhesive comes out from the perforations of the tabs.

Delicately place and press the wall covering, ensuring that it is in line with the profile and at the proper distance required for the gap (usually 1 or 3 millimeters).

With the proper gap filler, seal the cleft left between the wall covering and the profile. Clean excess gap material, glue, solvents, etc. carefully with a soft sponge with water within 10 minutes of application.

Care and maintenance

The care and maintenance of the materials used for the realization of these profiles are closely linked to the type of alloy and/or used finishing.

The instructions below describe the operations to which it must submit the profile in order to restore as much as possible its original appearance.

The intent of this paper is to provide all those general guidelines that can serve as guidelines in the choice of when and how to clean, but they will have to be checked case by case. It must be underlined that there are already precise specifications responsibility at every stage of product life since its installation.

Aluminum

These need no particular maintenance and are easily treatable for with colorless alcohol diluted in water or with normal detergents, though not acid-based products (e.g. hydrochloric or hydrofluoric acid). For cleaning tasks, a wide array of detergents coming in a variety of commercial brands and of numerous manufacturers are generally used. In general, there are three product types:

- Alkaline type
- Neutral type
- Acid type

For cleaning, neutral detergent diluted in water and a rinsing agent of solely water is recommended, using a sponge and/or non-abrasive cloth to prevent scratches and/or damage to the anodization, shine or varnish.

During the cleaning, the following advices should be kept in mind:

- Do not use acid or alkaline detergents, since they can damage aluminum;
- Do not use abrasive products and/or materials;
- Do not use organic solvents on varnished surfaces;
- Do not use detergents with unknown chemical compositions;
- Do not apply detergents directly to the surface to be cleaned;
- Surfaces must be relatively "cold" when cleaning (Max. Temp = 30°C) and not exposed directly to sunlight;
- Detergents used for cleaning must be in turn "cold" (Max. Temp = 30°C) and spray devices must not be used.

In any case, the last phase of cleaning is always an adequate rinsing with water on the part that has been treated, followed immediately by drying with a soft cloth or rag. Maintenance with polishing products or similar is unnecessary.

Effect a quick and accurate cleaning of the profile, according to the indications on the product's packaging, in order to prevent possible cement deposits, caulking material or similar products that may end up attacking the surface layers.

Stainless Steel

The stainless surfaces can be polished with the adequate products, commonly found in stores. Stainless steel is easy to clean and extremely hygienic; its smooth and non-porous surface makes it especially difficult for the adhesion and survival of bacteria and/or other micro-organisms. Some simple guidelines are all that is required to keep steel surfaces perfectly cared for: it suffices to wash with hot water and soap, rinsing abundantly and drying with a soft cloth.

If the surface is exposed to atmospheric or aggressive agents, periodic cleaning of the stainless profile is recommended in order to keep the surface unaltered and prevent the onset of corrosion. On brushed finish surfaces, always clean in the direction of the grain and never across it. For scratches, use a detergent/polish suitable for stainless steel and a soft cloth.

Under no circumstances should the following be used for cleaning:

- detergents containing hydrochloric acid (muriatic acid), hydrofluoric acid or bleach; avoid direct contact on the surface of detergents containing chlorine, unless the contact time is brief and followed up by an immediate rinsing with abundant amount of water;
- detergents in abrasive powder form that could damage the surface finish of the profile.

Avoid allowing objects and tools in common steel (e.g. brushes or steel wool normally used to remove residual mortar or similar products) to come into contact with profiles in stainless steel for a prolonged period, otherwise they could transfer ferrous particles (contamination), causing the appearance of rust stains on the surface. Prevent humid pieces of material or sponges to lay for a prolonged period of time in contact with the stainless steel surface in order to prevent unsightly water stains.

Brass

These need no particular maintenance and are easily treatable for with alcohol diluted in water or with normal detergents, though not acid-based products. For cleaning, neutral detergent diluted in water and a rinsing agent of solely water is recommended, using a sponge and/or non-abrasive cloth to prevent scratches and/or damage to the surface. Use non-abrasive sponges or cloths to avoid scratching the surface. For maintenance, a normal commercial polish should be used.

Fire Control Measures

In case of fire, extinguish with fire-fighting chemical products, dry sand or solid fire-extinguishing agents.

Note

These profiles must be handled with care, taking the necessary steps to use suitable gloves to prevent wounds such as cuts to the hand. All indications and instructions here have come from our own experience to be understood as purely informative and will have to be confirmed through exhaustive practical experience. Profilpas will not be held responsible for any personal injury or material damage from improper use of the product. The user is responsible for establishing whether the product is suitable for the task and likewise must assume all responsibility for incorrect laying of material.

Certifications

Properties of EPDM rubber layer

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Thickness	010-037050	EN 1849-2	5,01 mm	(5±0,2) mm	Pass
Surface density	010-037050	EN 1849-2	7000 g·m ⁻²	≥ 6000 g·m ⁻²	Pass
Visible defects	010-037050	EN 1850-2	without visible defects	without visible defects	Pass
Tensile strength at F _{max}	010-037050	EN ISO 527-1,3	4,9 MPa	≥ 4,5 MPa	Pass
Elongation at F _{max}	010-037050	EN ISO 527-1,3	586,9 %	≥ 500 %	Pass
Hardness Shore A	Z-031-16	EN ISO 868	54,74	≥ 50	Pass

For NTA-NTI profiles

Material	Aluminum profile - attest
Material	EPDM rubber insert (dark brown colour)

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Visible defects	010-036802	EN 1850-2	without visible defects	without visible defects	Pass
Thickness of ALU	010-036802	ČSN 73 0212-5	1,09 mm	(1,0±0,1) mm	Pass
Visible width	010-036802	ČSN 73 0212-5	9,68 mm	(10±0,4) mm	Pass
Installation Height	010-036802	ČSN 73 0212-5	4,33 mm	(4±0,4) mm	Pass
Secant Modulus at 25%	010-036802	EN ISO 8339	1,28 N/mm ²	≥ 0,8 N/mm ²	Pass
Elongation at break	010-036802	EN ISO 8339	187,1 %	≥ 140 %	Pass
Chemical resistance	010-036754	EN ISO 10545-13	See table below	---	Pass

Material	Stainless steel AISI 304/1.4301 - attest
Material	EPDM rubber insert (grey color)

Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Visible defects	010-036803	EN 1850-2	without visible defects	without visible defects	Pass
Thickness of Stainless steel	010-036803	ČSN 73 0212-5	0,72 mm	(0,8±0,1) mm	Pass
Visible width	010-036803	ČSN 73 0212-5	8,79 mm	(8,8±0,1) mm	Pass
Installation Height	010-036803	ČSN 73 0212-5	9,98 mm	(10,0±0,2) mm	Pass
Secant Modulus at 25%	010-036803	EN ISO 8339	1,4 N/mm ²	≥ 0,8 N/mm ²	Pass
Elongation at break	010-036803	EN ISO 8339	185,5 %	≥ 140 %	Pass
Chemical resistance	010-036754	EN ISO 10545-13	See table below	---	Pass
Minimum joint width	010-037137	ASTM E1399E	3,75	---	Pass
Maximum joint width	010-037137	ASTM E1399E	6,25	---	Pass
Cyclic Movement – 500 cycles	010-037137	ASTM E1399E	2,50	---	Pass
Antimicrobial activity -Staphylococcus aureus -Escherichia coli	16/0402-01a	JIS 2801	R ≥ 6,12 R ≥ 6,22	---	Pass
Resistance to Fungi	16/0739	ASTM G 21-09	No growth	No growth	Pass

Chemical substance	Concentration	Result
ammonium chloride	[100 g/l]	UA
citric acid	[100 g/l]	ULA
sodium hypochlorite	[20 g/l]	UA
potassium hydroxide	[30 g/l]	ULA

Note: UA, ULA ... no visible changes

Certifications
For STA-STI profiles

Material	Aluminum profile - attest				
Material	EPDM rubber insert (grey colour)				
Product characteristic	Test Report	The test procedure	Test results	Required / declared level	Evaluation
Visible defects	010-036938	EN 1850-2	without visible defects	without visible defects	Pass
Thickness of ALU	010-036938	ČSN 73 0212-5	1,06 mm	(1,0±0,1) mm	Pass
Visible width	010-036938	ČSN 73 0212-5	10,00 mm	(10±0,2) mm	Pass
Installation Height	010-036938	ČSN 73 0212-5	30,03 mm	(30±0,1) mm	Pass
Secant Modulus at 100%	010-036938	EN ISO 8339	1,32 N/mm ²	≥ 0,8 N/mm ²	Pass
Elongation at break	010-036938	EN ISO 8339	183,8 %	≥ 140 %	Pass

Material Aluminum profile (STA)

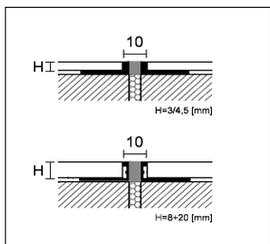
Chemical substance	Concentration	Result
ammonium chloride	[100 g/l]	UA
citric acid	[100 g/l]	ULA

Note: UA, ULA ... no visible changes

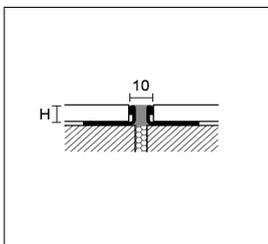
Material Stainless Steel (STI)

Chemical substance	Concentration	Result
ammonium chloride	[100 g/l]	UA
citric acid	[100 g/l]	ULA
sodium hypochlorite	[20 g/l]	UA
potassium hydroxide	[30 g/l]	ULA

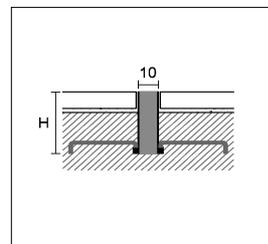
Note: UA, ULA ... no visible changes

NT - ST


NTA, NTO



NTI



STA, STI, STO



NTA



NTI



NTO



STA



STI



STO

PROJOINT DIL

length = 270 cm - pack 10 pcs

ART.	finishing	3	4,5	8	10	12,5	15	20
ALUMINIUM								
	natural aluminium + EPDM grey polishable	99421	99425	99441	99445	99449	99453	99457
	natural aluminium + EPDM black polishable	99422	99426	99442	99444	99450	99454	99458
NTA/								
	natural aluminium + EPDM bahama polishable	99427	99428	-	-	-	-	-
	natural aluminium + EPDM brown polishable	99429	99430	-	-	-	-	-

PROJOINT DIL

length = 270 cm - pack 10 pcs

ART.	finishing	3	4,5	8	10	12,5	15	20
STAINLESS STEEL								
	stainless steel AISI 304 DIN 1.4301 + EPDM grey	99471	99475	99481	99485	99489	99493	99497
	stainless steel AISI 304 DIN 1.4301 + EPDM black	99472	99474	99482	99486	99490	-	-
NTI/								
	stainless steel AISI 304 DIN 1.4301 + EPDM bahama	99431	99432	-	-	-	-	-
	stainless steel AISI 304 DIN 1.4301 + EPDM brown	99433	99434	-	-	-	-	-

PROJOINT DIL

length = 270 cm - pack 10 pcs

ART.	finishing	3	4,5	8	10	12,5	15	20
BRASS								
NTO/	natural brass + EPDM grey polishable	-	-	99401	99405	99409	99413	99417

PROJOINT DIL

length = 250 cm - pack 10 pcs

ART.	finishing	30	40	50
ALUMINIUM				
STA/	natural aluminium + EPDM grey polishable	99581	99585	99589
STAINLESS STEEL				
STI/	stainless steel AISI 304 DIN 1.4301 + EPDM grey polishable	99621	99625	99629
BRASS				
STO/	natural brass + EPDM grey polishable	99541	99545	99549