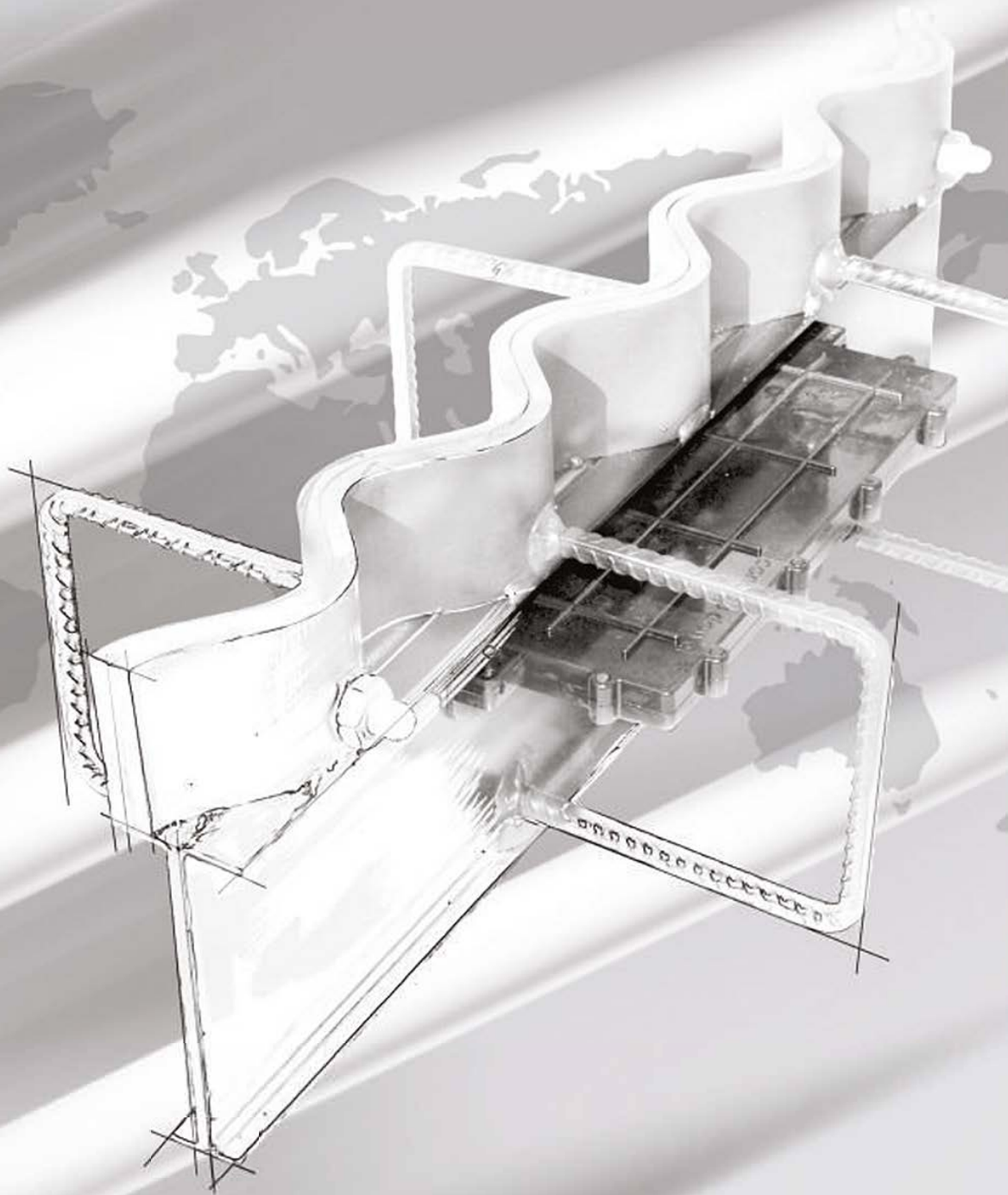




2017/2018



Armoured joints
for industrial floors

I D E A
project
product

Dear customers,

In response to the needs of architects, investors and contractors we are introducing a system of profiles securing and reinforcing floors at the joints between concrete slabs. We would like to present this offer and the new solutions that are the result of our experience in this area. We are open to all changes in order to maximally adjust our system to the present needs of our customers which result from the specifications of modern solutions in architecture. We are ready to accept the challenges and create individual solutions. You are all invited to co-operate with us.

CONTENTS:

1. Conecto Dowel system

2. Classic joints

- a. Conecto Dowel 10NA40-5D
- b. Conecto Dowel 08NA40-5D
- c. Conecto Dowel 06NA40-5D

3. Sinusoidal joints

- a. Conecto Sinus 06NC50-4D
- b. Conecto Sinus 06NC110-5D

4. Other products

- a. Conecto Omega
- b. Strip Joint & Angle Bars
- c. Specific solutions

5. Repair joints

- a. Conecto Sinus 06NC50-R
- b. Conecto Sinus 06NC110-R
- c. Conecto HDS

6. Pictures

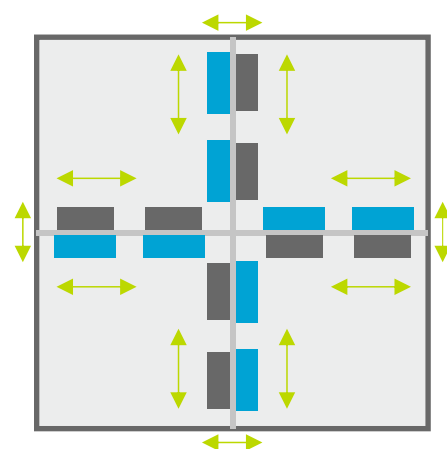
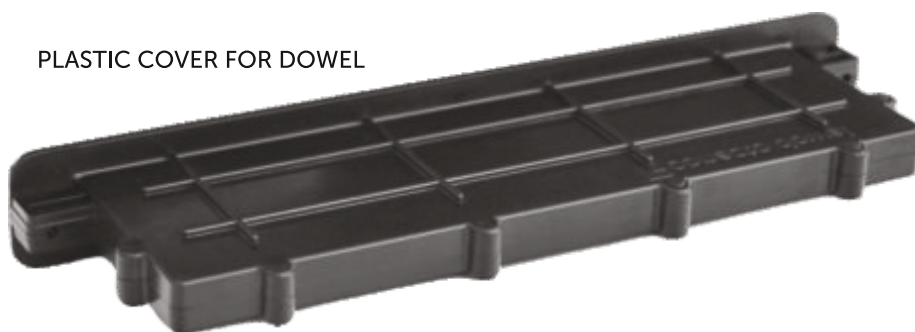
- a. Stock
- b. Construction site

7. Conecto Smart joints



Conecto Dowel system are designed to create expansion joints for industrial. Steel armoured joints with their unique construction constitute a stay-in-place formwork and additionally secure concrete floor edges. Conecto Dowel system is a floor expansion joint solution, where an anchoring element is a steel dowel placed in a specifically designed plastic sleeve, which permits free horizontal movement (along and across of expansion joints) and prevents vertical movements between expanded floor plates. Plastic elements are provided with proper reinforcements, which protect them against the deformation caused by the concrete pressure (even when the floor is thick).

PLASTIC COVER FOR DOWEL



This table shows the load at failure in bursting (failure of the concrete) and bending (failure of the dowel) for a joint opening of 25mm. The ultimate load has been calculated in accordance with TR34 (4th edition).

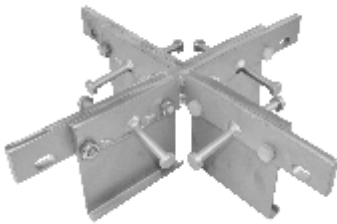
Load capacity about expansion joints depending on amount of dowels in one joint [kN/lm] steel S355MC, floor concrete C25/30						
Dowel size 180x120x8mm	opening dilatation					
Amount of dowels \ one joint	0	5	10	15	20	25
5D	303	197	136	101	79	65
6D	364	236	163	121	95	78
7D	424	276	190	141	111	91
Dowel size 180x140x10mm	opening dilatation					
Amount of dowels \ one joint	0	5	10	15	20	25
5D	379	267	195	150	120	99
6D	455	321	235	180	144	119
7D	530	374	273	210	168	139

• According to TR34. Edition 4 from 2013

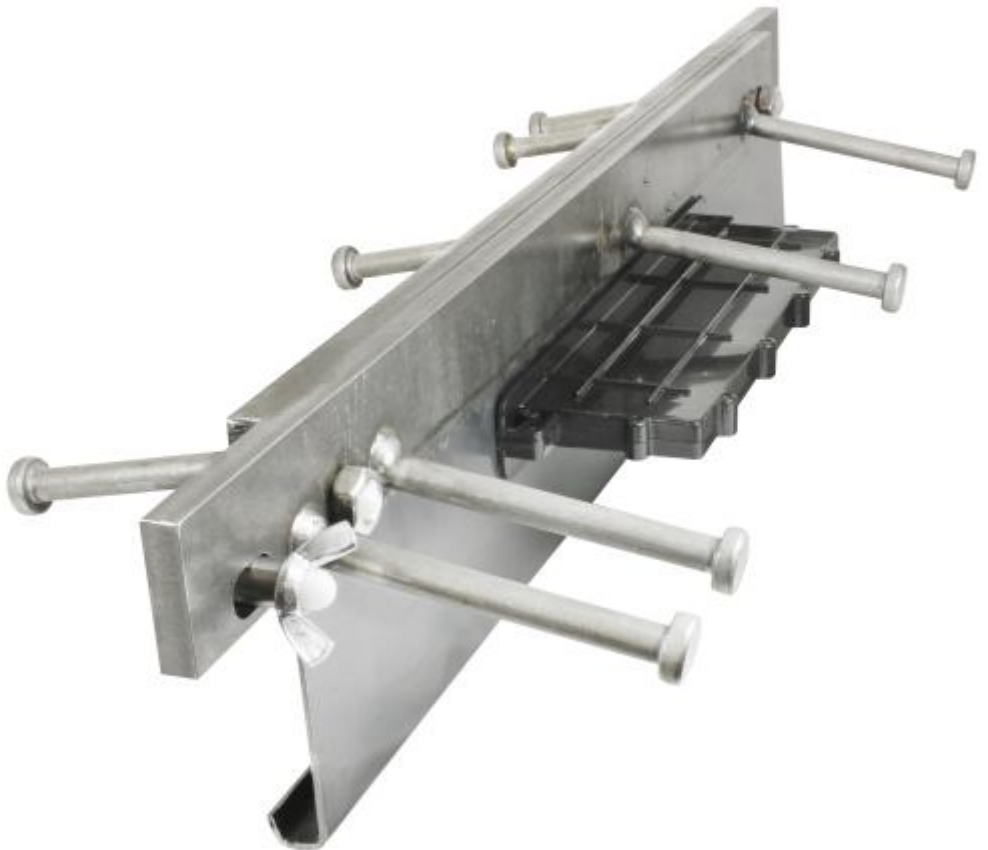
DOWEL 10NA40-5D L-SHAPE



DOWEL 10NA40-5D CROSS-SHAPE



DOWEL 10NA40-5D T-SHAPE



Expansion strips are mounted in concrete floor plates to compensate movements in plate sections. Concrete plates are exposed to internal and external pressures. Damage occurs mainly at the edges of plates near to connections. Connection of floor plates should compensate their mutual horizontal movements (perpendicular and parallel to the expansion joint) which are usually caused by thermal expansion and shrinkage of concrete. At the same time the connection must also block vertical movements and mutual curving of floor elements which is a consequence of traffic, heavy loads and uneven passive earth pressure.

Conecto Dowel expansion joints allow for a movement between floor plates:

- dowel size 180x120x8mm ± 15 mm parallel and ± 20 mm perpendicular
- dowel size 180x140x10mm ± 20 mm parallel and ± 30 mm perpendicular

Conecto Dowel expansion joints ensure an even distribution of the loads between floor plates by preventing excessive local tensions. Expansion joints help to eliminate the main reason behind uncontrolled floor cracking, they make the floor last longer and improve use comfort.

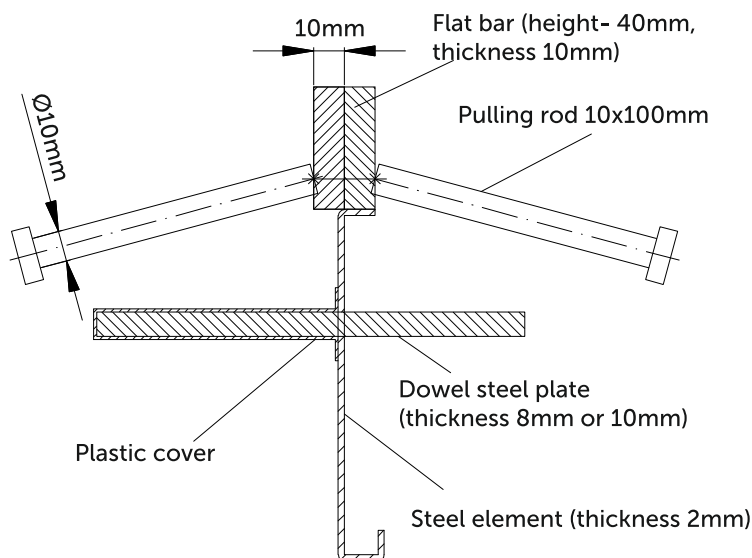
The number of expansion joints should allow to divide the floor into regular fields, with a shape similar to a square of up to 1000m², which constitutes a daily flooring efficiency. Joints should be spaced at a distance not greater than 45-45m.

The system is complete, easy to install and ready for application, all you should do is place the joint at the installation site and join them without wrenches, using screws with wing nuts provided in the package.

Conecto Dowel joints guarantee proper resistance in case of permanent high traffic loads.



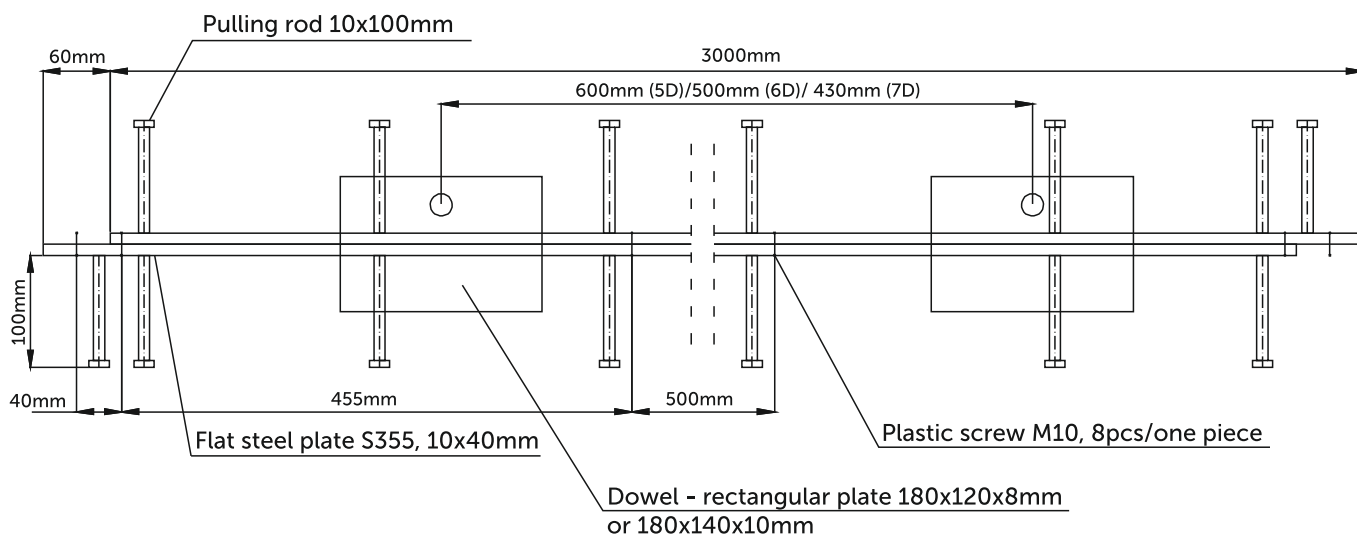
conecto DOWEL 10NA40-5D



- Possibility to use flat bars size 6x40mm or 8x40mm
- Possibility to prepare top joint from galvanized steel or stainless steel
- Very big surface of steel dowel
- Standard space between dowels 600mm (5D)
- Possibility to use more dowels per one joint (6D, 7D) to increase max loads on floor
- Standard grade steel S355
- Nylon screws M10 providing possibility of separation and work between floor fields
- Plastic cover made of highly resistant ABS plastic

Floor height [mm]	Profile height [mm]	Dowel size [mm]	Dowel spacing [mm]	One piece weight [kg]	Max pieces on pallet [pcs]	Palett weight [kg]
100-110	90	180x120x8 180x140x10	600	31.80	80	2744.0
110-130	100			32.27	80	2781.6
135-155	125			33.47	80	2877.6
160-185	155			34.91	77	2888.1
185-205	175			35.87	66	2567.4
210-230	200			37.07	55	2238.8
235-255	225			38.27	55	2304.8
260-280	250			39.47	44	1936.7
285-305	275			40.67	44	1989.5

- ability to perform a profile in any height of 5 mm.
- possibility to preparing profiles of height 50mm, 60mm, 70mm, 80mm
- standard lenght 3 meters





Conecto Sinus joint is innovation solution on the market. Due to unique construction and best quality materials it gives feeling when driving over it, that there is no profile in the floor. Using sinusoid joint you could avoid floor cracking and difficult and expensive reparations. Conecto Sinus joints completely absorb shocks and they are completely invisible in usage. Usage of Conecto Sinus joints minimizes operation costs. They reduce problem of damaged fork-lift wheels, loading equipment and goods destruction due to shocks.

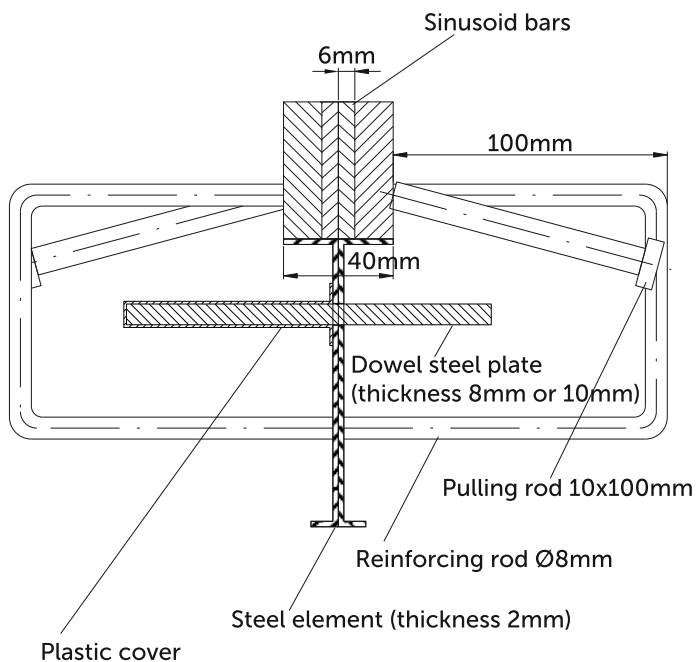
Conecto Sinus expansion joints allow for a movement between floor plates:

- dowel size 180x120x8mm ± 15 mm parallel and ± 20 mm perpendicular
- dowel size 180x140x10mm ± 20 mm parallel and ± 30 mm perpendicular

Sinusoid joint evenly moves tension which gives correct mutual horizontal and side-by-side movements. Another advantage of these joints is easy installation. You just need to put the strip in proper place and anchor it to the ground. Anchoring elements size and shape are designed to give the biggest surface to move the tenses between parts of the floor.

Conecto Sinus system allows for the free movement of forklifts which wheels are particularly damaging for wrong made expansion joints.

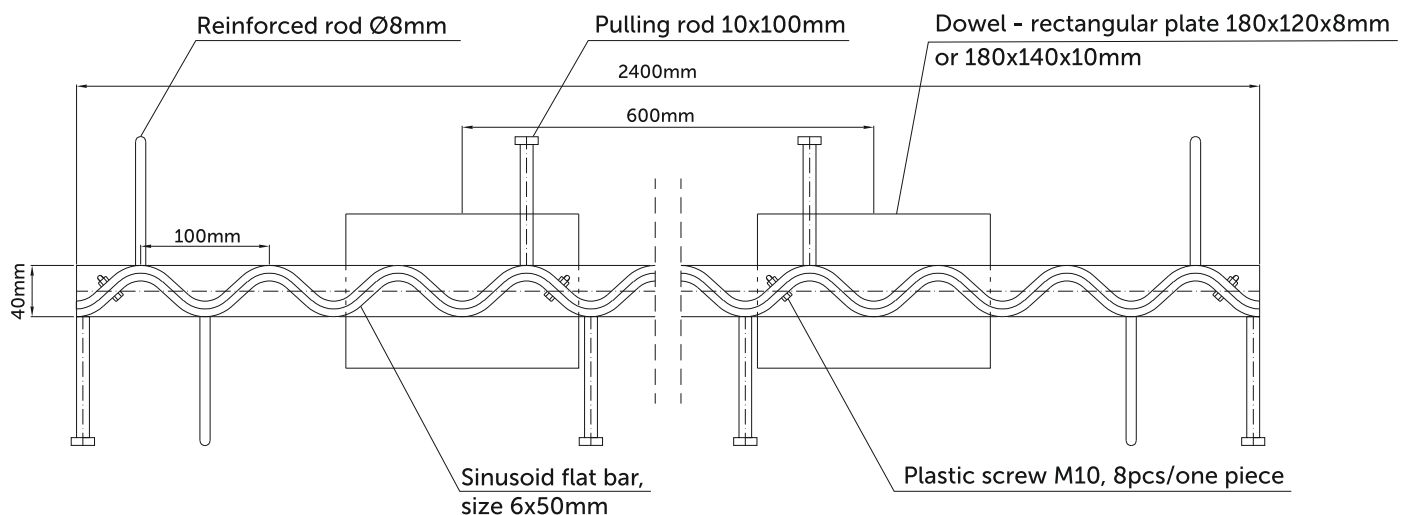




- Possibility to prepare top sinus from galvanized steel
- Very big surface of steel dowel
- Standard space between dowels 600mm (4D)
Possibility to use more dowels per one joint (5D, 6D) to increase max loads on floor
- Standard grade steel on top S235, dowel system S355
- Nylon screws M10 providing possibility of separation and work between floor fields
- Plastic cover made of highly resistant ABS plastic

Floor height [mm]	Profile height [mm]	Dowel size [mm]	Dowel spacing [mm]	One piece weight [kg]	Max pieces on pallet [pcs]	Palett weight [kg]
135-155	125	180x120x8 180x140x10	600	32.01	56	1992.6
160-185	155			34.89	49	1909.6
185-205	175			36.81	42	1746.0
210-230	200			39.21	35	1572.3
235-255	225			41.61	35	1656.3
260-280	250			44.01	28	1432.3
285-305	275			46.41	28	1499.6

- ability to perform a profile in any height of 5 mm.
- standard lenght 2.4 meters





Expansion strips are mounted in concrete floor plates to compensate movements in plate sections. Concrete plates are exposed to internal and external pressures. Damage occurs mainly at the edges of plates near to connections. Connection of floor plates should compensate their mutual horizontal movements (perpendicular and parallel to the expansion joint) which are usually caused by thermal expansion and shrinkage of concrete. At the same time the connection must also block vertical movements and mutual curving of floor elements which is a consequence of traffic, heavy loads and uneven passive earth pressure.

Conecto Sinus expansion joints allow for a movement between floor plates:

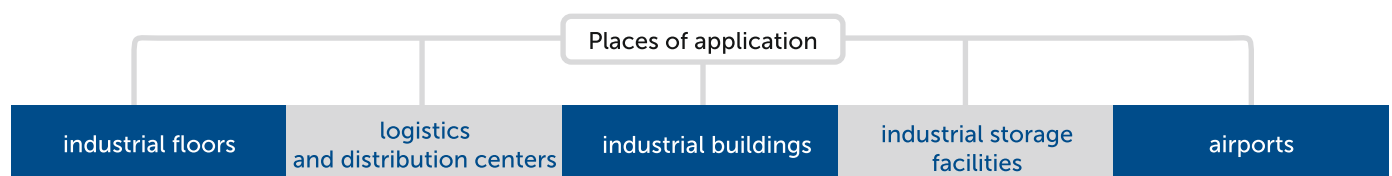
- dowel size 180x120x8mm ± 15 mm parallel and ± 20 mm perpendicular
- dowel size 180x140x10mm ± 20 mm parallel and ± 30 mm perpendicular

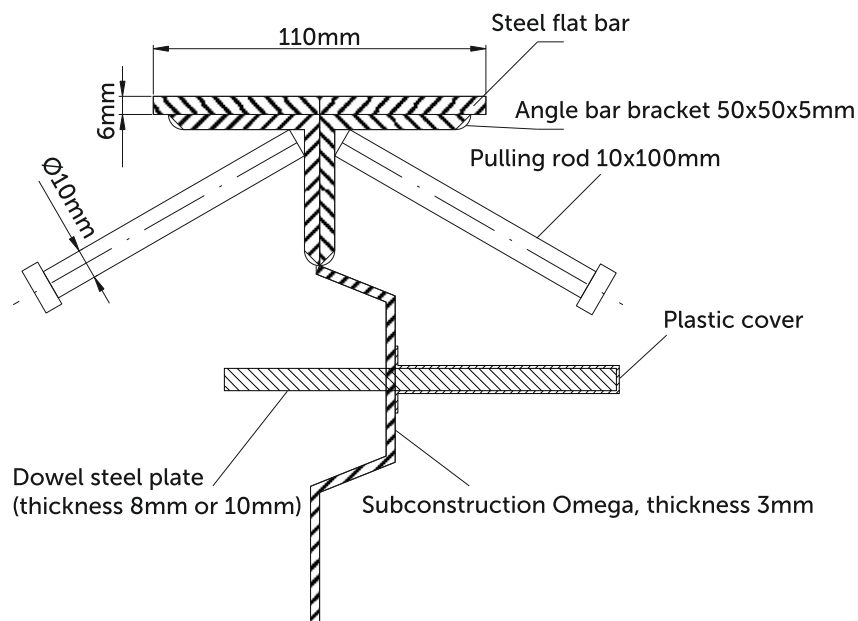
Conecto Sinus expansion joints ensure an even distribution of the loads between floor plates by preventing excessive local tensions. Expansion joints help to eliminate the main reason behind uncontrolled floor cracking, they make the floor last longer and improve use comfort.

The number of expansion joints should allow to divide the floor into regular fields, with a shape similar to a square of up to 1000m², which constitutes a daily flooring efficiency. Joints should be spaced at a distance not greater than 45-45m.

The system is complete, easy to install and ready for application, all you should do is place the profiles at the installation site and join them without wrenches, using screws with wing nuts provided in the package.

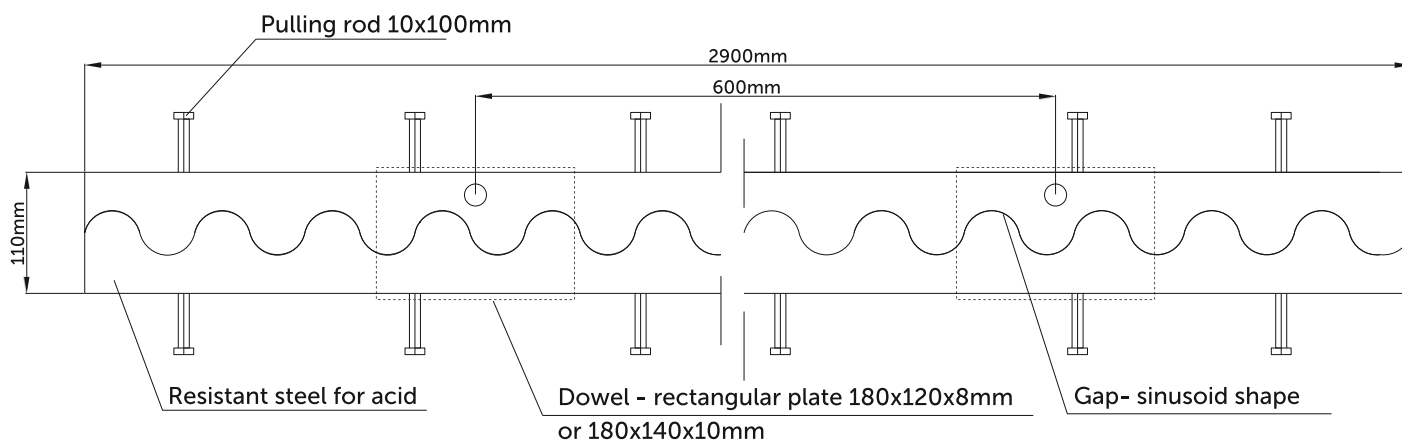
Conecto Sinus joints guarantee proper resistance in case of permanent high traffic loads.

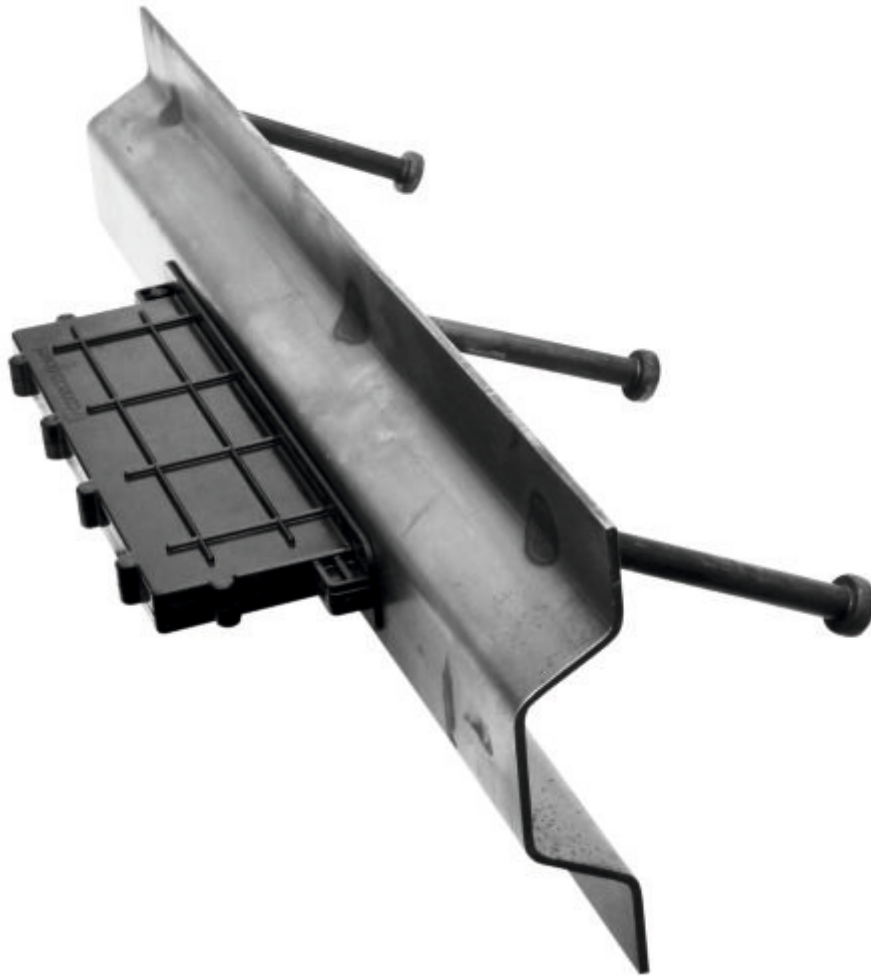




Floor height [mm]	Profile height [mm]	Dowel size [mm]	Dowel spacing [mm]	One piece weight [kg]	Max pieces on pallet [pcs]	Palett weight [kg]
125	100	180x120x8 180x140x10	600	50.58	48	2627.8
150	125			52.08	48	2699.8
175	155			53.58	48	2771.8
200	175			55.08	48	2743.8
225	200			56.58	42	2576.4
250	225			58.08	42	2639.6
275	250			59.58	36	2344.9
300	275			61.08	36	2398.9

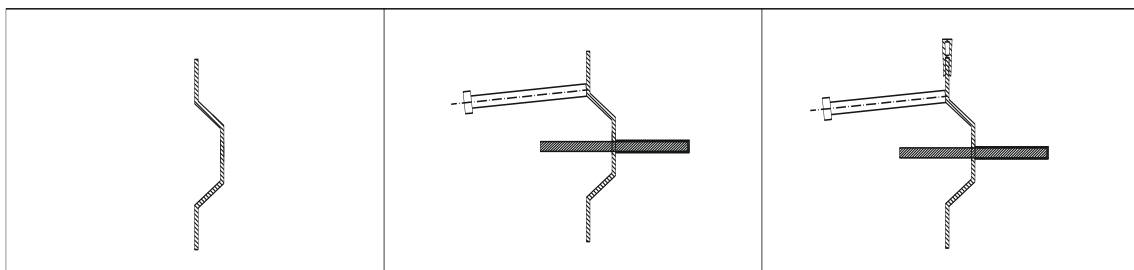
- ability to perform a profile in any height of 5 mm.
- standard lenght 2.9 meters
- height 100 and 125 without omega shape (footer)





Conecto Omega 03NB is used as a day off work for the construction teams. The shape and dowel system prevent the least amount of vertical movement and guarantee optimal load transfers. Pulling rods guarantee solid anchorage in the concrete when shrinking occurs due to drying of the concrete, which also causes the actual widening to occur. The milled upper side ensures perfect smoothness of the 2 steel plates and lasting edge protection of the newly created floor portions

- length 3 meters



Places of application

industrial floors

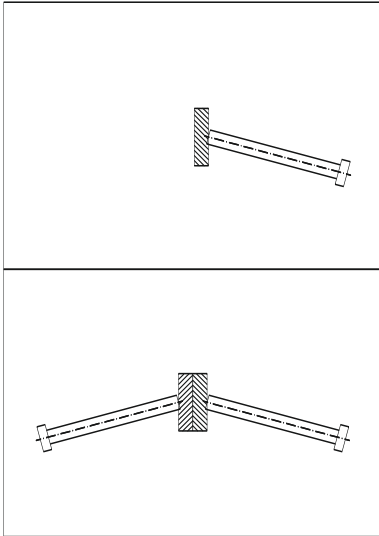
logistics
and distribution centers

industrial buildings

industrial storage
facilities

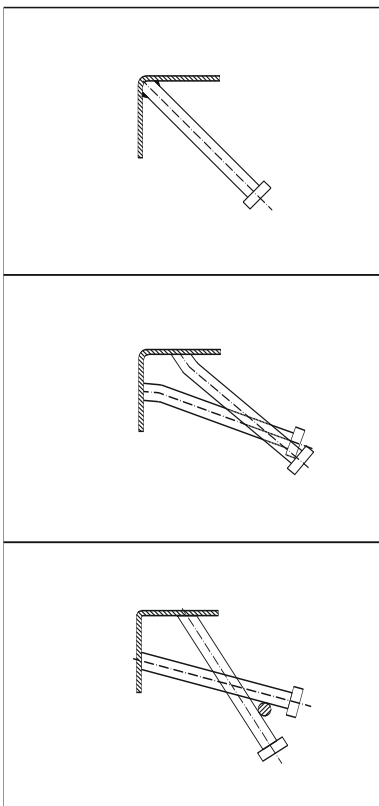
airports

conecto STRIPJOINT & ANGLE BARS



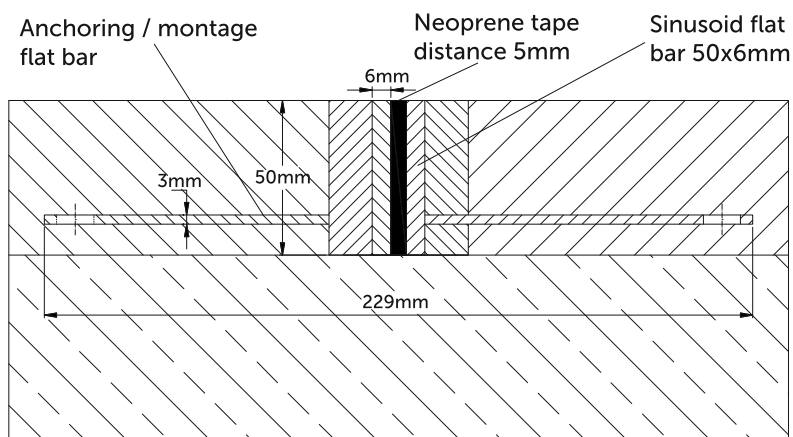
StripJoint is combination of dowel system on top with timber formwork like a footer. It fixed to the top of the timber for the duration of the first concrete pour, and remains in place once the timber formwork is removed.

Suitable for a wide range of internal applications like industrial floors. Ideal for free movement areas, but also suitable for most other areas suitable for use with all vehicle types like forklifts. Standard length 3 meters

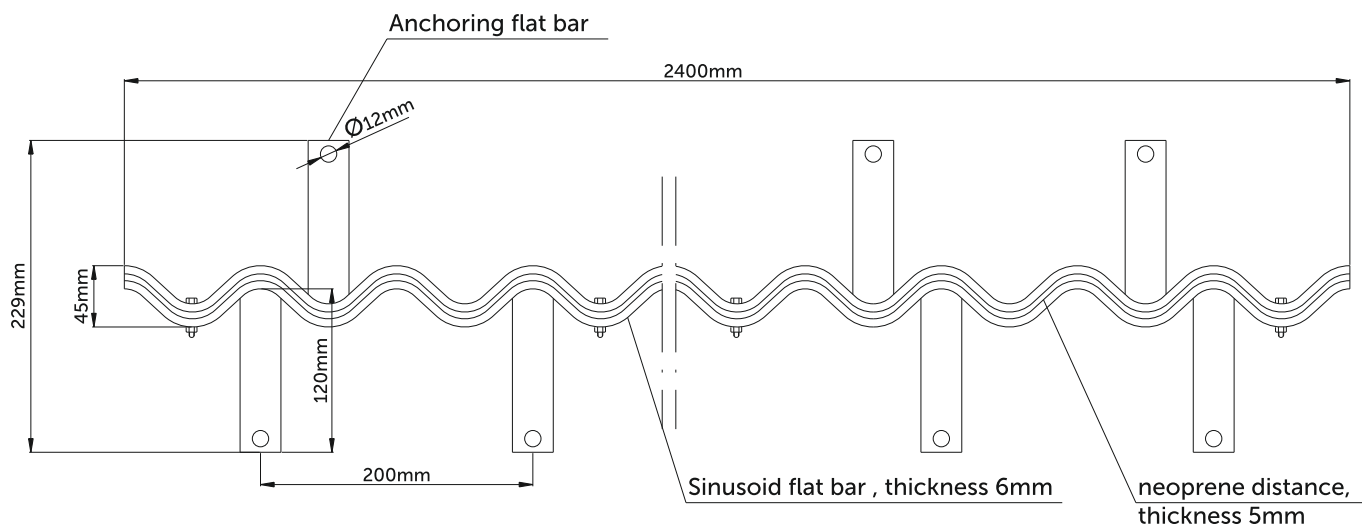


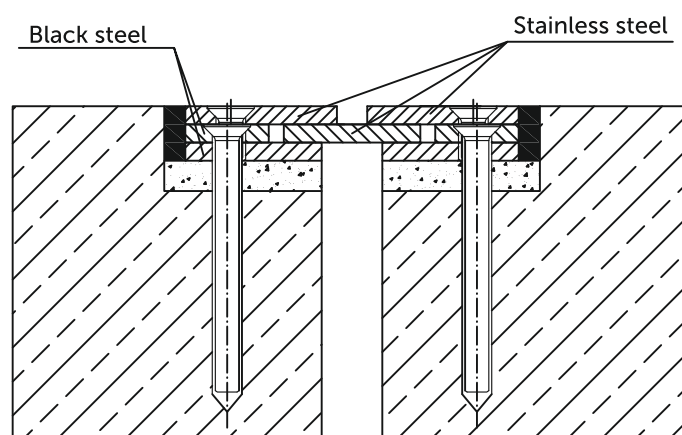
Angle Bars are designed to be used as protecting profile for the inner corner of the concrete constructions. They can transfer moderate loads to the concrete.

The standard length of the angle is 3 meters. They can be cut easily to required length at building site. Anchoring of the angle is based on rebar anchors.

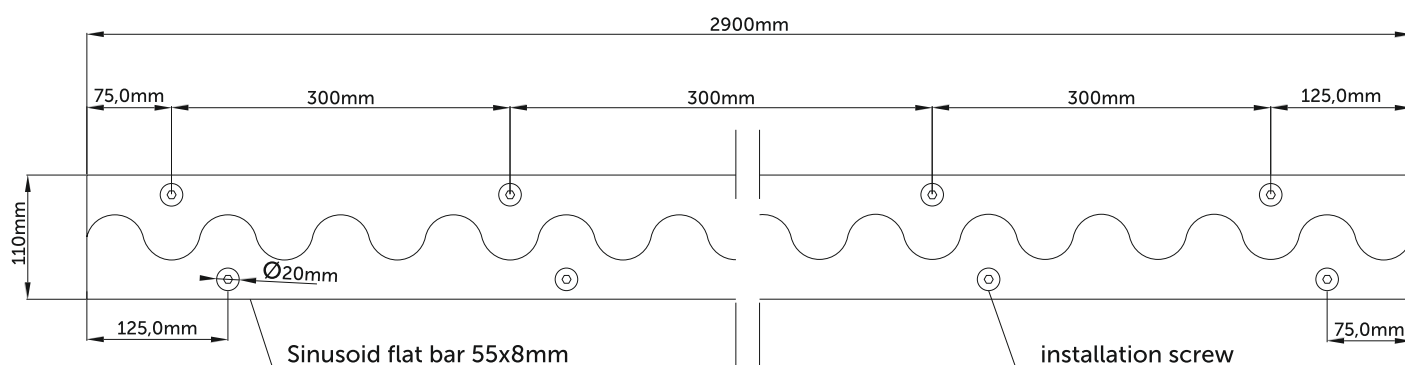


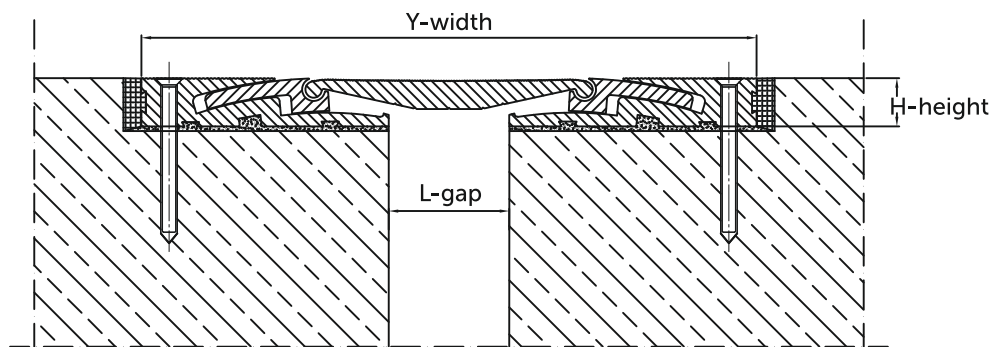
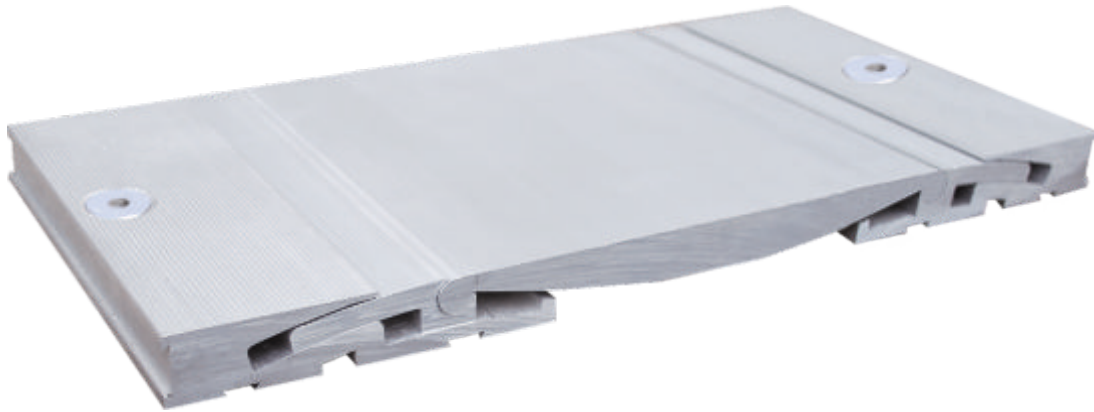
Conecto Sinus are reparation joints designed for cracking floors. Sinusoid construction provides two-level movement which prevent deeper cracking of the floors. Properly installed Conecto Sinus joints eliminate resultant damages and prevent in case of further damages. Properly secured with Conecto Sinus joints floor will not cause vehicles damages and ward off deep cracks which could prevent further usage of floor. Standard lenght = 2.4 meters.





Flat steel joint with sinusoid dilatation gap designed for heavy loads, used for cracked concrete floors repair. Installed to existing concrete floor with montage flat bars that are removed after hardening of mortar. Bilateral protection of concrete plate edges. There is possibility to order the profile made of stainless steel or galvanized steel. Standard length $l = 2900$ mm. We have a possibility to make a profile in different widths between 80mm-300mm.





Conecto HDS is the system of construction connectors for walking and riding movement, designed to use in big buildings or industrial objects. Due to big movement of mobile element it is possible to use these connectors to compensate seismic tensions. Connector does not have the wings which gives smaller thickness of adjacent surface. Hidden sliding runners make the upper surface flat and edges-free. This solution is easier for cleaning and reduces noises and friction when it is in contact with wheels. Installation system gives monolithic connection with surface.

ART.	L mm*	H mm*	Y mm*
HDS 50	50	20	255
HDS 100	100	20	305
HDS 150	150	20	360
HDS 200	200	20	410

- horizontal movements +/- 30 mm
- vertical movements +/- 20 mm
- standard lenght 3 meters



SEMICIRCLE 03ND



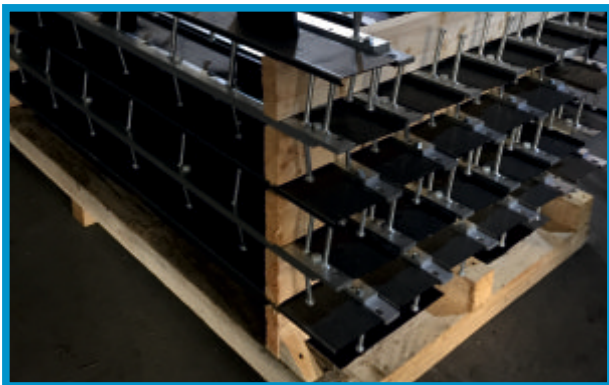
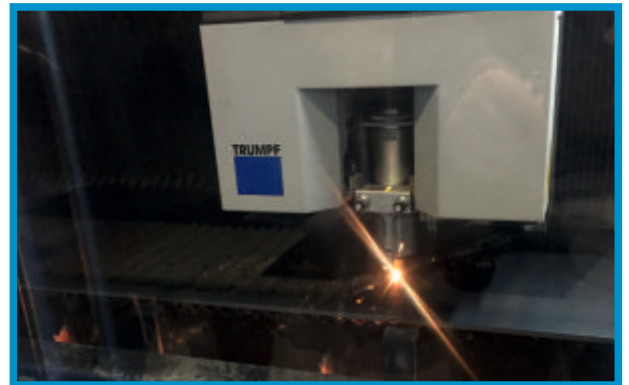
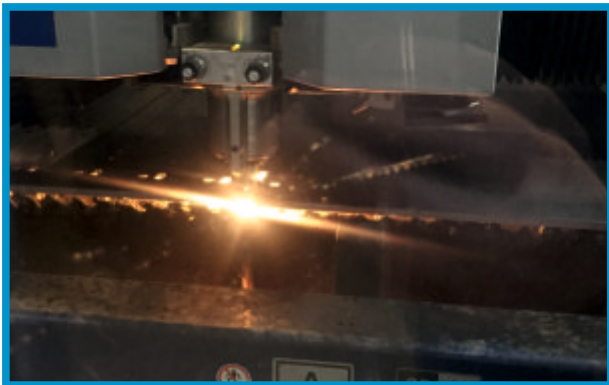
CONNECTION BETWEEN
OLD-NEW FLOOR 10NF108

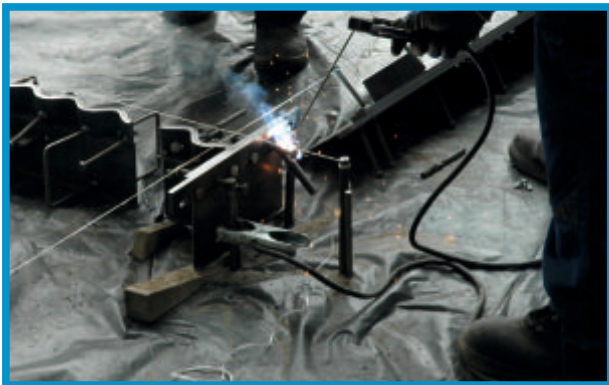


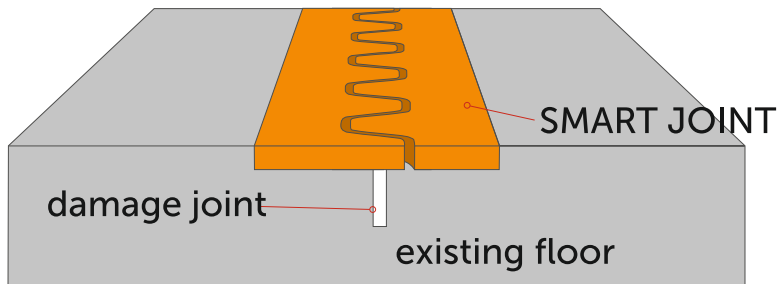
INDUSTRIAL JOING CEILING
08NE120



COLD STORAGE JOINT
06NE120







ADVANTAGES:

- Easy installation
- Chemically resistant
- Ultraflat
- No vibration caused by vehicles traffic

Profile type	Module length	Module width	Module height	Maximum width of the existing joint	Maximum horizontal movement	Compressive strength	Bending strength	Color
SMART JOINT	1000 mm	250 mm	25 mm	29 mm	15 mm	90 N / mm ²	75 N / mm ²	gray concrete
SMART JOINT MINI	1000 mm	120 mm	25 mm	29 mm	15 mm	90 N / mm ²	75 N / mm ²	gray concrete

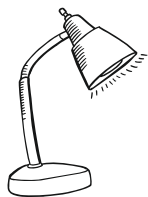
Smart Joint is a prefabricated joint in composite material that is installed at the old run-down joints. It is suitable to be subjected to a heavy traffic such as industrial. It ensures the flatness and continuity of your floor, and averts premature degradation of your vehicles, and in particular the wheels. It also eliminates bumps and knocks, with undoubted advantages both for the operators, both in order to reduce the occurrence of occupational diseases. It allows vertical and horizontal movements to the floor. It is applied with perfect adherence to the existing support, becoming itself a part of the floor. As time passes it does not deteriorate and does not require maintenance.





NOTES

conecto



I D E A
project
product



Rainbow Sane Chem Ceylon (Pvt) Ltd.
No. 70/5, Allen Avenue Dehiwala, Sri Lanka.

mob. +94 7777 208 79
email: jdesilva825@gmail.com

phone: +94 11 273 40 60
email: rainbowfoods@sltnet.lk