

STONE SYSTEM

DECK CONSTRUCTION AND

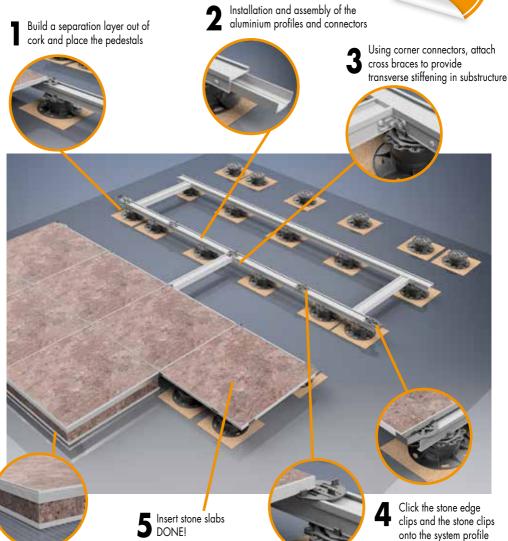
LANDSCAPING

More than
YEARS
of quality



Building patios has never been so easy! Five steps to the perfect terrace





Accessories

If required, more accessories are available. More information can be obtained from this brochure, our decking and landscaping catalogue as well as from www.eurotec.team.







Your contacts can be reached by **E-Mail: technik@eurotec.team**

Telefon: +49 2331 6245-444

All information constitutes planning / design support and should be checked by a specialist planner if necessary!

We would be delighted to advise you on your construction projects

Contact our technical department or use the free calculation software in the service section of our website:

www.eurotec.team/en

Calculations / planning in the deck and garden segment

- Quantity surveys and product recommendations for terrace construction.
- Planning of special terraces, e. g. elevated terraces.
- Installation diagram of terraces if necessary once an order has been placed.
- Customised product developments for terrace construction.

Calculations / planning in the field of timber construction

- Overhead insulation with Paneltwistec and Topduo.
- Main / secondary beam joints with KonstruX, Atlas, Magnus and Ideefix.
- Geometric / static bar panels with KonstruX, Paneltwistec and Topduo.
- Support reinforcements with KonstruX.
- Rafter / purlin joints with KonstruX, Paneltwistec and Topduo.

Calculations / planning in the concrete segment

 Fasteners in / on concrete components with rock concrete screw, bolt anchor and injection anchor.

Calculations / planning in the field of facades

 Quantity determinations for fixing façades and façade elements with EiSYS façade screws, Klimax insulation dowels, ERD frame dowels, Topduo and Paneltwistec.



Proper surface for adjustable pedestals

If you want to build/create a viable and permanently reliable terrace, the condition of the subsurface significantly contributes to the success of the project and should therefore be prepared carefully in advance.

If no foundations are available, we recommend to use adjustable pedestals. For a properly designed terrace construction, a load-bearing substrate made of soil, gravel, split or floor slabs is required. These can absorb arising loads in the soil.

Before the substructure made of aluminium profiles or support beams are laid.

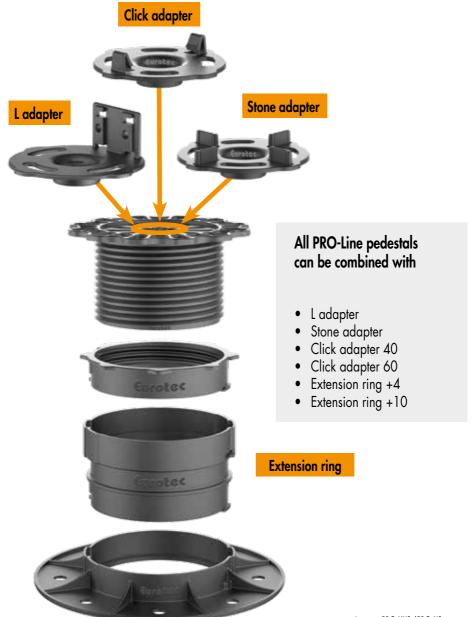
- A supporting structure is required. Appropriate preparations must be made for loose subsurface.
- Stake out the planned area and remove any natural soil, such as turf, rocks and weeds.
- Remove the top layer of soil that contains humus and soil-dwelling organisms in addition to inorganic substances.
- If the topsoil is removed, dig out a 20 30 cm deep bed. Fill with crushed gravel or chippings and compact each layer separately to ensure a stable substrate.
- Here, too, a gradient of 1 2% to the garden should be considered.
- Pure sands and gravels are not recommended as they are not based on the displacement of the individual grains.
- Lay concrete slabs of approx. 30 x 30 cm at the same distance as the foundation.
- Fixing the adjustable pedestals to the concrete slabs is not required.







The modular system of our Profi-Line





Roof-protection cork and Cork pad spacer

 The cork pad spacers are laid between the deck substructure and the foundation / subsurface (self-adhesive on one side) and thus form a gap that aids constructive timber protection.

 Using the spacer includes the option to adjust the height of the substructure.

 The roof-protection cork provides natural protection against mechanical damage to the roof sheeting.



Cork pad spacer

Nivello 2.0

- Versatile slope adjustment Minimum slope: 0,5 % Maximum slope: 10 % Slope can be adjusted in steps of 0,5%
- Click-locking of adjustable pedestals
- Large bearing surface
- Can be combined with our pedestals PRO S, M, L and XL



Profi-Line adjustable pedestals

- Versatile applications thanks to a modular system
- Basic assembly heights of 10 - 168 mm;
 Additional heights possible with the extension rings and extension plate
- Stepless height adjustment
- High load-bearing capacity of up to 8,0 kN/pedestal
- Resistant to weather, UV exposure, insects and rot







PRO XS/S



Extension rings and -plate

- For increasing the height of the PRO adjustable pedestals
- The extension rings are available in the heights 40 and 100 mm.
- The assemby height of the XXS extension plate is 5 mm
- A maximum of 3 extension rings +10cm is allowed to be combined

This combination with the PRO XL would result in a total height of 46,8 cm



Extension rings



XXS extension plate

SL PRO adjustable pedestals

- Self-levelling for slopes of up to 8%
- Stepless height adjustment from 55 to 102 mm
- Can be combined with the PRO-Adapters and extension rings.







SL PRO L



PRO M



PRO L



PRO XL



EVO aluminium system profile

- In contrast to timber substructures, the profile is dimensionally stable and straight
- It doesnt suffer from climate-related effects such as warping, cracks, etc.
- The special shape prevents the screws from shearing off
- Allows both hidden and visible fastening



EVO Slim aluminium system profile

- For visible and hidden fastening of deck boards, e.g. Twin System Clip suitable.
- Especially designed to suit low assembly heights



HKP deck support system

- The new deck support system comprises an aluminium substructure that allows spans of up to 3 m, depending on the desired loading capacity.
- The support system can therefore be tailored flexibly to meet a wide range of requirements.
- It is used especially on decks installed near to the ground in which only a few auxilary supports are laid.
- Is versatile range of application also includes elevated decks, load-bearing balconies and overhanging decks near to the ground.





EVO aluminium system profile connector

- For connecting the EVO aluminium system profile with each other.
- The profile butt joint is only to be positioned above a post or support.



EVO corner connector

• For corner bracing of the EVO aluminium system profile.



EVO position anchor

- Provides a simple and straightforward solution for joining profiles.
- Can be joined at an angle of between 30° and 90°.









90° / 180° EVO joint

- Are used to join the EVO aluminium system profiles.
- The pivots can rotate freely on both sides and can be used for angles of up to 90° or 180° in deck substructures.



MaTre-Band

- For material separation
- Has to be placed between the aluminium profile and planks.
- Prevents creaking noises.









Flex-Stone-Clip

- For clicking onto the EVO aluminium system profile within the paving.
- The flexibility of the new Flex-Stone-Clip allows it to compensate for manufacturing tolerances of up to 2 mm in stone slabs.



Stone-Edge-Clip

- For clicking onto the EVO aluminium system profile at the edges
- To prevent individual stone slabs from slipping, the stone edge clipsare to be screwed to the aluminium substructure in the edge area.





profile drilling screw





DrainTec - drainage grate

- Its special geometry allows it to "trap" the rain.
- The water falls directly onto the weatherproof layer, or into the gutter, without covering the door element or the façade cladding with reflected water.
- The combination with commercially available terrace boards is possible.





DrainTec Base

- Supports drainage of decking
- Does not require any additional substructure
- Compatible with adjustable feet PRO S PRO XL
- The DrainTec Base is the ideal addition to our DrainTec Drainage Grate.









End profiles for aluminium substructure

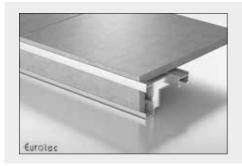
- Deliver a visually attractive border on decks with stone slab flooring.
- In combination with the Profi-Line adjustable pedestals and the EVO aluminium system profile.
- The system consists of two end profiles, which enclose the deck's upper and lower edges respectively.



Aluminium cover + eaves

- The aluminium eaves offers an additional opportunity to form the terrace edge.
- Easy assembly
- Flexible border design
- Can be combined with all standard gutter systems/ eaves fascia.
- Can be combined with the tops of the terrace edge profiles for an aluminium substructure and single bearing or with the stone-edge clip to a high-quality terrace edge.









The right support spacing for your terrace!

Max. support spacing L [mm] for EVO aluminium system profile with adjustable pedestalsal

			Pro	ofi-Line adjustable ped	destals, perm. F = 8,0	kN				
Payload [kN/m²]	Centre distance e [mm] between the profiles									
[Kily III]	300	350	400	450	500	550	600	800		
2,0	1000	1000	1000	950	900	850	850	750		
3,0 d)	1000	950	900	850	850	800	800	700		
4,0 d	900	850	850	800	750	750	700	650		
5,0 ₫	850	800	800	750	700	700	650	600		

Max. support spacing L [mm] for EVO Slim aluminium system profile with adjustable pedestalsal

Payload [kN/m²]	Profi-Line adjustable pedestals, perm. F = 8,0 kN									
	Centre distance e [mm] between the profiles ^{b)}									
[,]	250	300	350	400	450	500	550	600		
2,0	650	600	600	550	550	500	500	500		
3,0 ^{d)}	550	550	500	500	500	450	450	400		
4,0 d	500	500	450	450	400	400	400	400		
5,0 ^{c)}	500	450	450	400	400	400	350	350		

al Indication of max. span at which the profile's deflection does not exceed L/300. Average board thickness of 25 mm with a specific weight of 7 kN/m³ (larch, pine, Douglas fir).

Max. support spacing L [mm] for Aluminium Deck Support System HKP with adjustable pedestalsal

Bearing type	Payload kN/m²	Maximum support distances L [mm] with the adjustable pedestals of the PRO-Line series with a HKP support profile®								
bearing type		300	350	400	450	500	550	600		
	2,0	3000	2750	2750	2500	2500	2500	2500		
Single-span beam L	3,0 e)	2750	2500	2500	2250	2250	2250	2000		
	4,0 ⁴	2500	2250	2250	2000	2000	2000	2000		
	5,0 d	2250	2000	2000	2000	1750	1750	1750		
T.: 1 []	2,0	3000	3000	3000	3000	3000	2750	2500		
Twin-span beam L [mm]	3,0 €	3000	2750	2500	2250	2000	1750	1750		
	4,0 ⁴	2500	2250	2000	1750	1500	1250	1250		
	5,0 ₫	2000	1750	1500	1250	1250	1000	1000		
Single-span cantilever beam	2,0	3000 / 1000	2750 / 1000	2750 / 1000	2500 / 1000	2500 / 1000	2000 / 1000	1750 / 1000		
L[mm]/Lk[mm] ^{d)}	3,0 €	2500 / 1000	2500 / 1000	2500 / 750	2500 / 750	2500 / 750	2000 / 750	1750 / 750		
	4,0 d	1750 / 1000	1500 / 750	1500 / 750	1500 / 750	1500 / 750	1500 / 750	1500 / 750		
	5,0 d	1500 / 750	1500 / 750	1500 / 750	1500 / 750	1250 / 750	1250 / 500	1250 / 500		

a) Max. bearing clearances (L) for bearings with adjustable pedestals of the PRO-Line series with payloads of 2, 3,4 and 5 kN/m², with a mean board thickness of 25 mm and a board weight of 7 kN/m² (larch, pine, Douglas fir).

b) e.g.: spacing between profiles = 550 mm; payload = 2,0 kN/m² max. span of the profile = 600 mm.

Payloads according to DIN EN 1991-1; roof terraces = 4 kN/m², patios for public use = 5 kN/m².

d) Load capacity according to SIA 261 for balconies and roof terraces private use = 3 kN/m²

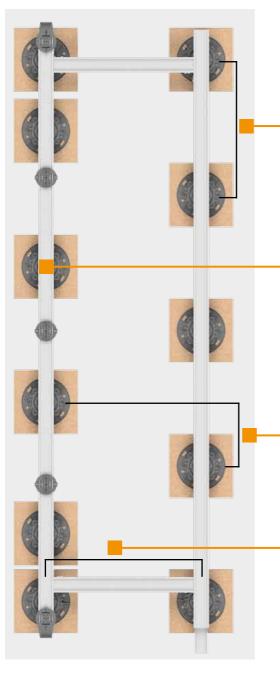
b) If WPC boards are used, the axis clearance e between the profiles must not exceed 400 mm!

^{c)} Load capacities according to DIN EN 1991-1; roof terraces = 4 kN/m², decks for public use = 5 kN/m².

d) Lifting forces of up to 1 kN can be sustained on support A.

e) Load capacity according to SIA 261 for balconies and roof terraces private use = 3 kN/m².





Support spacings L

- The correct support spacing is shown in the table
- High load-bearing capacity of up to 8,0 kN/ pedestal

profile connectors

• The profile butt joint is only to be positioned directly above a post or support

Adjustable pedestal offset L/2

 To reduce vibrations, we recommend to offset the adjustable pedetals of every 2nd aluminium system profile by L/2

Centre distance e

- The correct centre distance depends on the surface material
- We recommend to arrange a cross bracing every 150 cm

The specialist for fastening technology



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