

# ALU TERRACE

## ALUMINIUM PROFILE FOR PATIOS

### TWO VERSIONS

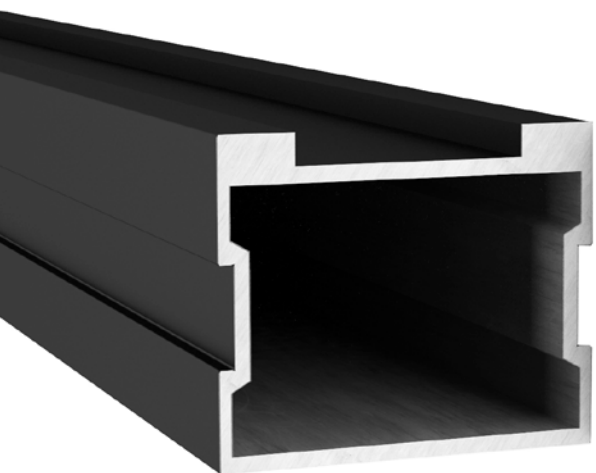
ALUTERRA30 version for standard loads. ALUTERRA50 version, in black, for very high loads; can be used on both sides.

### SUPPORT EVERY 1,10 m

ALUTERRA50 is designed with a very high inertia so that the SUPPORTS can be positioned every 1,10 m (along the profile midline), even with high loads (4,0 kN/m<sup>2</sup>).

### DURABILITY

The substructure made of aluminium profiles guarantees excellent patio durability. The drainage channel allows water to run off and generates effective micro-ventilation.



### CHARACTERISTICS

FOCUS	excellent durability and strength
SECTIONS	53 x 30 mm and 60 x 50 mm
THICKNESS	1,8 mm   2,2 mm



### MATERIAL

Versions in aluminium and in anodized aluminium (class 15) in graphite black.

### FIELDS OF USE

Patio substructure. Outdoor use. Suitable for service classes 1, 2 and 3.



### **DISTANCE 1,10 m**

With a spacing of 80 cm between the profiles (load: 4,0 kN/m<sup>2</sup>), the SUPPORT elements can be spaced 1,10 m apart and placed in the mid-line of the ALUTERRACE50 profile.

### **COMPLETE SYSTEM**

Ideal for use in combination with SUPPORT, fixed laterally with KKA screws. System with excellent durability.

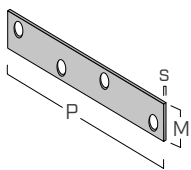


Stabilization of ALUTERRA50 with stainless steel plates and KKA screws.

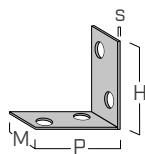


Aluminium substructure made with ALUTERRA30 and resting on GRANULO PAD

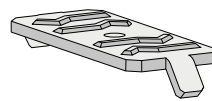
## ACCESSORY CODES AND DIMENSIONS



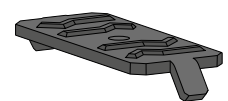
LBVI15100



WHOI1540



FLIP

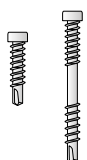


FLAT

CODE	material	s [mm]	M [mm]	P [mm]	H [mm]	pcs
LBVI15100	A2   AISI304	1,75	15	100	--	200
WHOI1540	A2   AISI304	1,75	15	40	40	200

CODE	material	pcs
FLAT	black aluminum	200
FLIP	zinc-plated steel	200

KKA AISI410



d <sub>1</sub> [mm]	CODE	L [mm]	pcs
4	KKA420	20	200
TX 20			
5	KKA540	40	100
TX 25	KKA550	50	100

KKA COLOR



d <sub>1</sub> [mm]	CODE	L [mm]	pcs
4	KKAN420	20	200
	KKAN430	30	200
	KKAN440	40	200
5	KKAN540	40	200
TX 25			

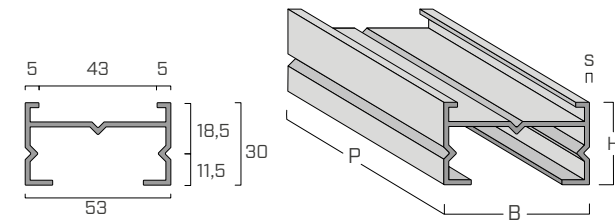
## CODES AND DIMENSIONS

CODE	s [mm]	B [mm]	P [mm]	H [mm]	pcs
ALUTERRA30	1,8	53	2200	30	1

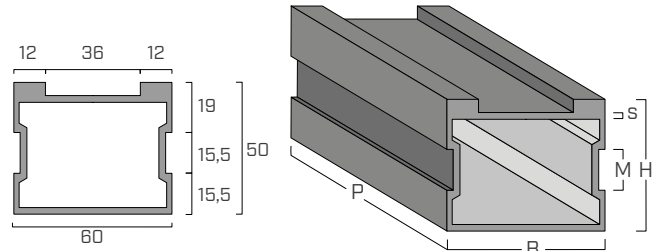
CODE	s [mm]	B [mm]	P [mm]	H [mm]	pcs
ALUTERRA50	2,5	60	2200	50	1

NOTES: upon request, P = 3000 mm version is available.

## GEOMETRY

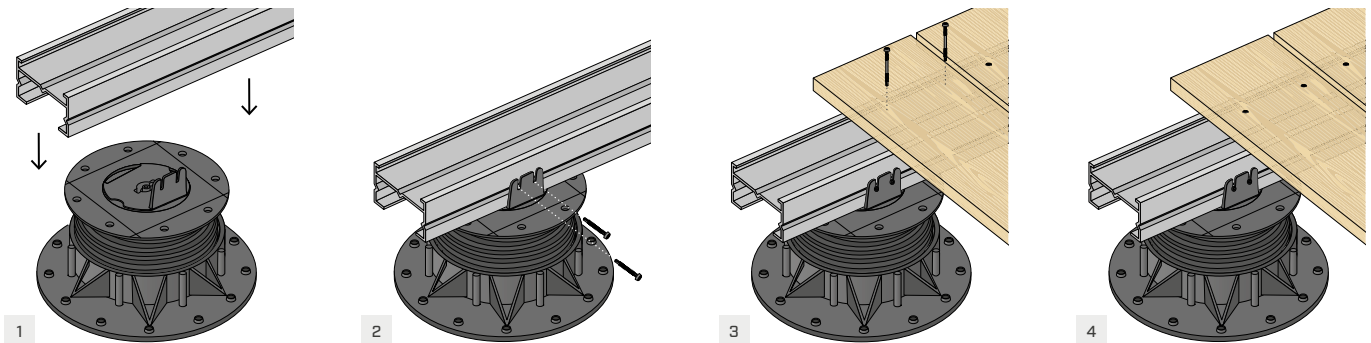


ALU TERRACE 30



ALU TERRACE 50

## EXAMPLE OF FASTENING WITH SCREWS AND ALUTERRA30



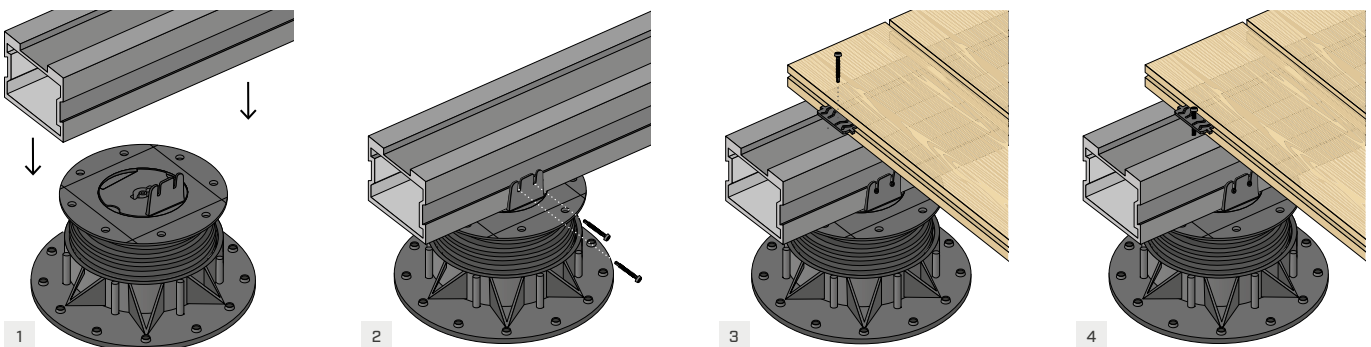
1 Place the ALU TERRACE profile on the SUP-S support fit with head SUPSLHEAD1.

2 Fix the ALU TERRACE profile with 4,0 mm diameter screws KKAN.

3 Fix the timber or WPC boards directly on the ALU TERRACE profile with 5,0 mm diameter KKA screws.

4 Repeat the operations for the remaining boards.

## EXAMPLE OF FASTENING WITH CLIP AND ALUTERRA50



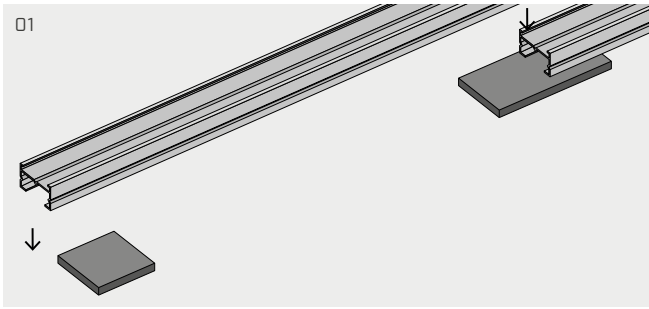
1 Place the ALU TERRACE profile on the SUP-S support fit with head SUPSLHEAD1.

2 Fix the ALU TERRACE profile with 4,0 mm diameter screws KKAN.

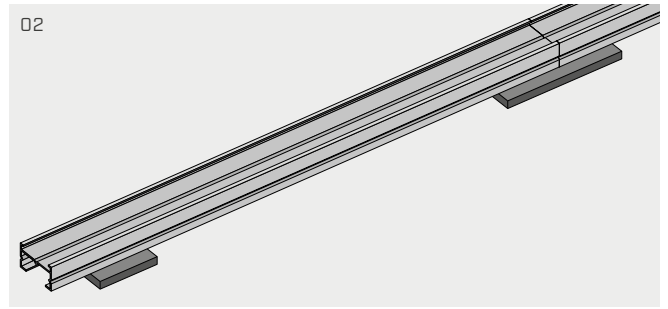
3 Fix the boards using FLAT concealed clips and 4,0 mm diameter KKAN screws.

4 Repeat the operations for the remaining boards.

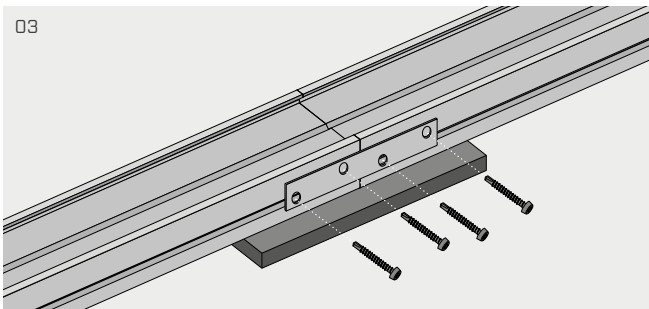
## EXAMPLE PLACEMENT ON GRANULO PAD



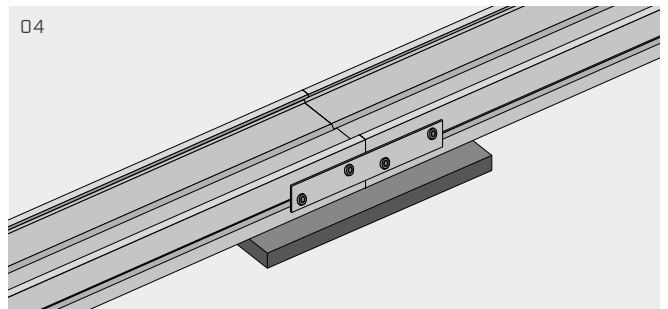
Several ALUTERRA30 units can be connected lengthwise using stainless steel plates. Connection is optional.



Align two head-to-head profiles.

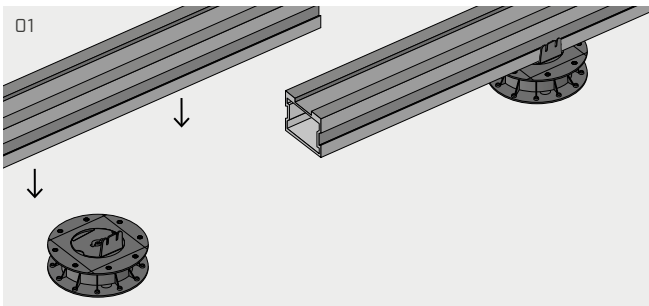


Place the LBVI15100 stainless steel plate on the aluminium profiles and fix with 4,0 x 20 mm diameter KKA screws.

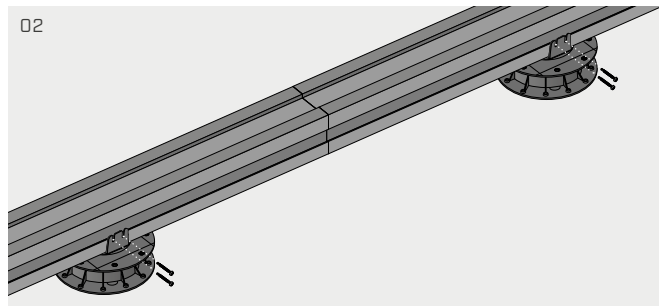


Do this on both sides to maximize stability.

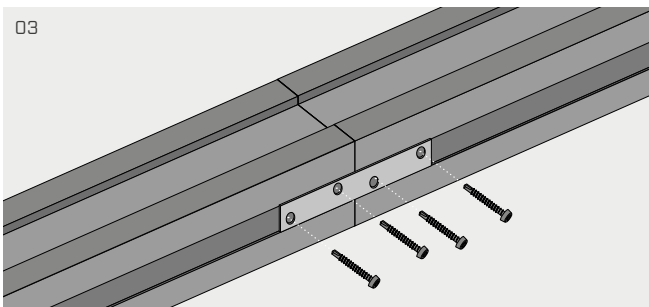
## EXAMPLE PLACEMENT ON SUPPORT



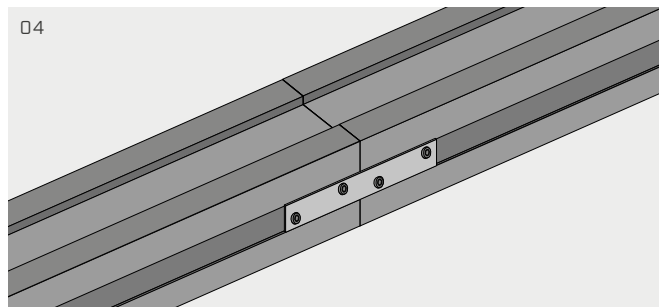
Several ALUTERRA50 units can be connected lengthwise using stainless steel plates. Connection is optional if the joint coincides with placement on the SUPPORT element.



Connect the aluminium profiles with KKAN screws (diameter: 4,0 mm) and align two head-to-head profiles.



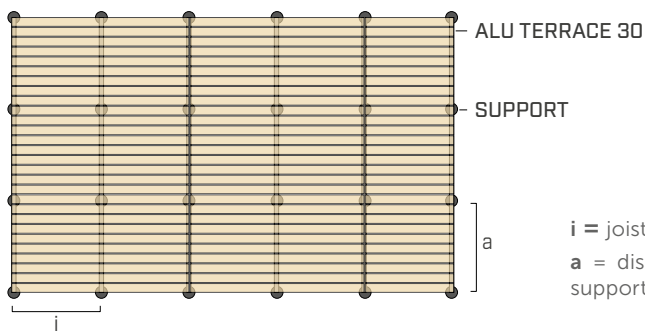
Place the LBVI15100 stainless steel plate on the lateral holes in the aluminium profiles and fix with 4,0 x 20 mm diameter KKA screws or KKAN 4,0 mm diameter.



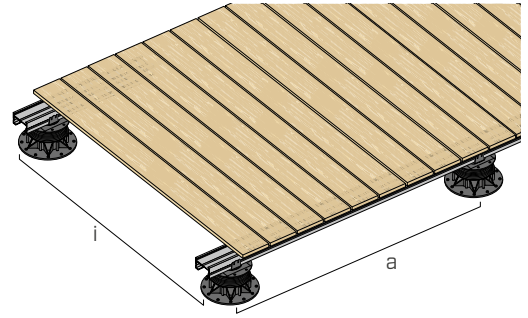
Do this on both sides to maximize stability.

## MAXIMUM DISTANCE BETWEEN SUPPORTS (a)

### ALU TERRACE 30

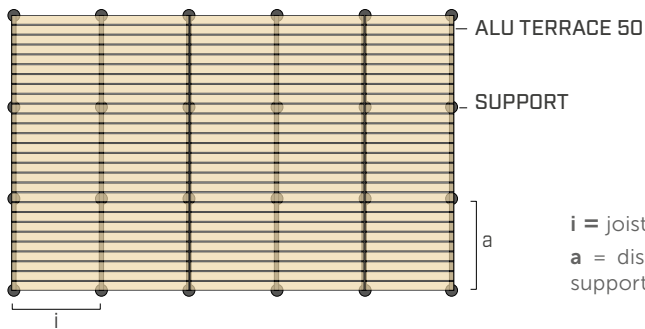


$i$  = joists spacing  
 $a$  = distance between supports

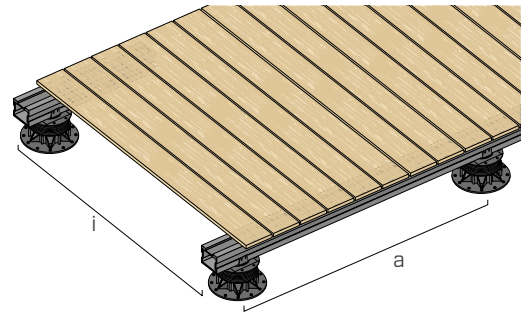


OPERATING LOAD [kN/m <sup>2</sup> ]	$i$ [m]								
	0,4	0,45	0,5	0,55	0,6	0,7	0,8	0,9	1,0
2,0	0,77	0,74	0,71	0,69	0,67	0,64	0,61	0,59	0,57
3,0	0,67	0,65	0,62	0,60	0,59	0,56	0,53	0,51	0,49
4,0	0,61	0,59	0,57	0,55	0,53	0,51	0,48	0,47	0,45
5,0	0,57	0,54	0,53	0,51	0,49	0,47	0,45	0,43	0,42

### ALU TERRACE 50



$i$  = joists spacing  
 $a$  = distance between supports



OPERATING LOAD [kN/m <sup>2</sup> ]	$i$ [m]								
	0,4	0,45	0,5	0,55	0,6	0,7	0,8	0,9	1,0
2,0	1,70	1,64	1,58	1,53	1,49	1,41	1,35	1,30	1,25
3,0	1,49	1,43	1,38	1,34	1,30	1,23	1,18	1,14	1,10
4,0	1,35	1,30	1,25	1,22	1,18	1,12	1,07	1,03	1,00
5,0	1,25	1,21	1,16	1,13	1,10	1,04	1,00	0,96	0,92

#### NOTES:

- Example with deformation  $L/300$ ;
- Useful load according to EN 1991-1-1:
  - Category A areas =  $2,0 \div 4,0$  kN /m<sup>2</sup>;
  - Areas susceptible to category C2 crowding =  $3,0 \div 4,0$  kN/m<sup>2</sup>;
  - Areas susceptible to category C3 crowding =  $3,0 \div 5,0$  kN/m<sup>2</sup>;

The calculation was performed with a static diagram on a simple support span and considering a uniformly distributed load.