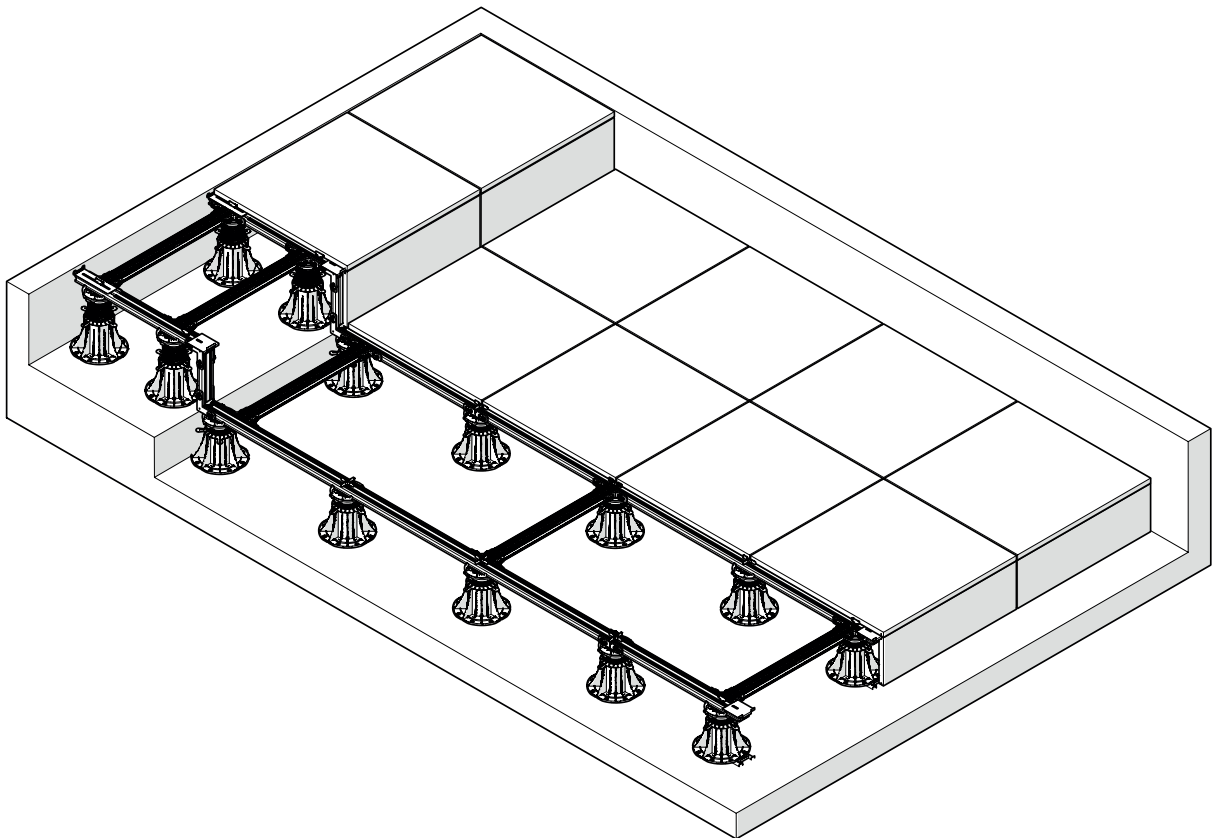


SOLVER.

RAISED TERRACE ALUDECK SYSTEM

INSTALLATION AND USE INSTRUCTIONS

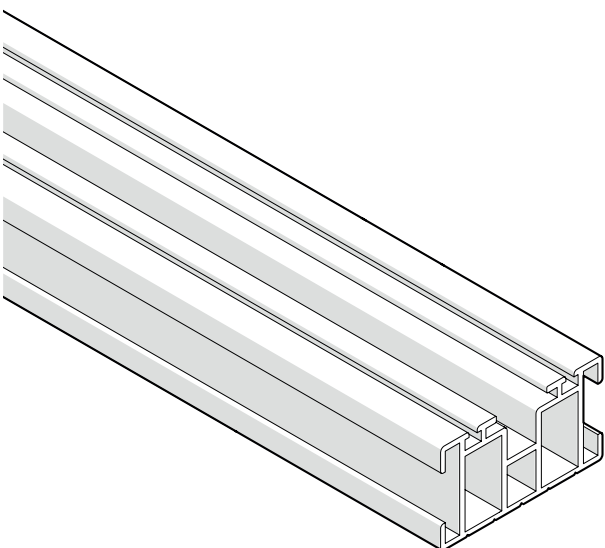


CONTENTS

Contents	2
Tools required	3
Safety recommendations	3
System components	4
Additional accessories	5
Terrace installation	10
Step 1 - Preparing the substrate	10
Step 2 - Positioning and adjusting the pedestals	13
Step 3 - Placing the pedestals	15
Step 4 - Preparing the joists	16
Step 5 - Joining joists lengthwise	17
Step 6 - Connecting transverse joists	18
Step 7 - Preparing a step / slope	19
Step 8 - Installing vertical pavers	20
Step 9 - Laying the pavers	21

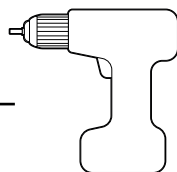


For more information about the system, visit:
www.solver-systems.com/aludeck

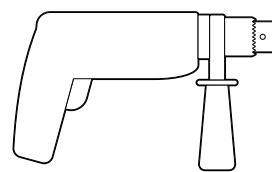


TOOLS REQUIRED

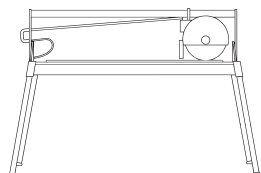
Cordless drill/driver



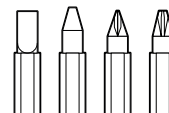
Hammer drill.
Optional, where the
pedestals can be
anchored to the substrate.



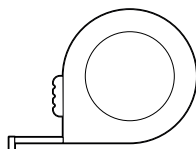
Saw for cutting
2 cm thick
ceramic pavers



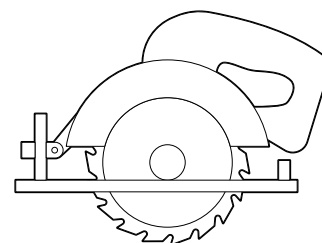
Screwdriver
bit set



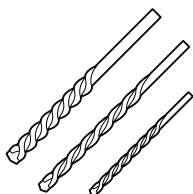
Tape measure



Saw with an
aluminum-cutting
blade



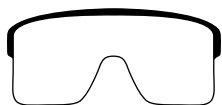
Metal drill bits



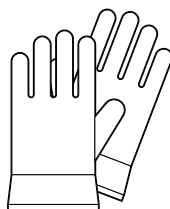
Carpenter's pencil



SAFETY RECOMMENDATIONS



Safety glasses



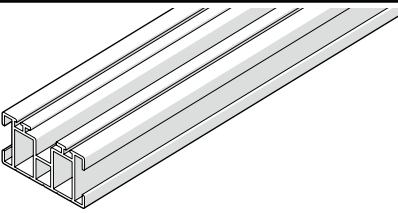
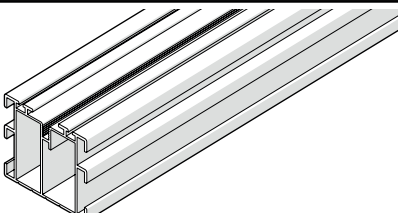
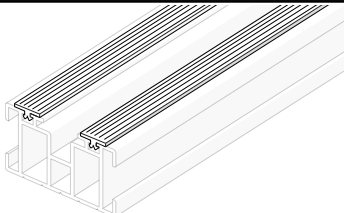
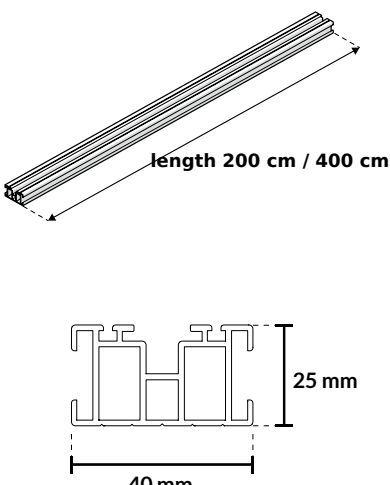
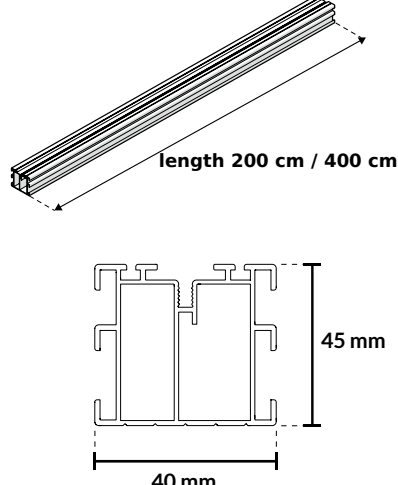
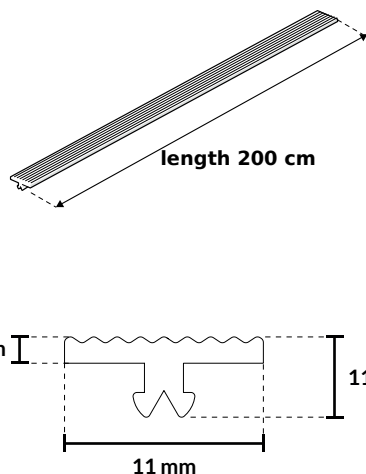
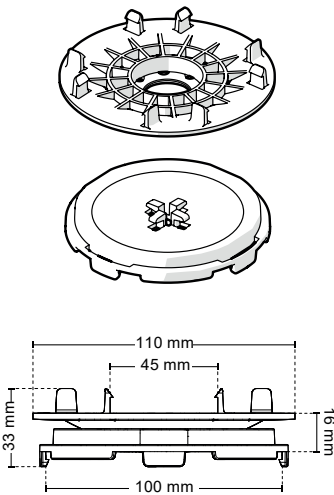
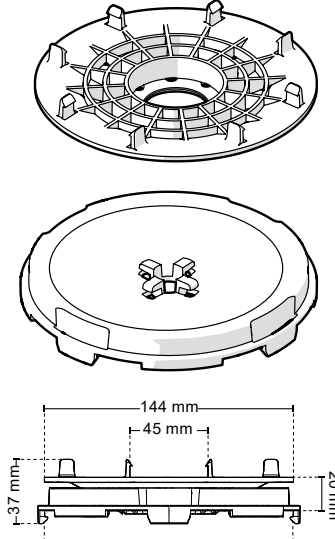
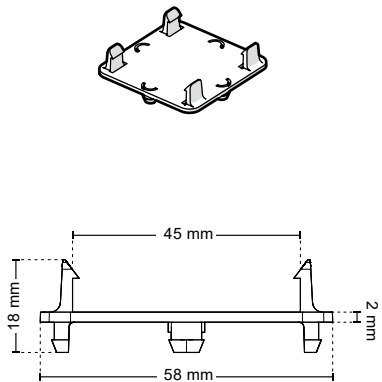
Protective gloves



Safety footwear

All work must follow good construction practice and occupational health and safety rules.

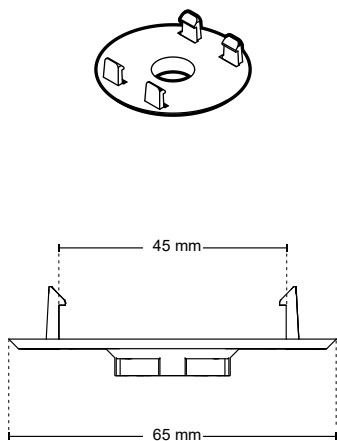
SYSTEM COMPONENTS

		
ADEC-ADJ25X45 AluDeck 25×45 mm Length 200 cm / 400 cm Material: aluminum	ADEC-ADJ40X45 AluDeck 40×45 mm Length 200 cm / 400 cm Material: aluminum	ADEC-AJR Joist soundproofing tape AluDeck 1 mm thick Material: rubber
		
ADEC-LE100 AluDeck self-levelling head - STANDARD For click-in joist installation; slope compensation up to 6%. Diameter 32.5 mm, height 16 mm	ADEC-LE145 AluDeck self-levelling head - MAX / SPIRAL For click-in joist installation; slope compensation up to 6%. Diameter 32.5 mm, height 19 mm	ADEC-ACA AluDeck click adapter - STANDARD / CLEVER LEVEL Fixed adapter, height 2 mm
		

SYSTEM COMPONENTS

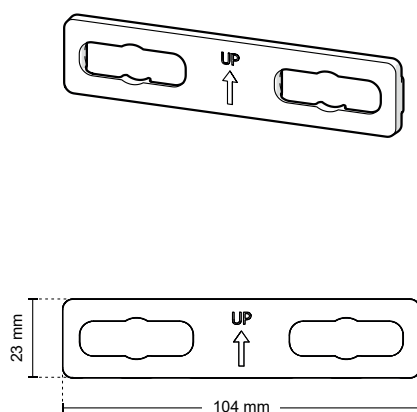
ADEC-ACAD

AluDeck click adapter -
MAX / SPIRAL
Fixed adapter, height 2 mm



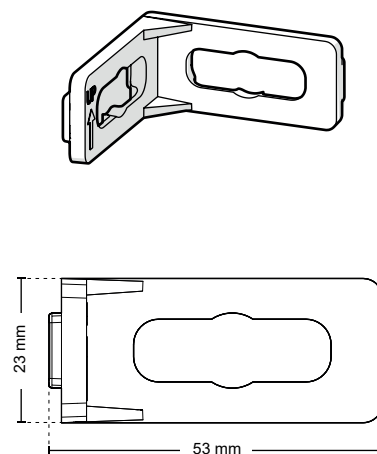
ADEC-ALC2

AluDeck longitudinal connector
Screw-free joist connection



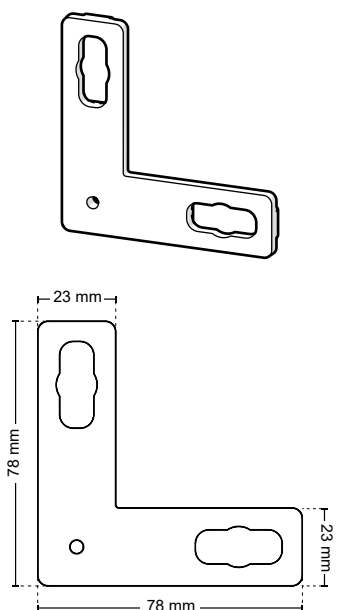
ADEC-ACC2

AluDeck transverse connector
Screw-free joist connection



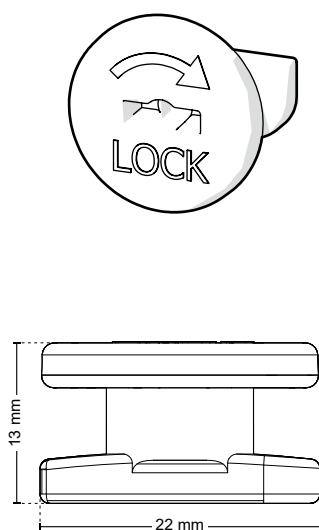
ADEC-AVC

AluDeck vertical connector
Screw-free joist connection



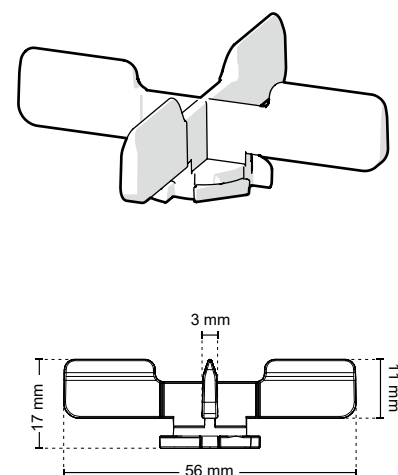
ADEC-CLIP

Locking clip
For screw-free joist connectors



ADEC-APK3

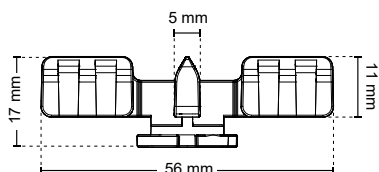
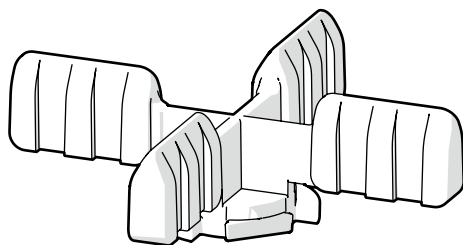
AluDeck sliding cross spacer 3 mm
Slides along the joist to set
3 mm joints between pavers



SYSTEM COMPONENTS

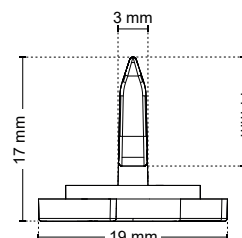
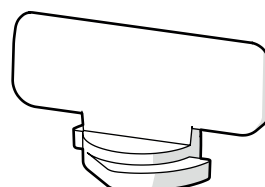
ADEC-APK5

AluDeck sliding cross spacer 5 mm
Slides along the joist to set 5 mm joints between pavers



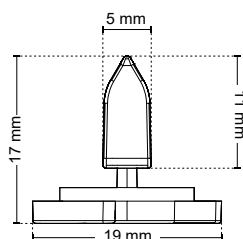
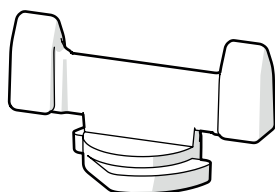
ADEC-APL3

AluDeck sliding linear spacer 3 mm
Slides along the joist to set 3 mm joints between pavers



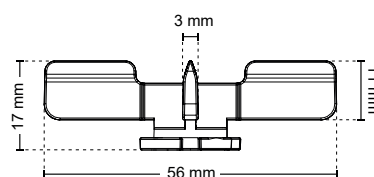
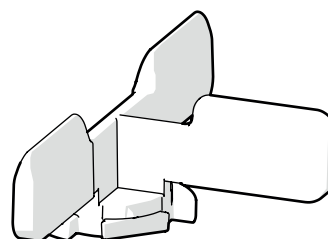
ADEC-APL5

AluDeck sliding linear spacer 5 mm
Slides along the joist to set 5 mm joints between pavers



ADEC-APT3

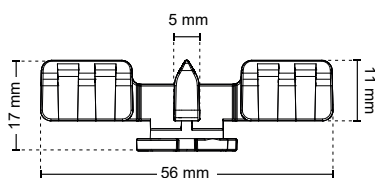
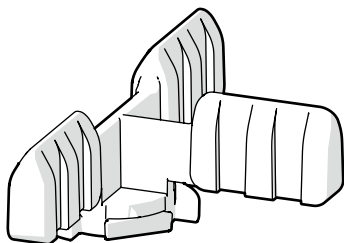
AluDeck sliding T-spacer 3 mm
Slides along the joist to set 3 mm joints between pavers



SYSTEM COMPONENTS

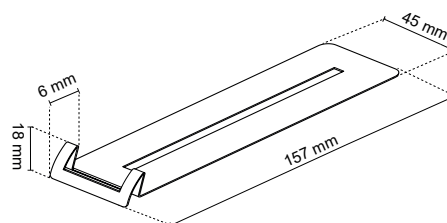
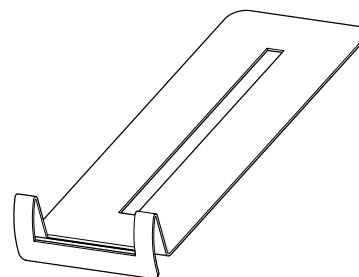
ADEC-APT5

AluDeck sliding T-spacer 5 mm
Slides along the joist to set 5 mm joints between pavers



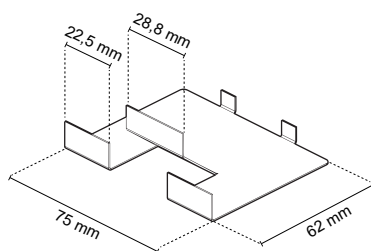
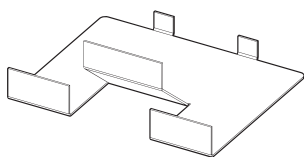
ADEC-WA

AluDeck Stainless Steel Wall Clip



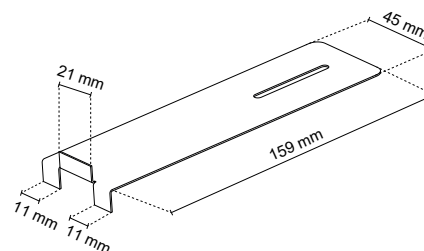
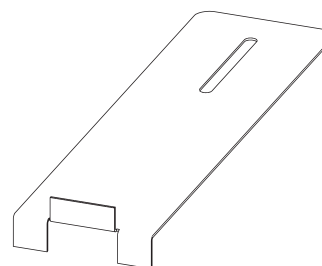
AKCW-EDL

Closure clip lower inox
Not compatible with SPIRAL pedestals



ADEC-EDU

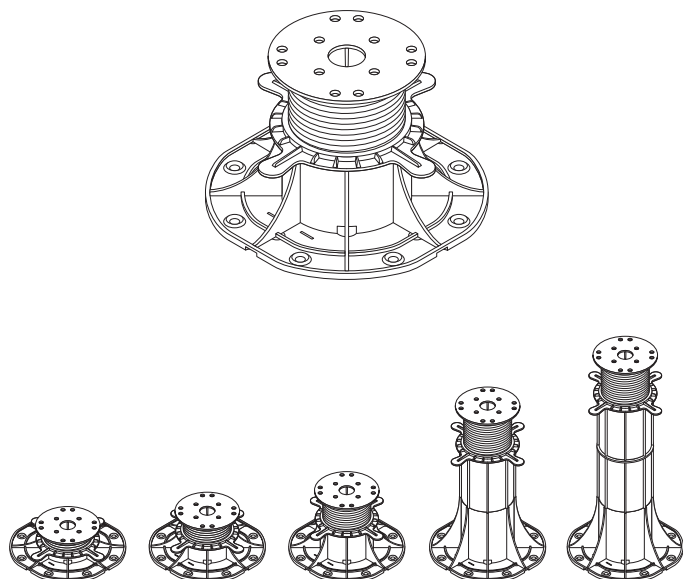
AluDeck upper closure clip
Stainless steel clip for edge cladding



COMPATIBLE PEDESTAL RANGES

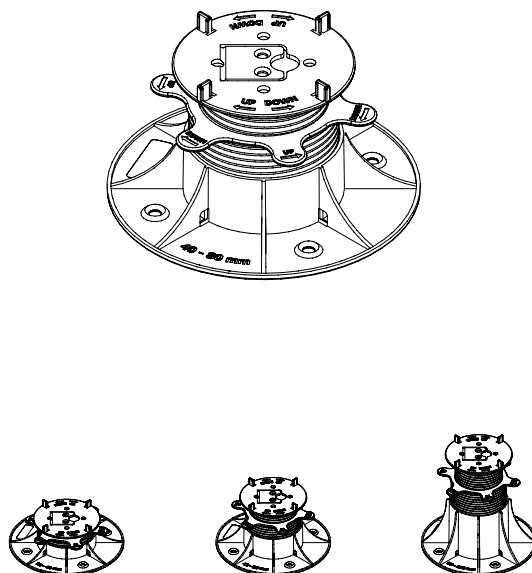
STANDARD

Height from 30 to 420 mm



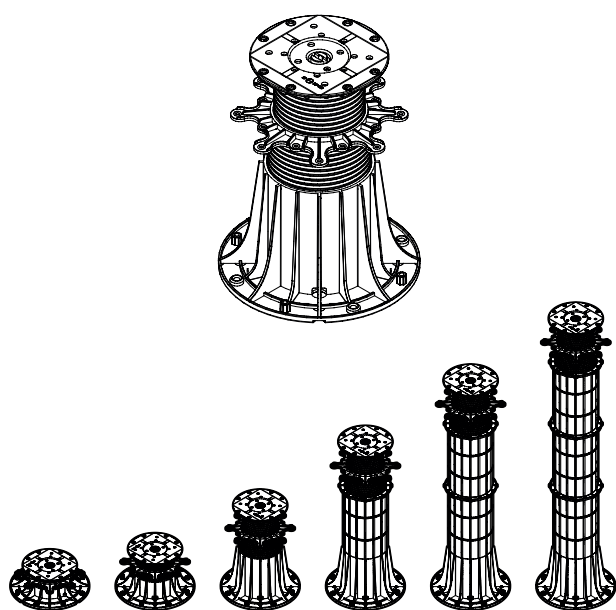
CLEVER LEVEL

Height from 17 to 200 mm



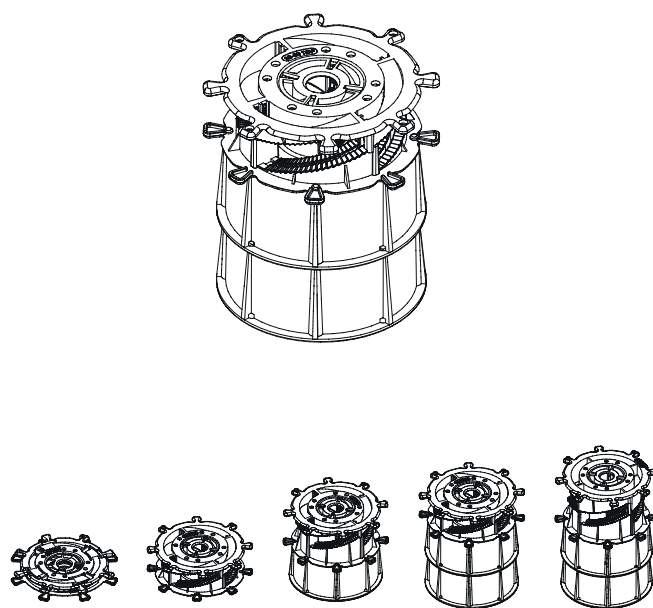
MAX

Height from 45 to 950 mm



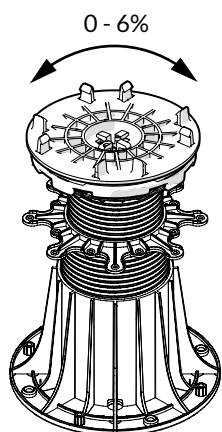
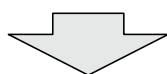
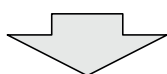
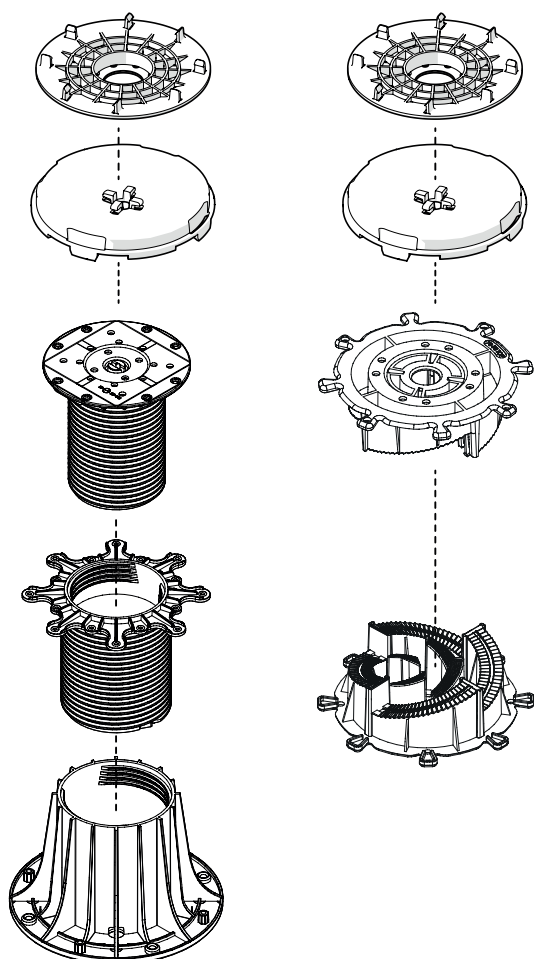
SPIRAL

Height from 10 to 210 mm

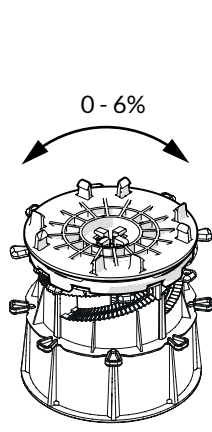


INSTALLING THE HEADS

Self-levelling head
ADEC-LE145 / ADEC-LE100

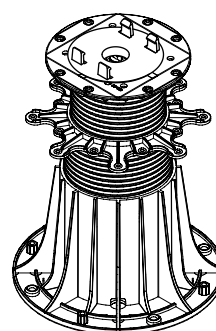
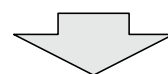
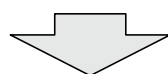
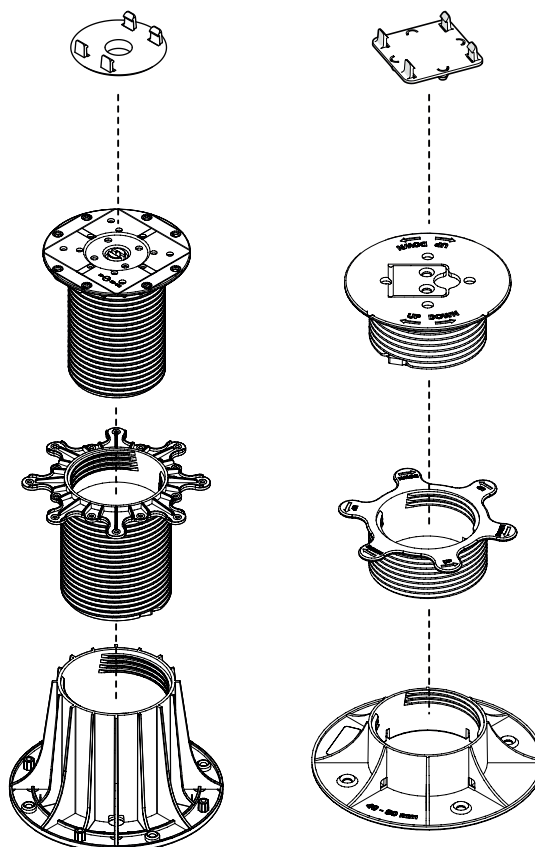


MAX

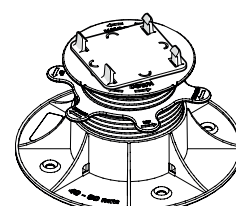


SPIRAL

Fixed click adapter
ADEC-ACA / ADEC-ACAD



MAX



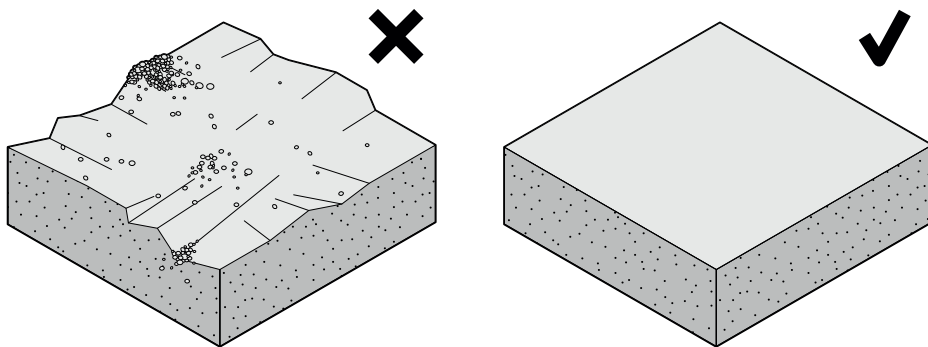
CLEVER LEVEL

TERRACE INSTALLATION

STEP 1 - PREPARING THE SUBSTRATE

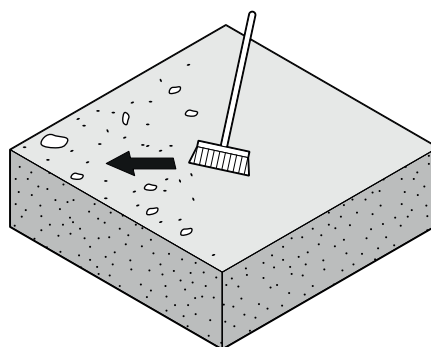
SUBSTRATE

The substrate beneath the terrace must be even and stable.



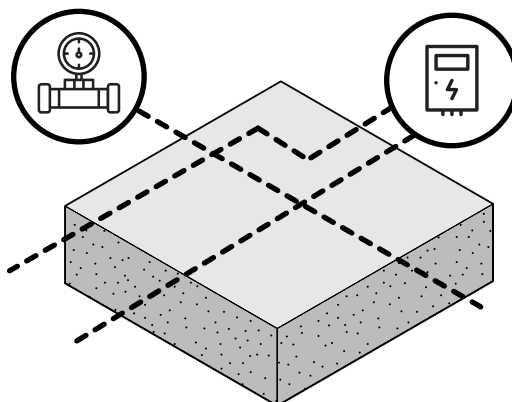
CLEANING THE SUBSTRATE

It is recommended to clean the substrate before starting installation.



PLANNING SERVICES

Plan all cable and pipe routes, particularly electrical and water services.



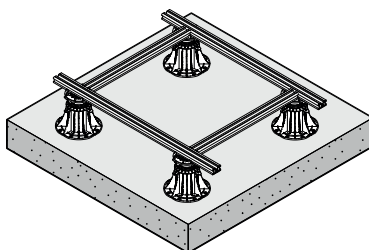
TERRACE INSTALLATION

STEP 1 - PREPARING THE SUBSTRATE

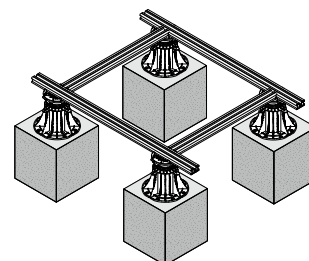
EXAMPLES OF SUBSTRATE TYPES

Pedestals can be placed on various types of substrate, provided they ensure stable support.

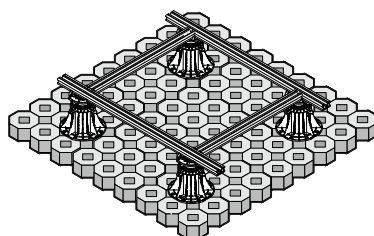
! The substrate must be even and stable.



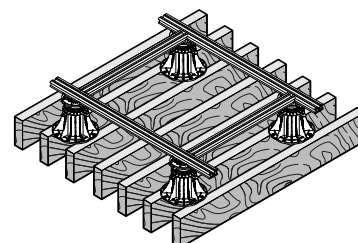
on a concrete screed



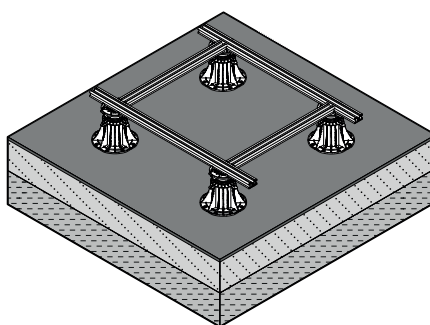
on concrete piers



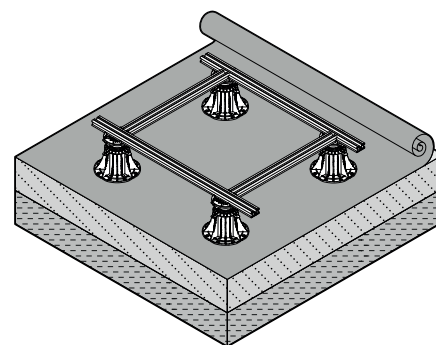
on concrete grass pavers



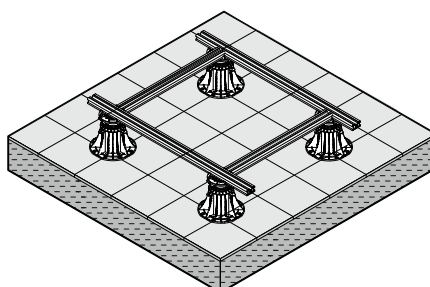
on joists



on an inverted roof



on XPS with geotextile



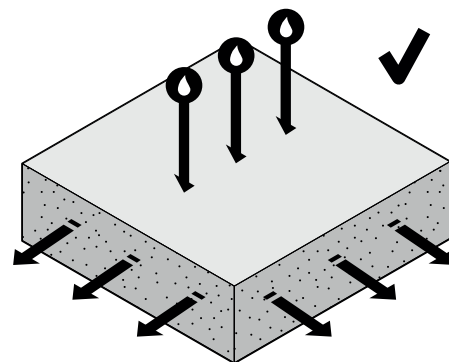
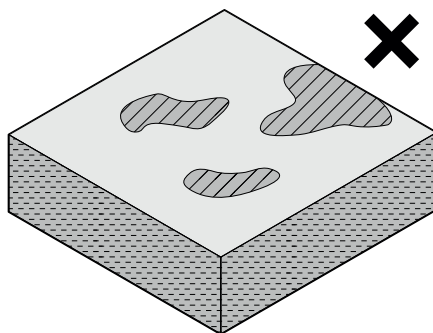
on ceramic tiles

TERRACE INSTALLATION

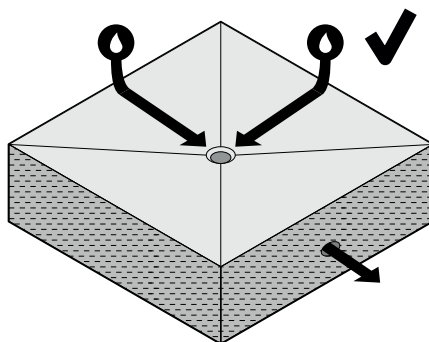
STEP 1 - PREPARING THE SUBSTRATE

WATER DRAINAGE

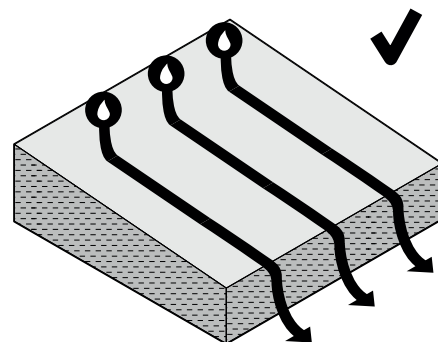
The substrate beneath a raised terrace must provide adequate drainage. A drainage system, outlet or fall must prevent water from accumulating beneath the terrace surface.



drainage



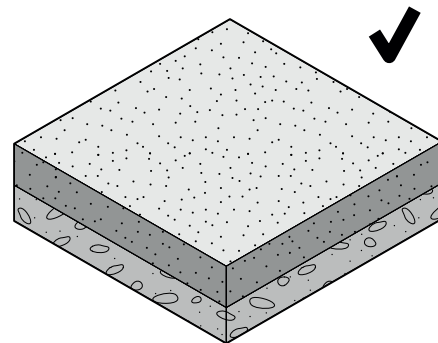
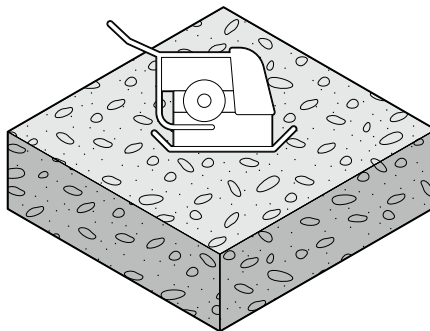
outlet



fall

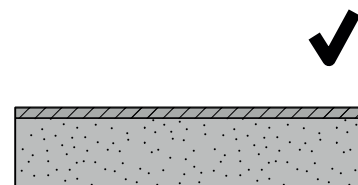
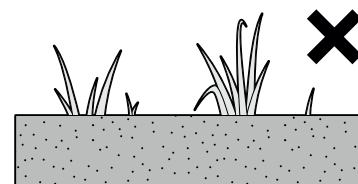
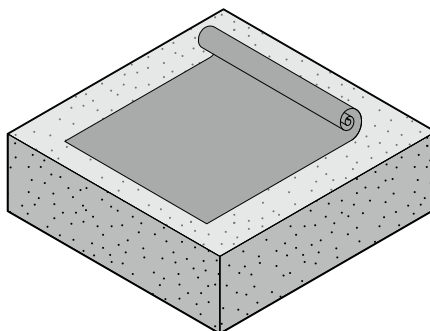
GROUND STABILIZATION

Permeable or vegetated ground must be stabilized by compacting the soil.



GEOTEXTILE

Cover permeable or vegetated ground with geotextile to prevent plant growth beneath the terrace.



TERRACE INSTALLATION

STEP 2 - POSITIONING AND ADJUSTING THE PEDESTALS

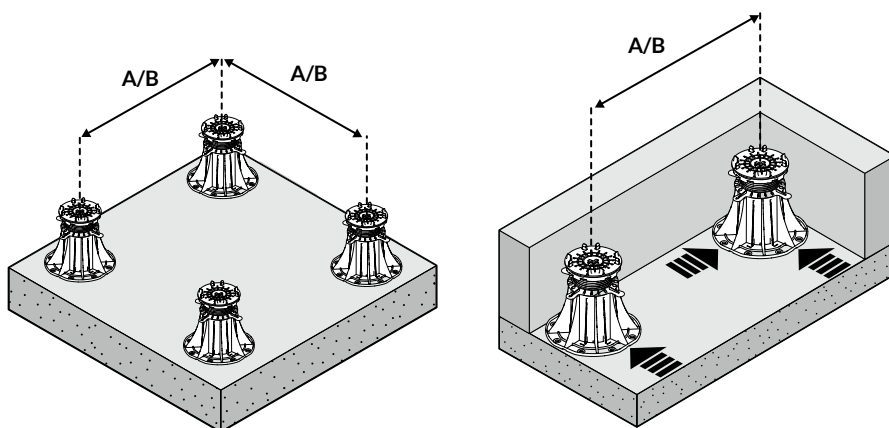
SPACING

The maximum distance between pedestals is:

A) ADEC-ADJ25x45 - max. 60 cm

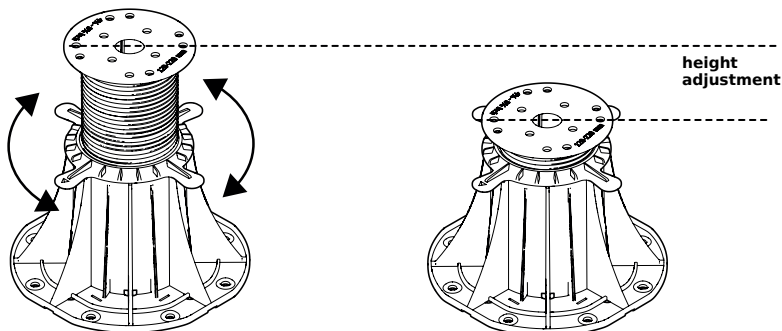
B) ADEC-ADJ40x45 - max. 80 cm

Trim the pedestal bases at perimeter boundaries so that the pedestals can be positioned as close to the edge as possible.



HEIGHT ADJUSTMENT

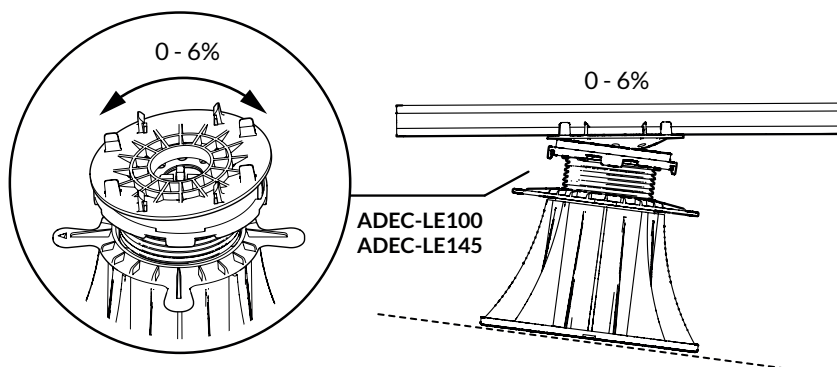
The pedestals have a threaded mechanism for compensating for unevenness and setting the required terrace height. It allows continuous height adjustment with millimeter precision.



SLOPE ADJUSTMENT

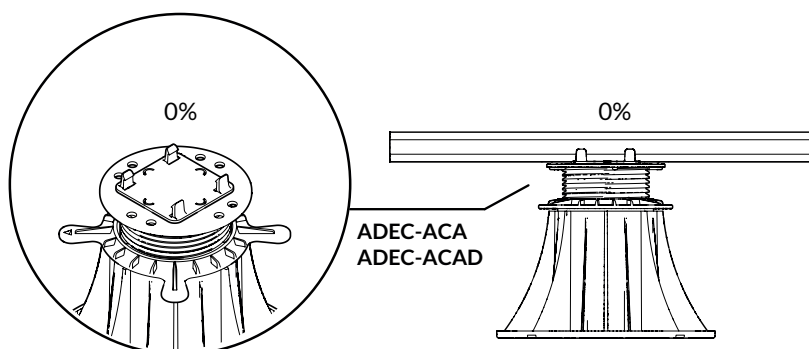
For terraces with slopes exceeding 2%, use self-levelling heads:

ADEC-LE100 for STANDARD pedestals and ADEC-LE145 for SPIRAL and MAX pedestals.



FLAT TERRACES

For flat terraces with slopes of up to 2%, use fixed click adapters: ADEC-ACA for STANDARD and CLEVER LEVEL pedestals, or ADEC-ACAD for SPIRAL and MAX pedestals.

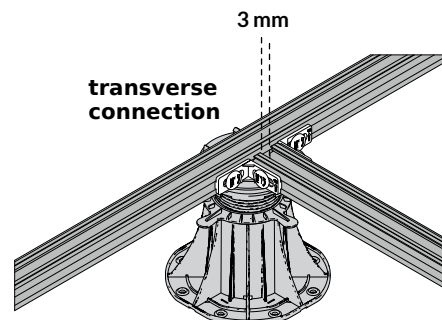
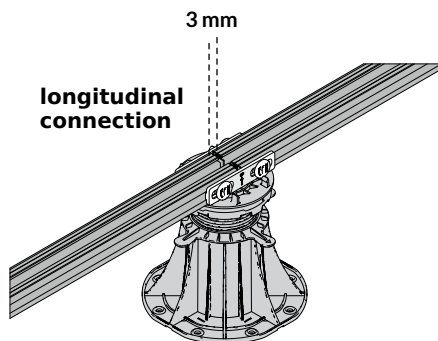


TERRACE INSTALLATION

STEP 2 - POSITIONING AND ADJUSTING THE PEDESTALS

SELF-LEVELLING HEAD

When using a self-levelling head, joists can be joined directly over the pedestal.

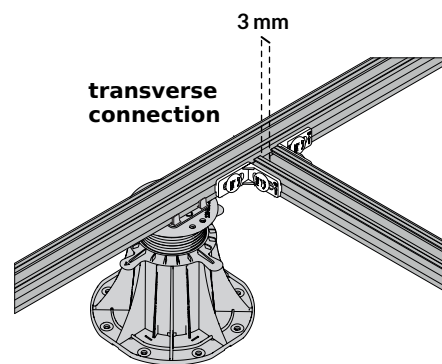
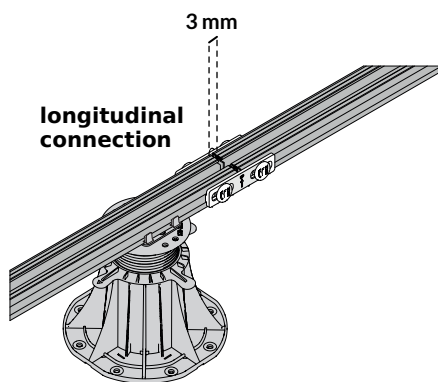


FIXED CLICK ADAPTER

When using a fixed click adapter, the joist connection must be outside the pedestal head, but as close to the pedestal as possible.

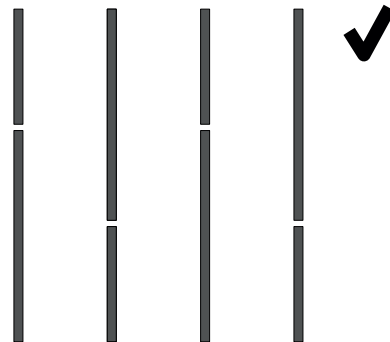
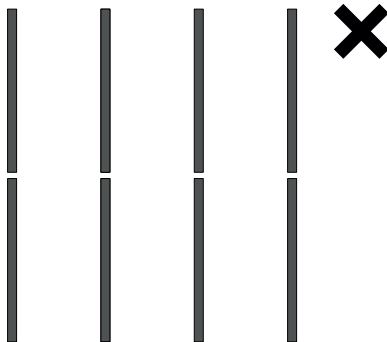
Transverse joists connect the joists and prevent them from spreading apart. They are not load-bearing members.

Leave a 3 mm gap at joist ends. This gap prevents water from accumulating between the joists.



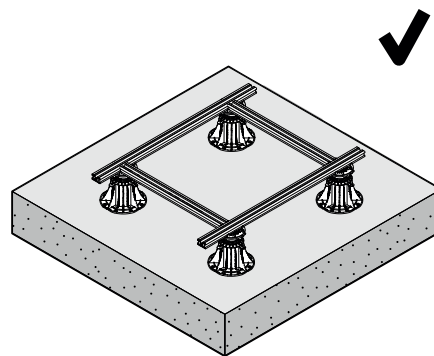
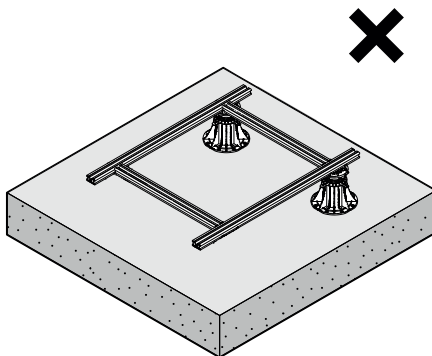
JOIST CONNECTIONS

Stagger the joist connections. Avoid aligning all joints in the same location.



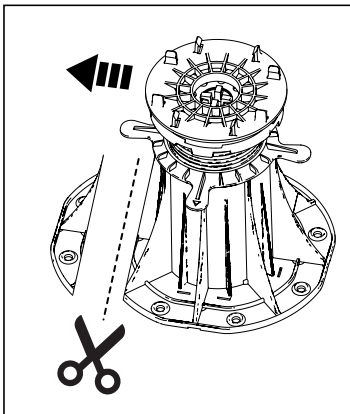
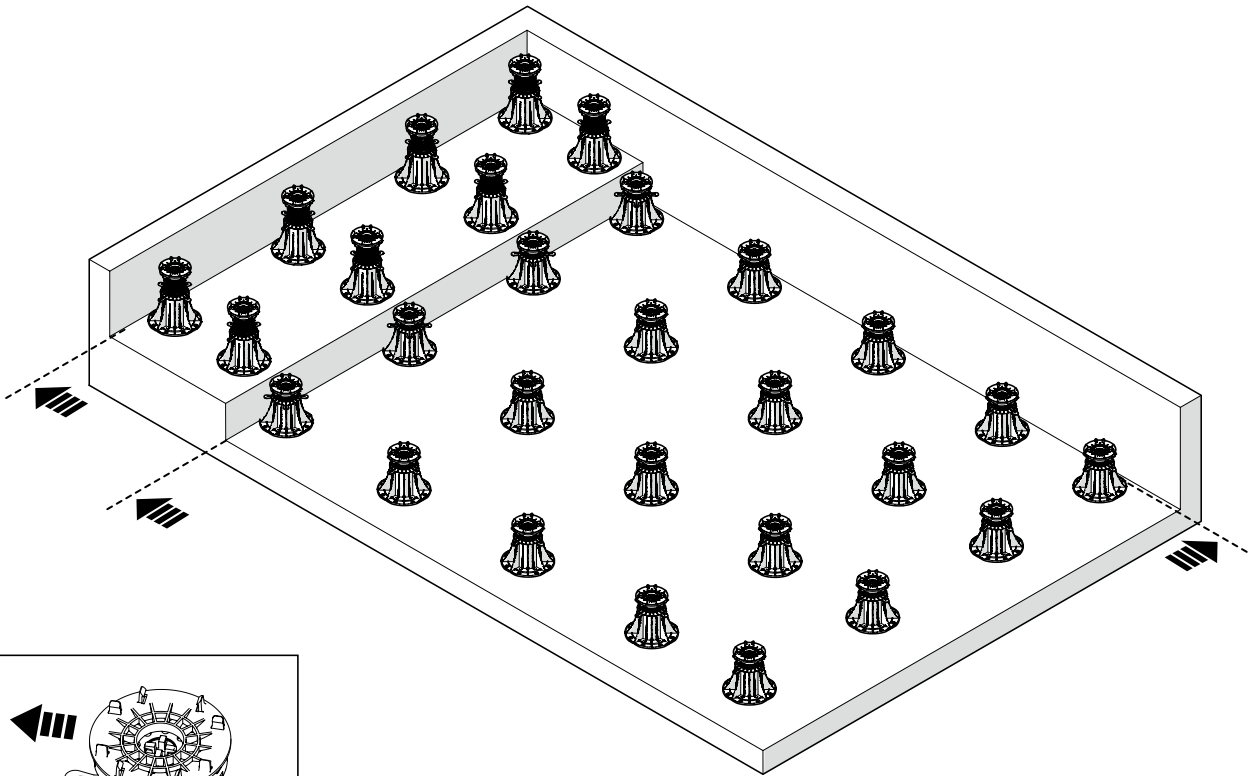
JOIST SUPPORT

Each joist must always be supported by at least 2 pedestals.

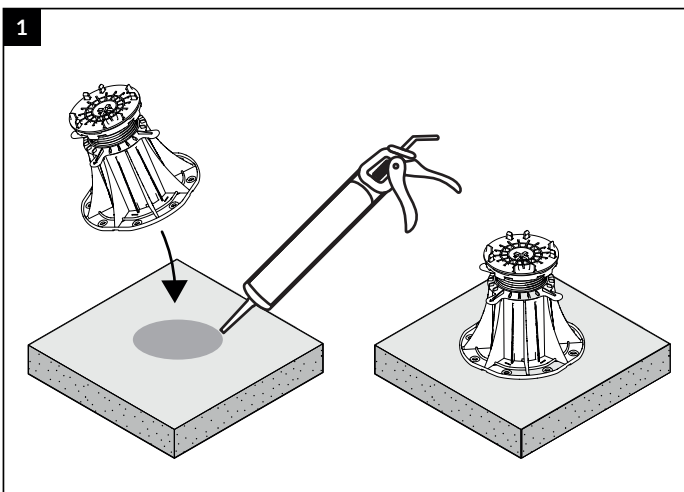


TERRACE INSTALLATION

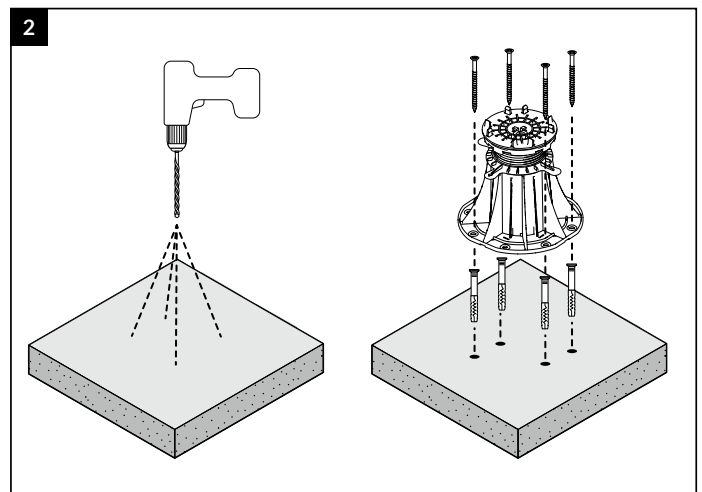
STEP 3 - PLACING THE PEDESTALS



Trim the pedestal bases at perimeter boundaries (walls) so that the pedestals can be positioned closer to the wall.



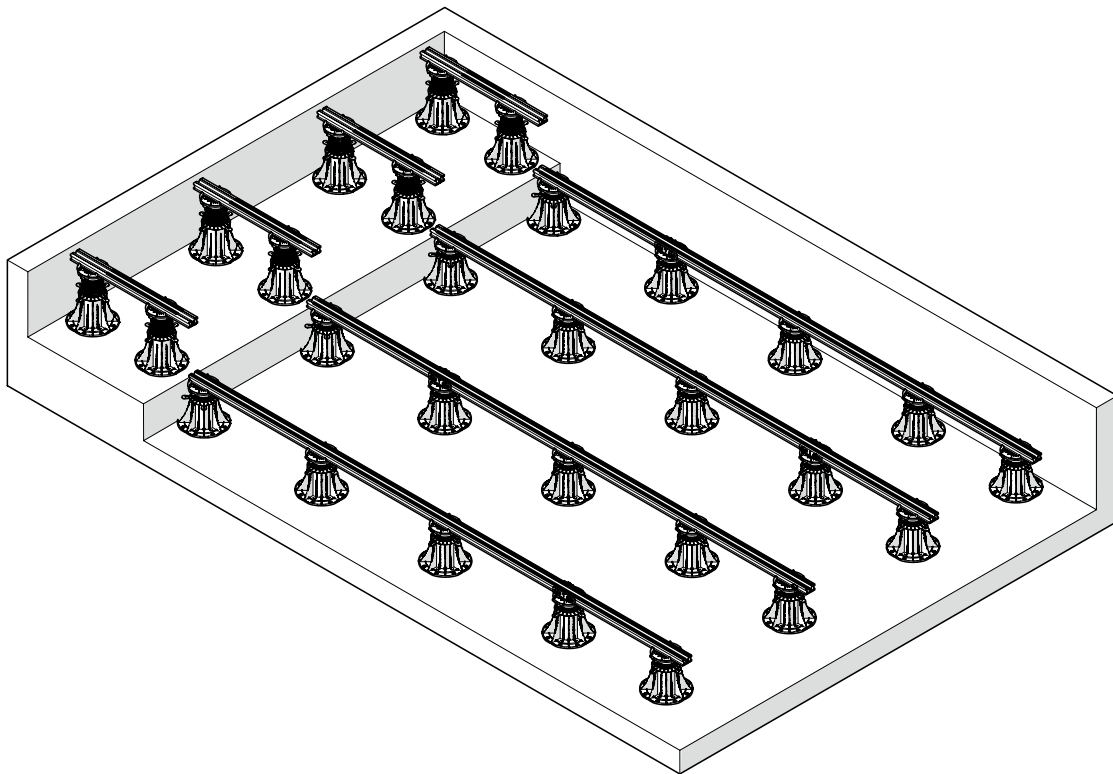
The pedestals can be fixed with construction adhesive.



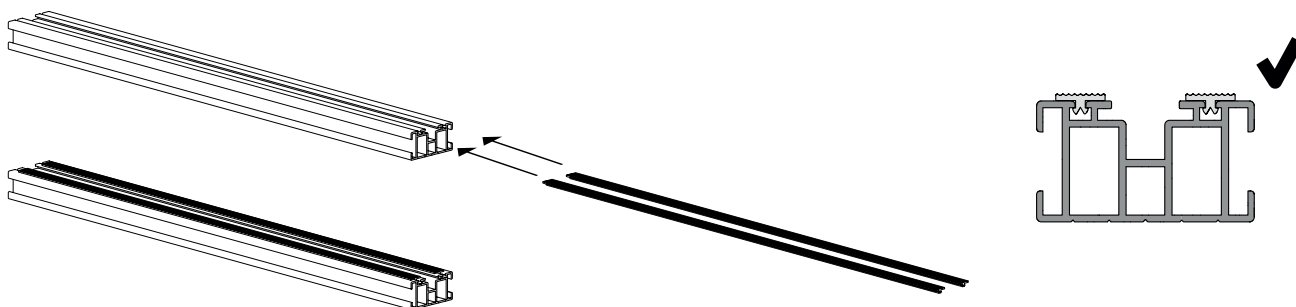
If there is no waterproofing layer beneath the terrace, the pedestals may additionally be anchored to the substrate. Not all pedestals need to be anchored. It is recommended to anchor the perimeter pedestals wherever possible.

TERRACE INSTALLATION

STEP 4 - PREPARING THE JOISTS

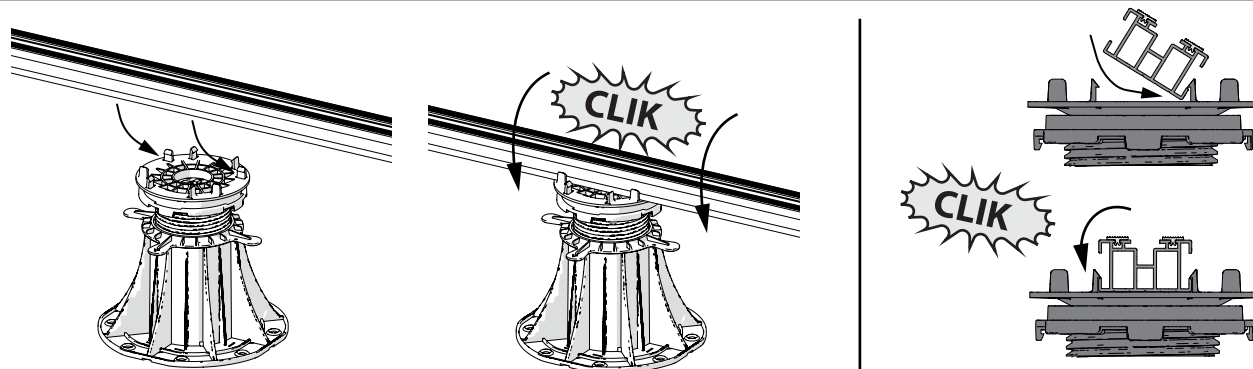


1



Slide the rubber joist soundproofing tape AluDeck ADEC-AJR into the joists.

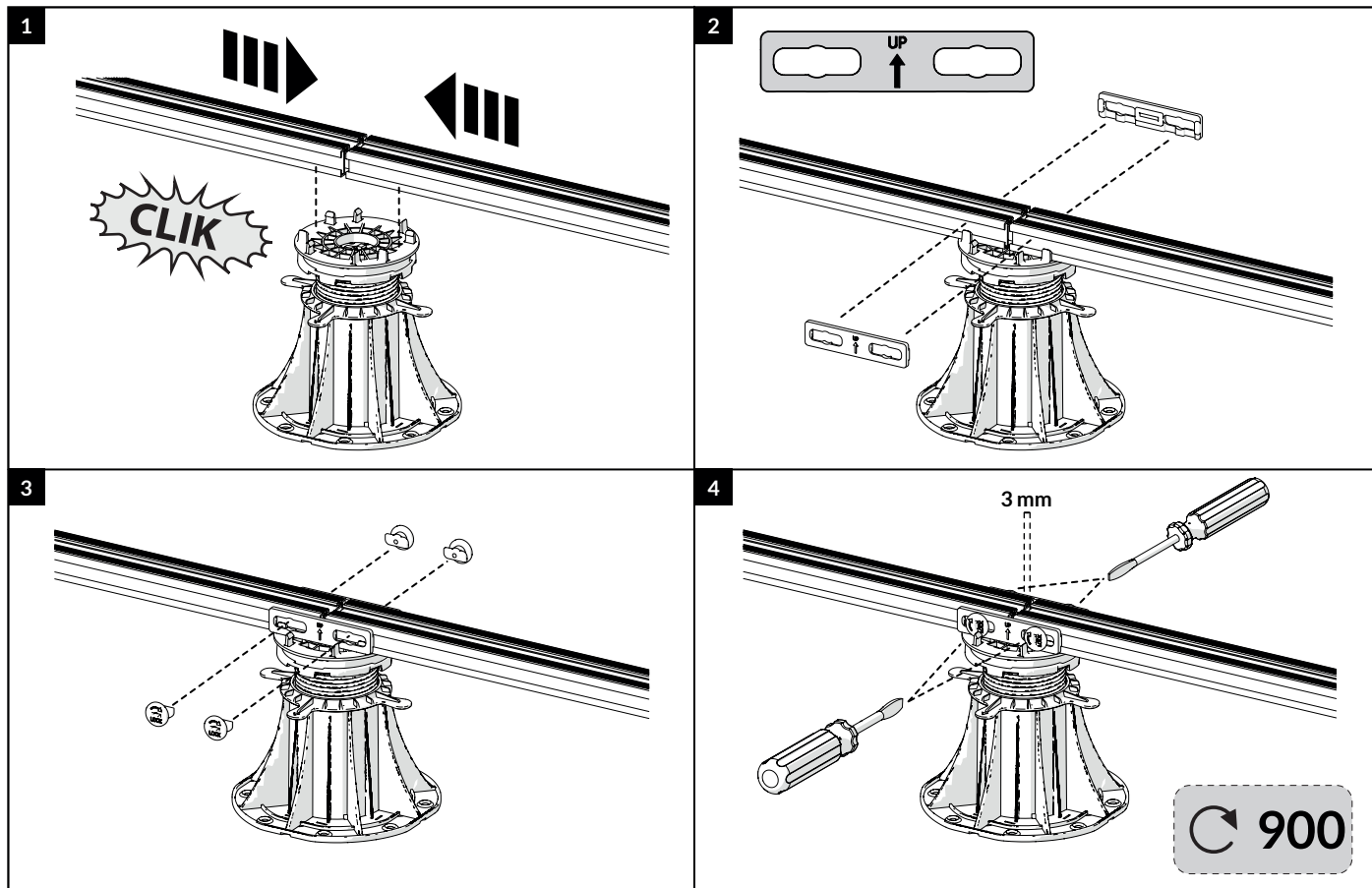
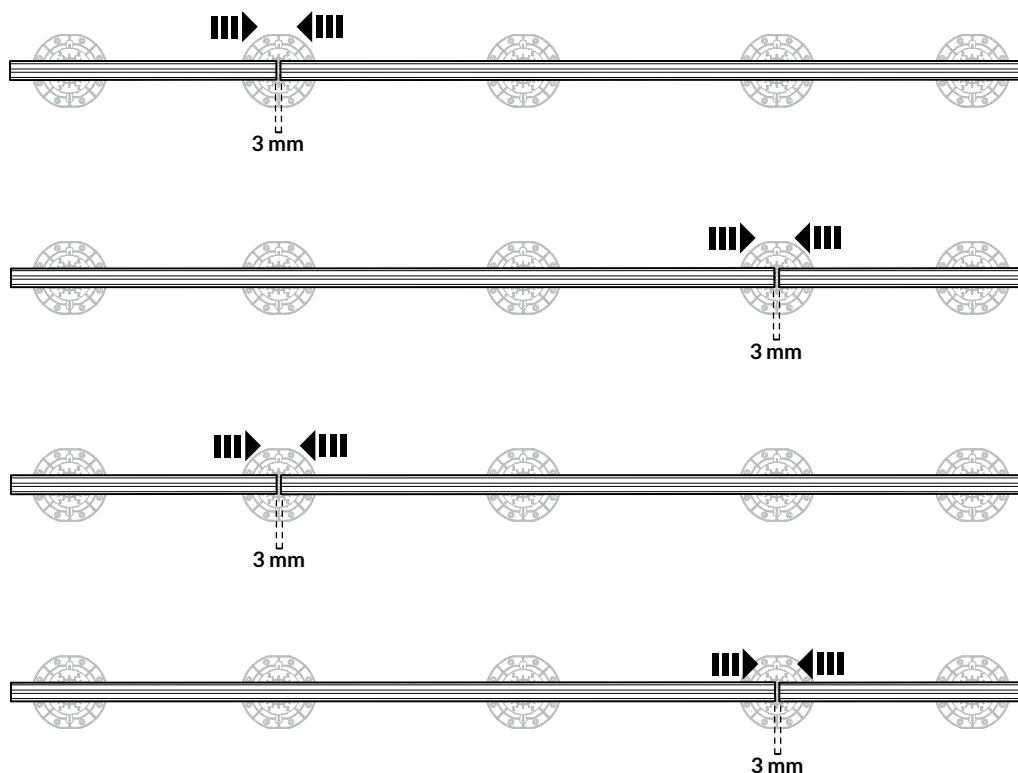
2



Seat the joists securely in the heads. Install the joists without tools. The system has special snap-fit catches that hold the joists in position. Insert the joists into the adapters at an angle, as shown.

TERRACE INSTALLATION

STEP 5 - JOINING JOISTS LENGTHWISE

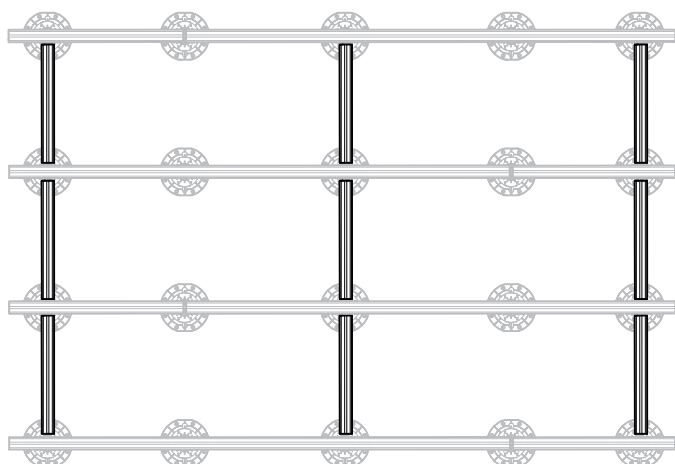


The connectors allow movement caused by thermal expansion. The locking clips can be permanently secured to the joist with self-drilling screws.

TERRACE INSTALLATION

STEP 6 - CONNECTING TRANSVERSE JOISTS

Transverse joists prevent the substructure from spreading apart. They do not perform the load-bearing function of longitudinal joists.

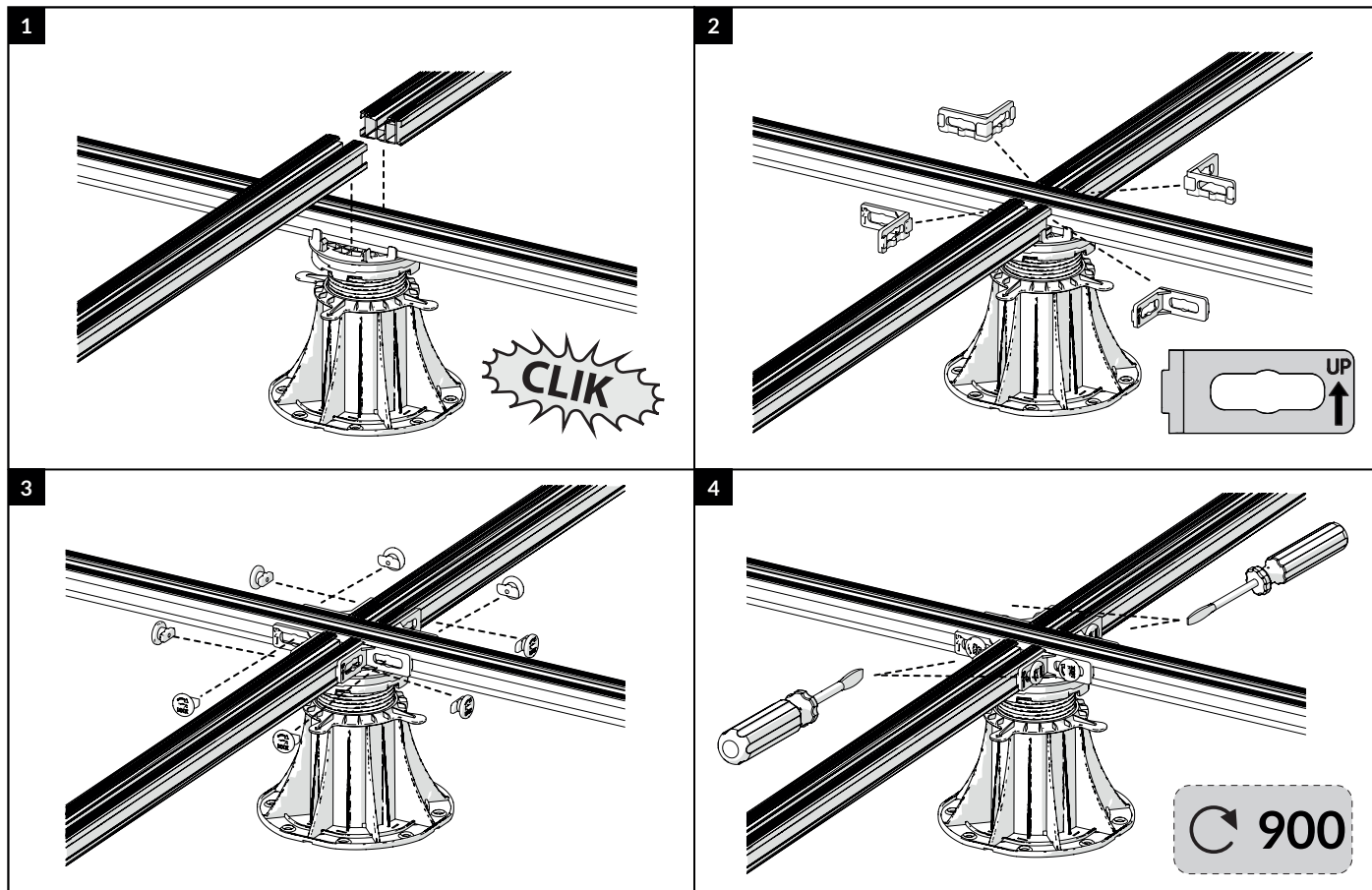


For paved terraces, transverse joists prevent the substructure from spreading apart. They are not required where perimeter restraints prevent the joist substructure from spreading.

For terraces with timber or WPC decking boards, transverse joists stiffen the substructure and reduce the risk of uplift caused by board warping. To fully prevent boards from lifting the terrace, use a grid frame of joists screwed together.

Set the spacing of transverse joists to suit the design and the terrace surface material. As a minimum, a transverse connection at the beginning and end of each joist is recommended.

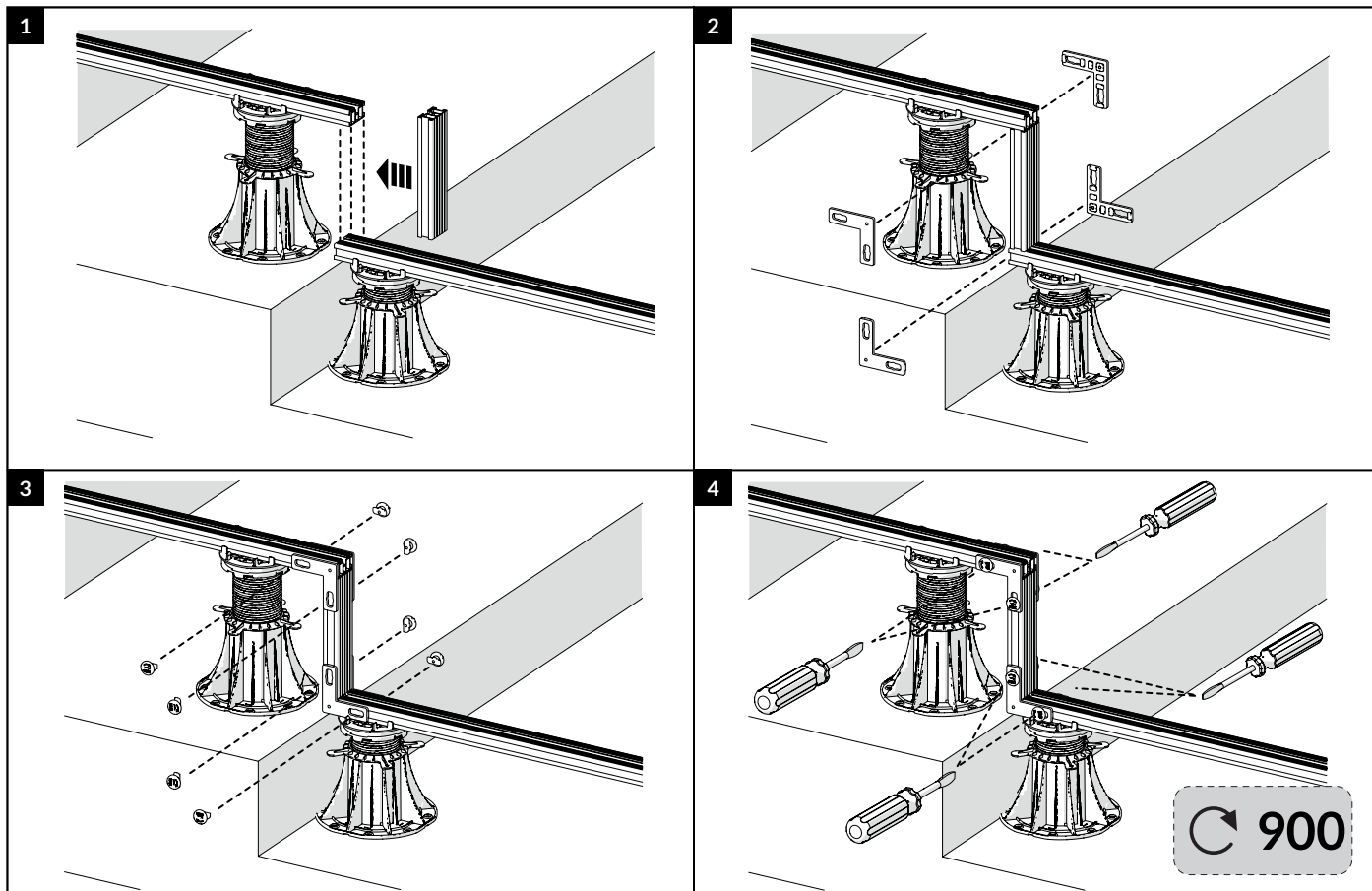
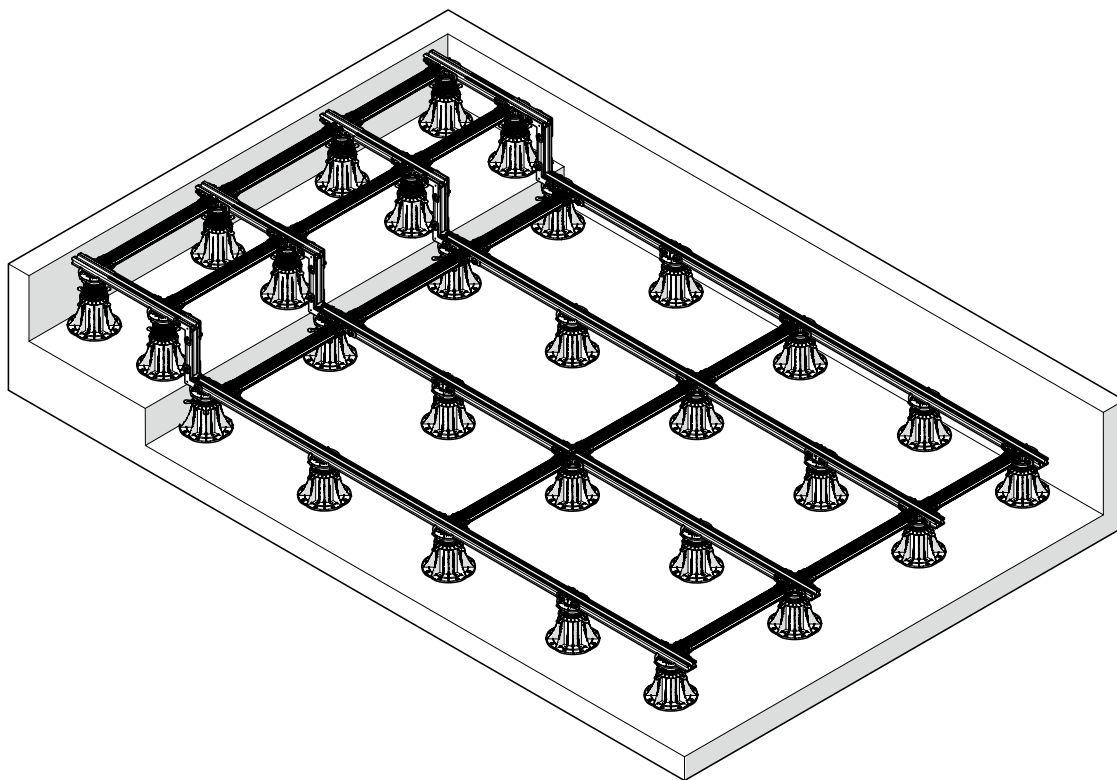
An outer frame of transverse joists around the terrace perimeter is recommended.



The connectors allow movement caused by thermal expansion. The locking clips can be permanently secured to the joist with self-drilling screws.

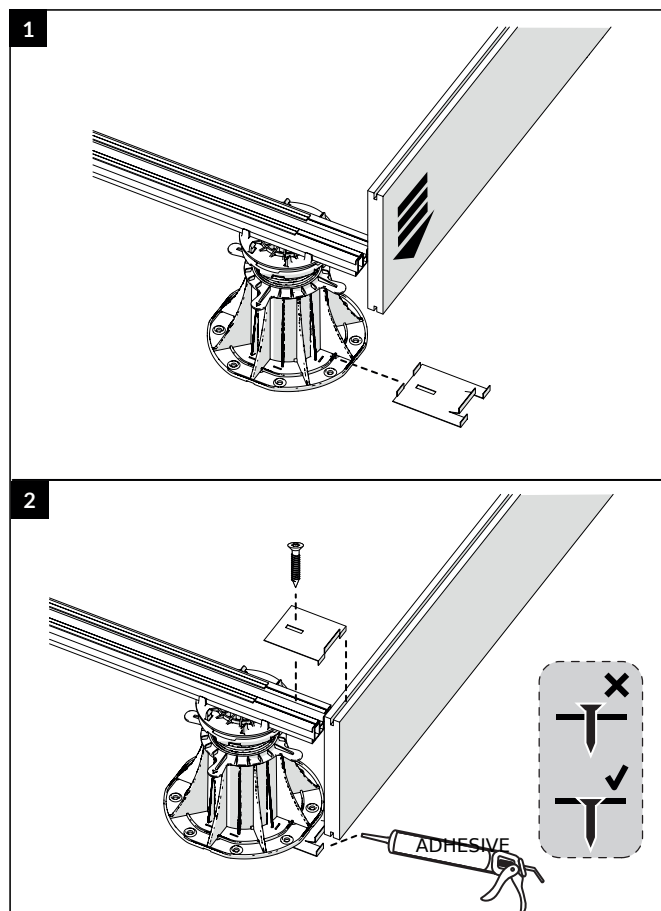
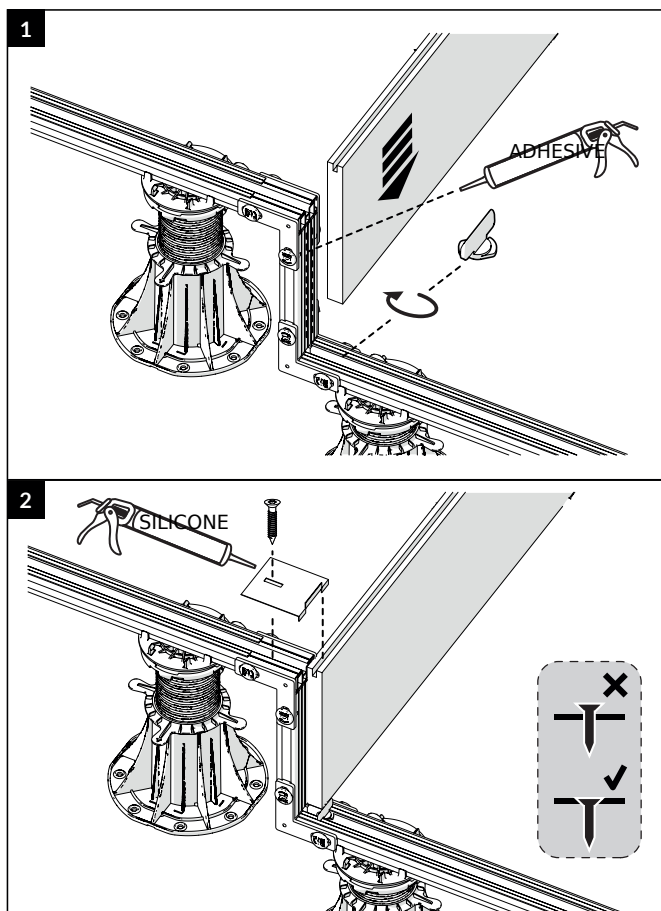
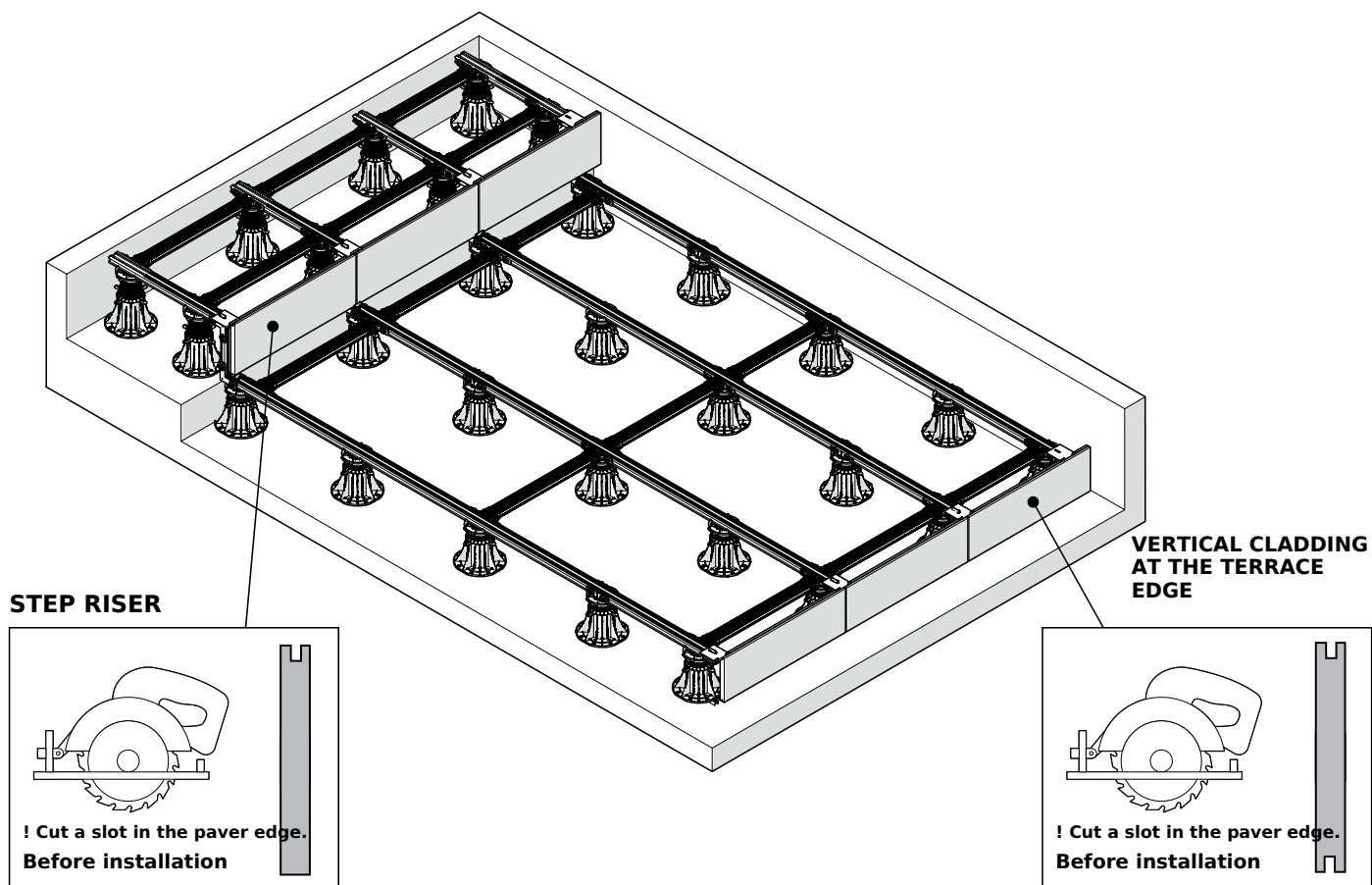
TERRACE INSTALLATION

STEP 7 - PREPARING A STEP / SLOPE



TERRACE INSTALLATION

STEP 8 - INSTALLING VERTICAL PAVERS

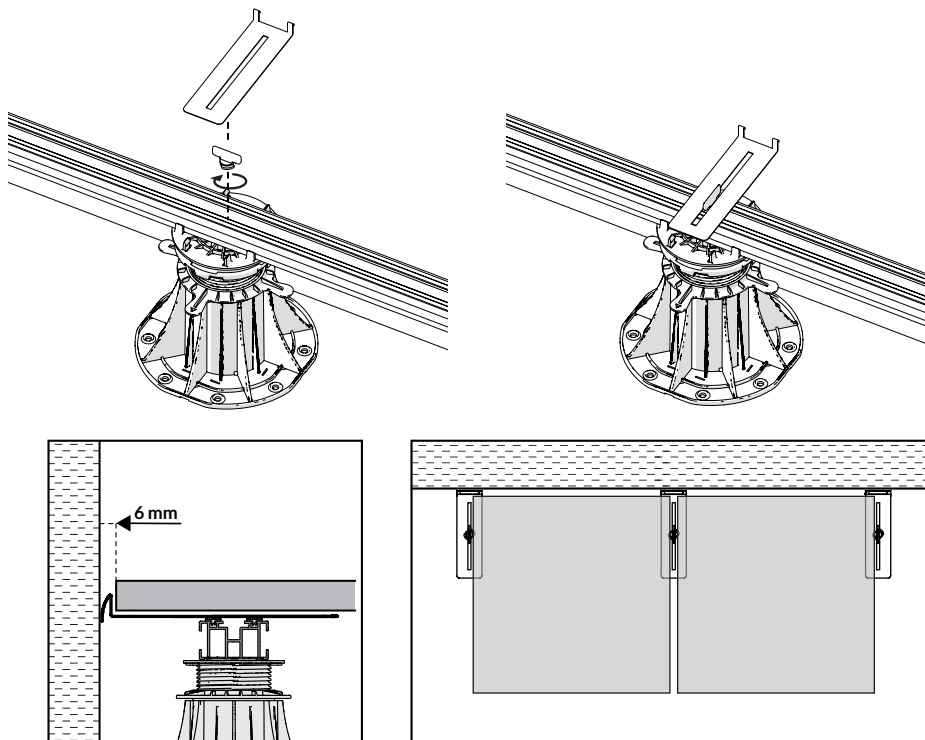


TERRACE INSTALLATION

STEP 9 - LAYING THE PAVERS

ALONG PERIMETER BOUNDARIES

Use AluDeck sliding linear spacers ADEC-APL3 or ADEC-APL5 for pavers along perimeter boundaries. Use the AluDeck Stainless Steel Wall Clip ADEC-WA to provide an expansion gap between the paver and the boundary.

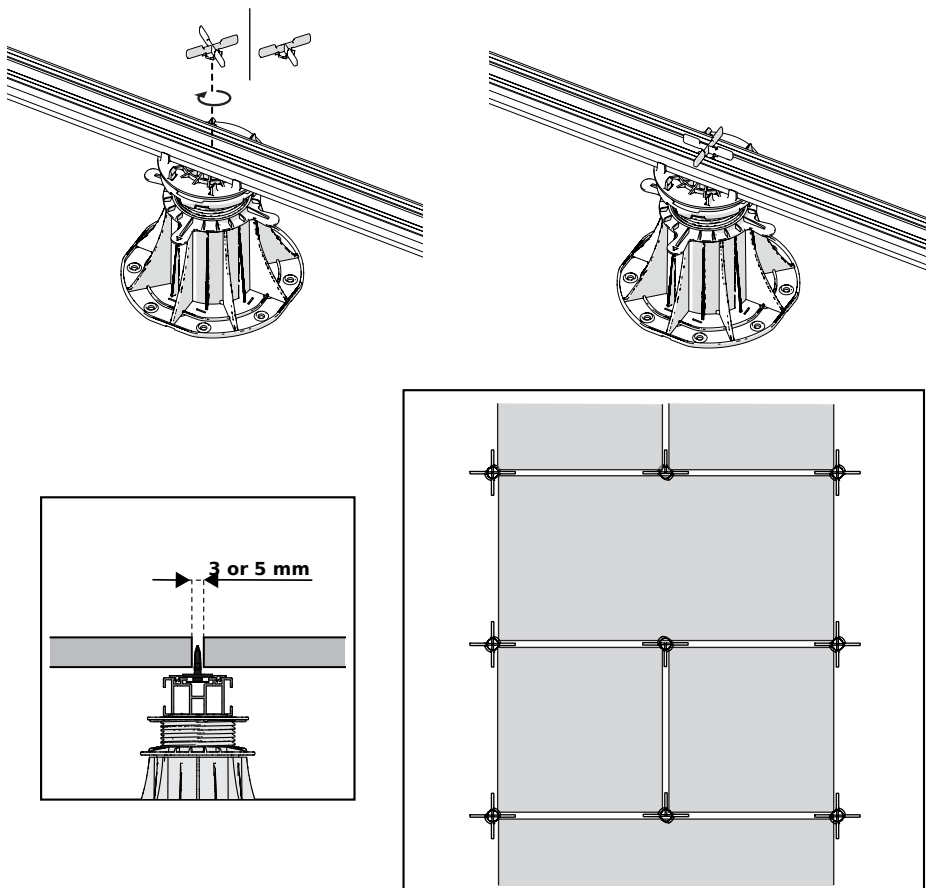


FOUR PAVER CORNERS

Separate four adjacent pavers using AluDeck sliding cross spacers ADEC-APK3 (3 mm) or ADEC-APK5 (5 mm).

TWO PAVER CORNERS

Separate two adjacent pavers using AluDeck sliding T-spacers ADEC-APT3 (3 mm) or ADEC-APT5 (5 mm).

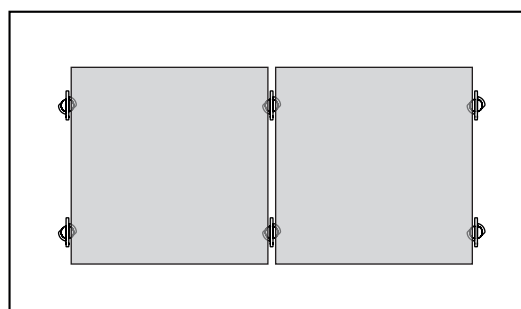
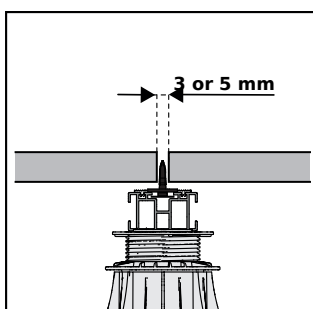
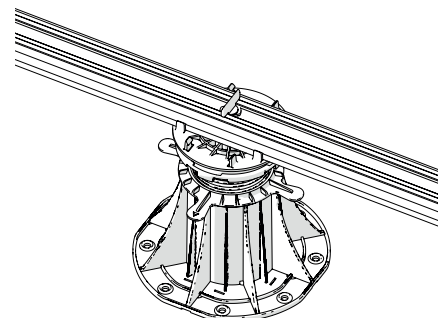
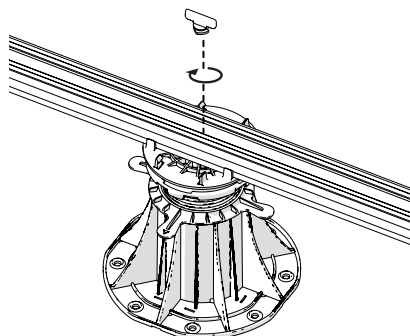


TERRACE INSTALLATION

STEP 9 - LAYING THE PAVERS

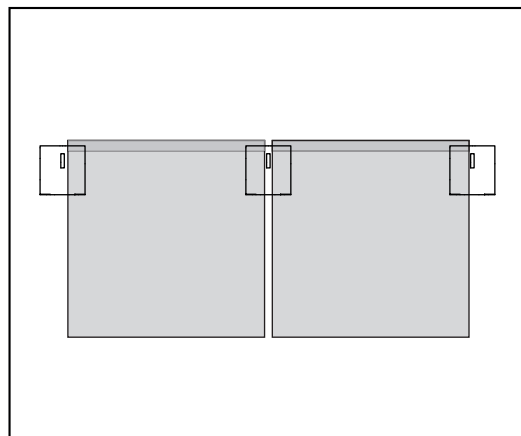
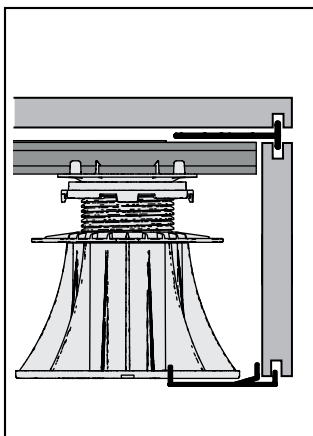
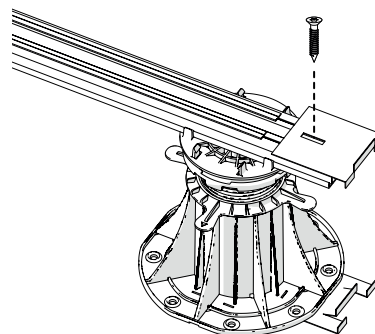
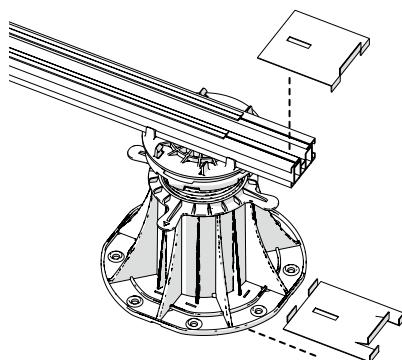
ADJACENT PAVERS AWAY FROM CORNERS

Separate two adjacent pavers using AluDeck sliding linear spacers ADEC-APL3 (3 mm) or ADEC-APL5 (5 mm).



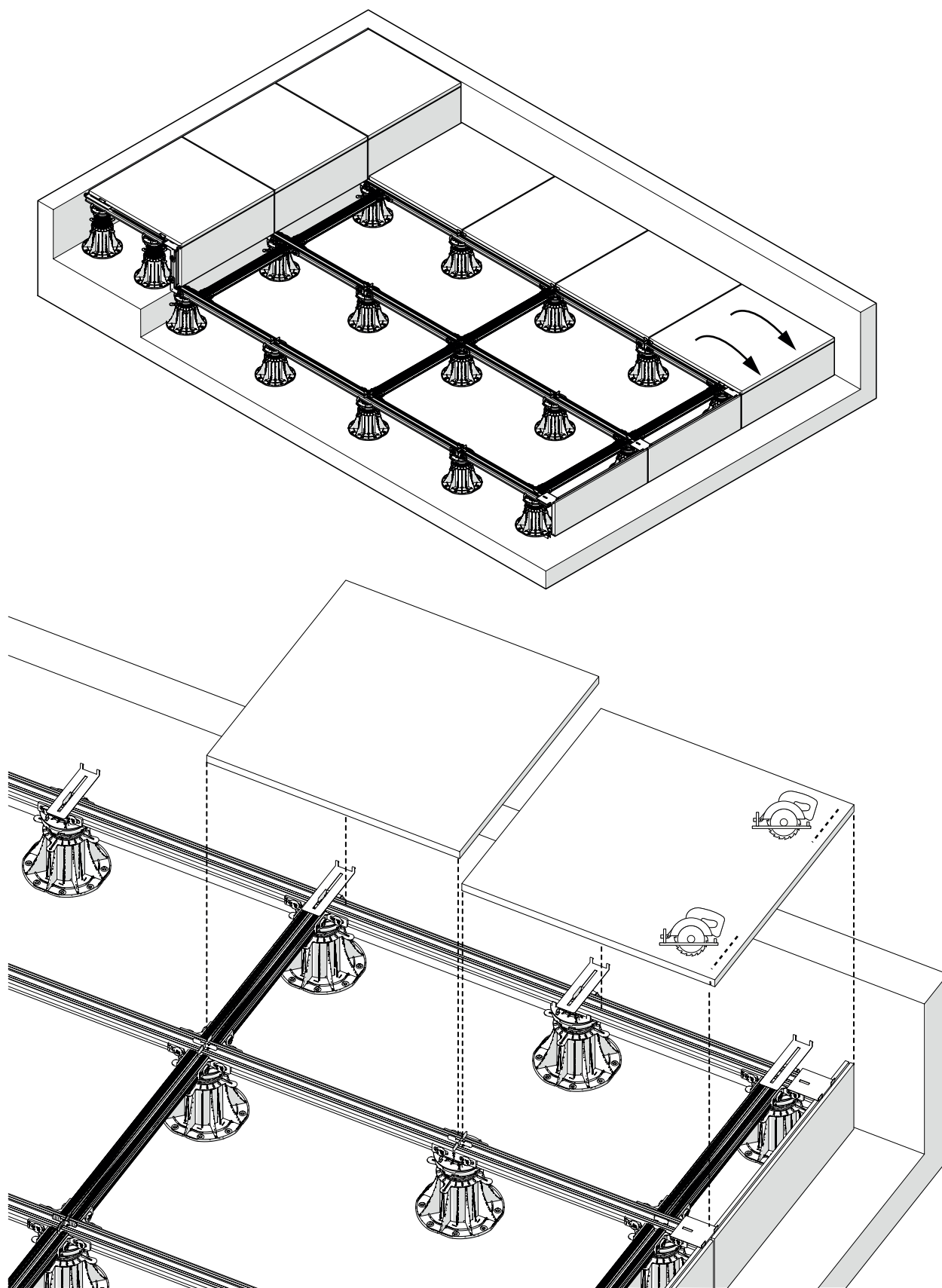
VERTICAL AND PERIMETER PAVERS

Fit the slotted paver edges onto the clip tabs. Secure the clips to the joist with self-drilling screws. Fasten the upper closure clip so that the screw head does not project above the rubber tape. A small amount of silicone may also be applied between the clip and the paver. Insert the tabs of the lower clips into the openings in the pedestal bases.



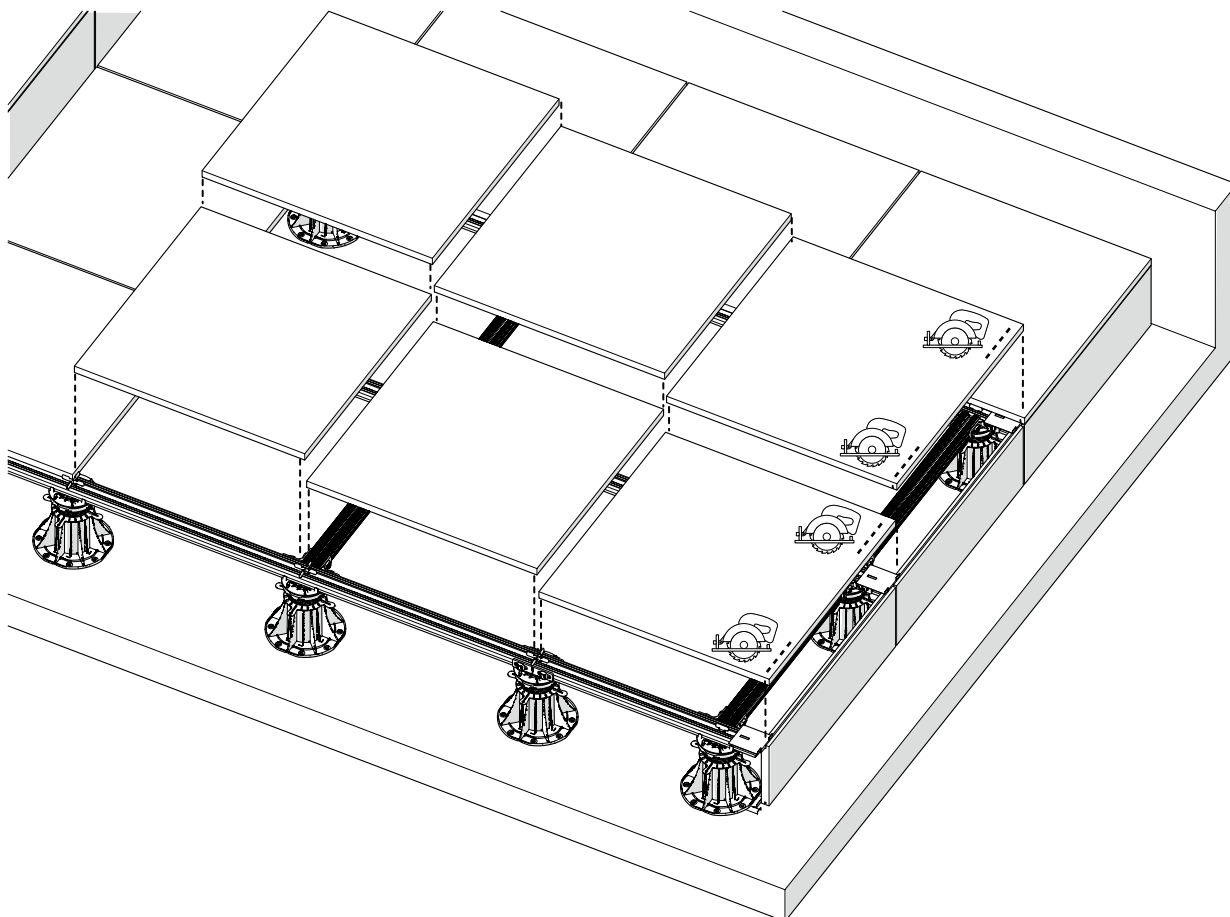
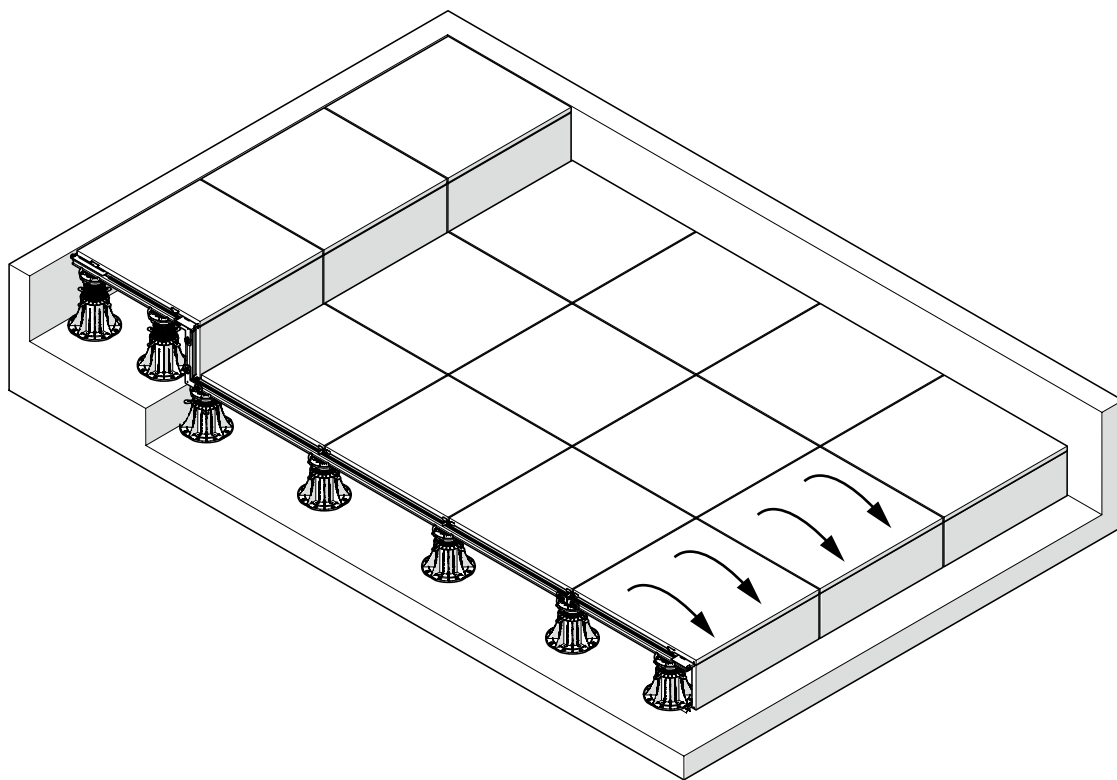
TERRACE INSTALLATION

STEP 9 - LAYING THE PAVERS



TERRACE INSTALLATION

STEP 9 - LAYING THE PAVERS



SOLVER.

