

PRODUCT CARD

Short name

ADEC-ADJ40X45X2000-(1)

Full name

AluDeck aluminium joist 40×45×2000 mm

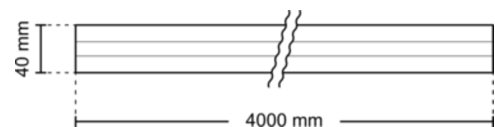
BASE DATA

Product group	AluDeck
Application	• wpc decking boards • wooden decking • terrace joist • terrace tiles
Code	109.010211
EAN	5 9 0 4 2 7 6 3 4 7 0 3 4  5 9 0 4 2 7 6 3 4 7 0 3 4



TECHNICAL DATA

Minimum height	40 mm
Maximum height	40 mm
Total dimension - length	2000 mm
Total dimension - width	45 mm
Total product dimensions - height	40 mm
Head diameter (top plate) Ø 0 mm (0 cm ²)	
Base diameter	Ø 0 mm
Weight	~1.71 kg
Wytrzymałość na obciążenia do	0 kg



Fire resistance	E
Temperature range	od -20°C do 65°C
Color	black
Mandatory warranty	Limited 10-year residential and commercial warranty
Country of origin	Poland
Material name	Aluminium joists
Percentage of recycled material	0 %
Type of waste	• non-hazardous waste - recyclable
Project type	• Fountain • exterior use

What finishing materials can be used

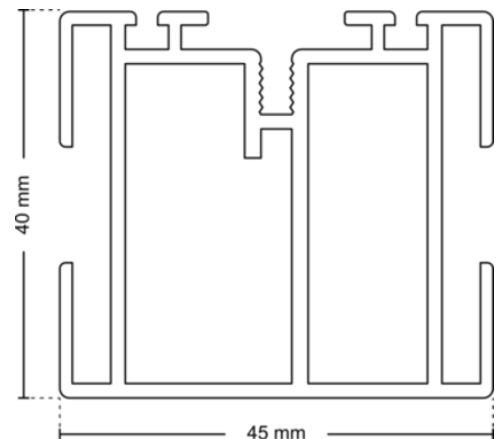
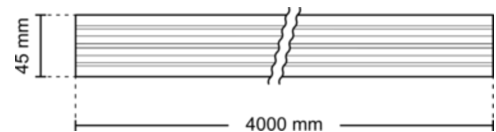
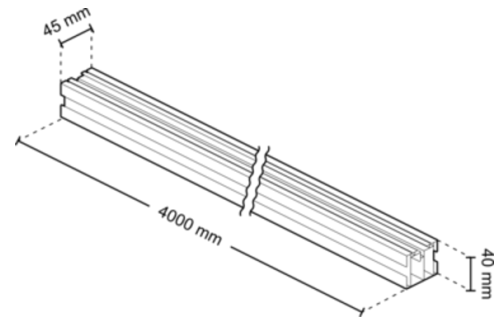
- AluDeck
- ceramic tile
- wooden decking boards
- concrete paver
- stone pavers

Consists of

ALU JOIST 40x45x2000

CERTIFICATES

Product certified by the Building Research Institute.
NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2022-2174



LOGISTICS INFORMATION

Package	Quantity Packaging Value	Package weight	Empty package weight	Palett	Number of packages on a pallet	Number of pieces on a pallet	Pallet weight	Empty pallet weight
-	-	- kg	- kg	-	-	-	- kg	- kg

Characteristic features

Product features:

Material and durability: Made from high-quality aluminum, ensuring complete resistance to corrosion, rotting, and thermal deformation.

Unique profile shape: The structure is equipped with a dedicated socket for an integrated rubber seal, which dampens the connection between the structure and the paver.

Mounting socket: Equipped with a special socket with zigzag vertical walls, facilitating the initial thread grip of the screw when installing pavers or boards.

Connection system: The side walls feature special hooks enabling screwless longitudinal and transverse connection, as well as installation on "click" type pedestals.

Application

Application of raised deck terraces:

The raised deck terrace system finds wide application in modern residential, commercial, and public utility construction. This solution is intended for creating:

1. terraces, balconies, and loggias
2. usable roofs and green roofs
3. recreational areas around buildings
4. pedestrian walkways, decks, and squares
5. spaces above technical installations requiring easy service access.

The system enables quick installation without the use of mortars and adhesives, ensuring free water drainage and ventilation under the entire terrace surface. Thanks to adjustable pedestals and/or joist construction, it allows for leveling slopes and height differences in the substrate.

Raised deck terraces are a particularly recommended solution where the following are important:

1. durability and resistance to weather conditions
2. aesthetic appearance and even surface
3. easy access to the insulation layer and installations
4. possibility of quick modernization or surface replacement

Load-bearing structures: Construction of a frame load-bearing structure for raised deck terraces with ceramic and stone pavers, as well as decking boards.

Increased strength: Ideal for projects requiring linear support for pavers, which significantly reduces stress and the risk of cracking in the surface material.

Cost optimization: Using joists with a larger cross-section (e.g., 140 mm) allows for increasing the distance between pedestals, reducing their required number in the project.

Public investments and ramps: Thanks to its high rigidity, the system performs excellently in the construction of ramps and facilities with high traffic intensity.

Advantages

Advantages of raised deck terraces:

1. Height and level adjustment – possibility of precise leveling of the surface without the need for screeds
2. Effective drainage – gaps in the terrace drain water to the space under the terrace
3. Easy maintenance – access to installations and substrate without dismantling the entire structure
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5. Thermal and acoustic insulation – the air layer under the pavers improves user comfort
6. Quick installation and dismantling – possibility of reusing elements when changing the arrangement

7. Durability – resistance to weather conditions and usage loads

Product advantages:

1. Reduction of paver deflection by approx. 22%: Linear support of the paver edge instead of point support drastically increases safety of use.
2. Installation 20% faster: No need to drill aluminum and use structural screws significantly reduces work time.
3. High horizontal stability: Creates a monolithic structure resistant to vibrations and paver displacement.

Installation recommendations

A raised deck terrace does not require permanent anchoring to the substrate. Free water drainage and ventilation must be ensured under the entire surface of the terrace. The substrate must be level, stable, and load-bearing. A slope of at least 1.5–2% towards the drainage must be provided. In the case of higher loads, densify the support grid. Level the terrace height by adjusting the pedestals. At building expansion joints, maintain a gap and seal it with flexible elements. Pedestals cannot be stacked on top of each other - meaning the base of the upper pedestal cannot be placed on the top cap of the lower pedestal. The holes in the base are only for stacking pedestals during packaging.

Support: The joist must be mounted on the heads of STANDARD, MAX, SPIRAL, RAPTOR, or CLEVER LEVEL series pedestals using dedicated adapters with the "click" system. Joining: To connect the profiles, use screwless ALC (longitudinal) and ACC (transverse) connectors to maintain the frame's rigidity. Expansion joint: Sliding cross-shaped APS spacers should be inserted into the joist's guides to set the gap between the pavers (3 or 5 mm). Edges: At the ends of the structure, use AEC end clips, which serve to lock the edge pavers and mount vertical fascia boards.

Tools

- Measure - Spirit level - String line or cross line laser - Pencil or construction marker - Mason's rule - Rubber mallet - Work gloves - Safety glasses - Hearing protection - Dust mask - Metal saw blade or jigsaw with metal cutting blade for trimming elements

Basic installation: The "click" system and screwless connectors do not require power tools for frame assembly. Connector locking: Only a flat-head screwdriver is required to tighten the mechanisms in the ALC and ACC connectors. Cutting: Standard tools for cutting aluminum (e.g., a miter saw with a blade for soft metals).

Recommendations for use

The raised deck terrace is intended for use in accordance with its purpose – as a recreational surface. Do not point-load the pavers (e.g., by placing very heavy objects on a small area). Avoid mechanical impacts that could damage the pavers or the support structure. The terrace surface should be regularly swept, and leaves, sand, and debris that may accumulate in the joints should be removed. At least once a year, check the stability of the pavers and pedestals. After winter or heavy rainfall, check the drainage system for blockages. If looseness or damage is found – perform adjustment or replacement of the elements. If access to the space under the pavers is required (e.g., for installations, drains), they should be carefully lifted using appropriate lifters or lifting tools. If access to the space under the pavers is required (e.g., for installations, drains), they should be carefully lifted using appropriate lifters or lifting tools. In the case of a slippery surface, use anti-slip mats or additional protective coatings, e.g., around the pool.