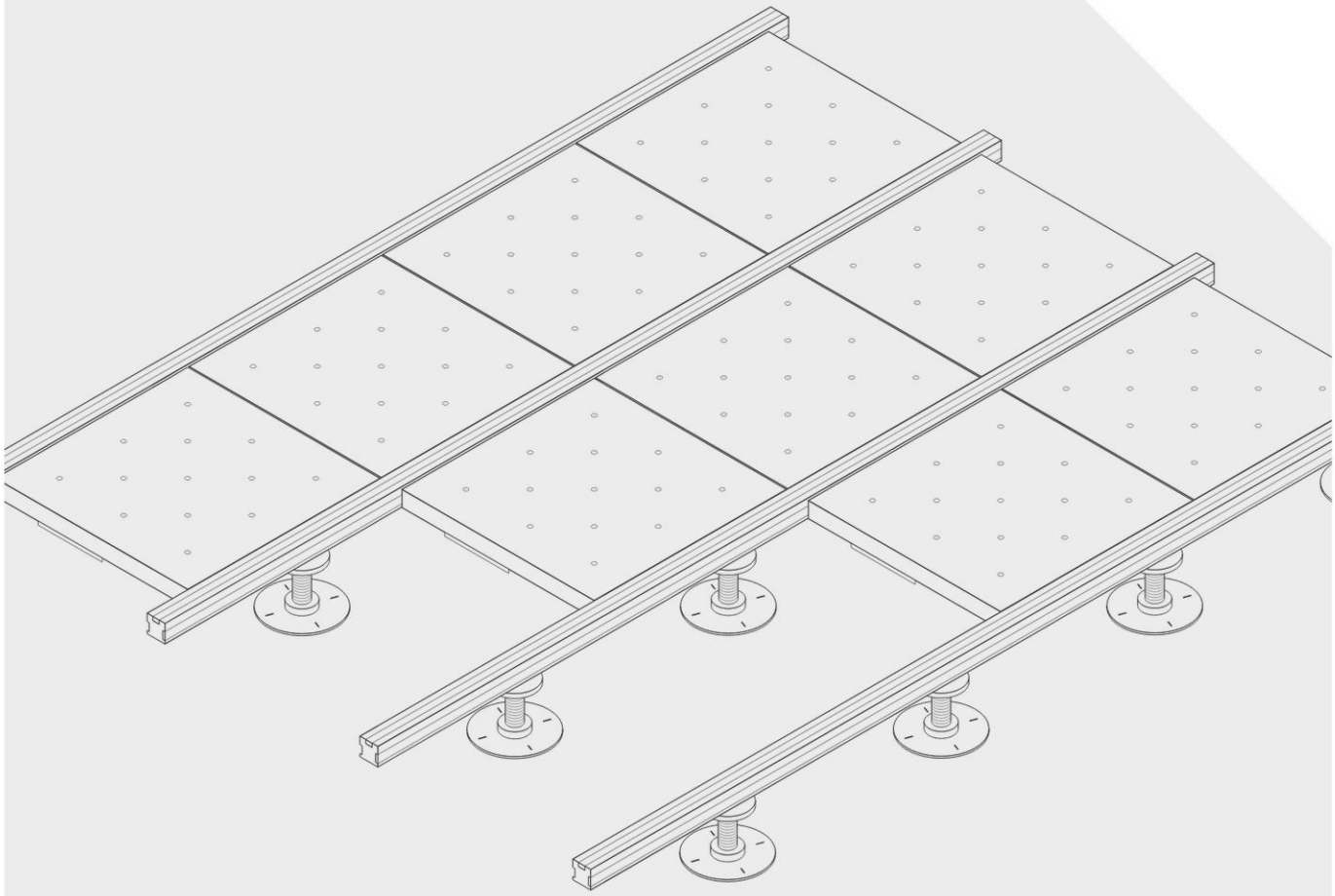
Kinley

INSPIRED PLACES MADE POSSIBLE

STRUCTA FLOOR STRUCTURE PANELS

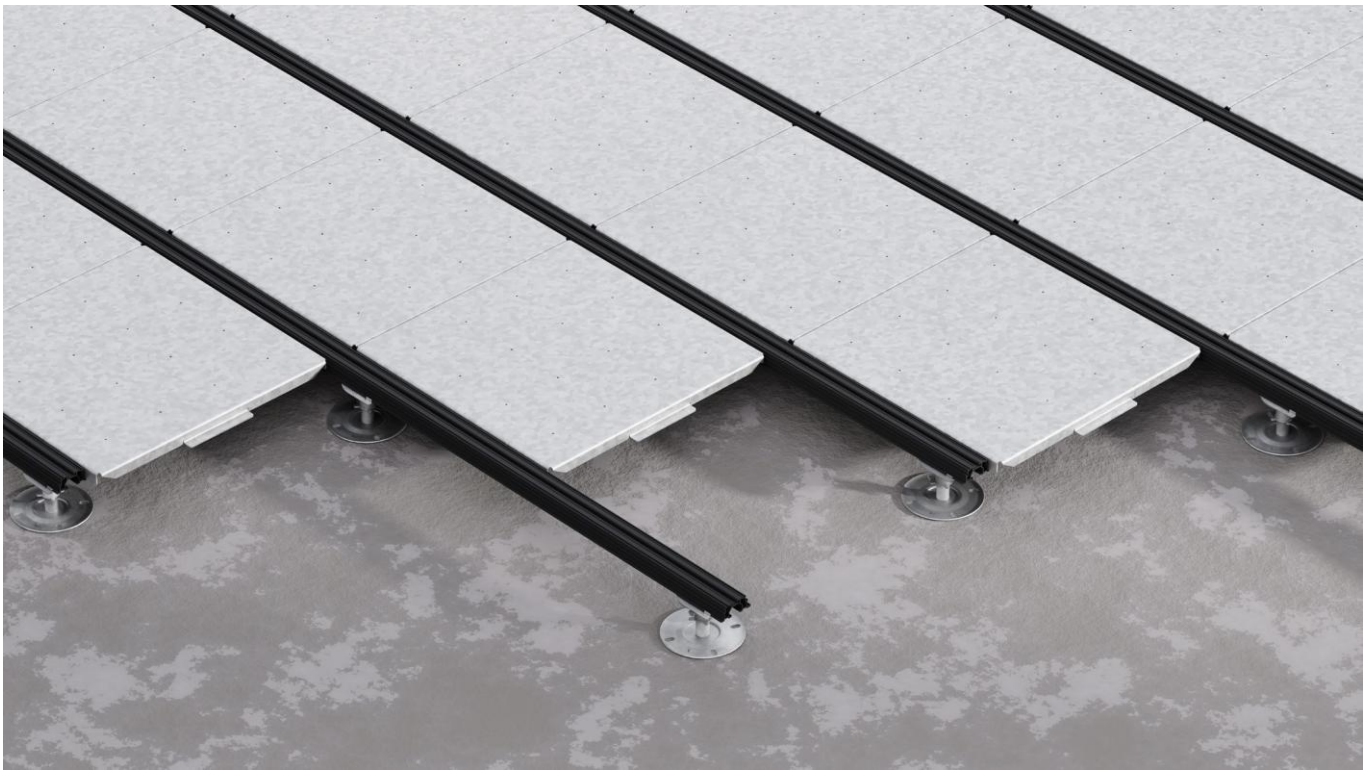
Technical data sheet



Reference:

DS-APT-0423

OVERVIEW



PRODUCT FEATURES

- Perforated steel floor panels work as part of the support structure system to provide a sturdy, permeable raised platform for laying surfaces such as artificial grass and resin bound gravel, and for installing planters off the ground – eliminating the need for a heavy, traditional, solid construction.
- Perforated panels allow free drainage and eliminate the requirement for a drainage board.
- Manufactured from high performance galvanised steel that displays excellent resistance to atmospheric corrosion.
- Fast and easy installation to create a strong, stable, external raised floor structure.

APPLICATION

Roof terraces, balconies and other external areas. Manufactured from pre-galvanised steel to provide a high performance solution in normal environments.

WORKS AS PART OF THE KINLEY TERRACE SYSTEM

A key element of the system, these floor structure panels create a sturdy, level raised access floor which opens up a huge range of opportunities for creative terraces.

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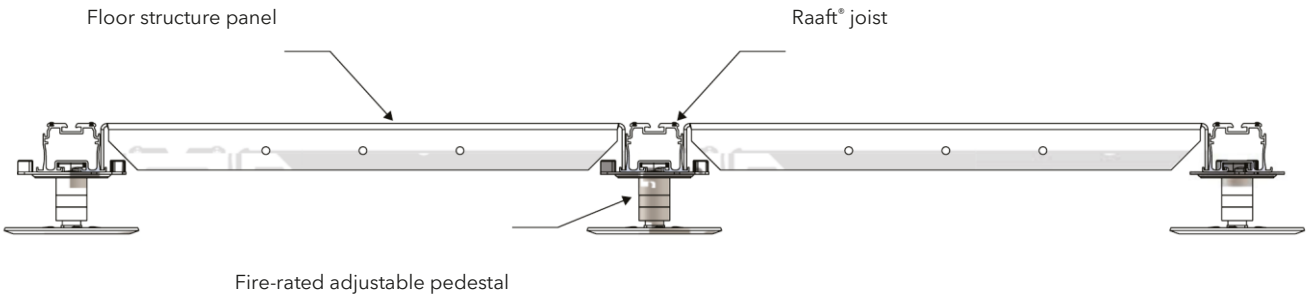
Ref: DS-APT-0423 Last update: October 2026

STRUCTA FLOOR STRUCTURE PANELS

TO FIT	MATERIAL	RECYCLED CONTENT	LENGTH	WIDTH	DEPTH	WEIGHT	QTY PER PALLET	SKU
50mm aluminium joist (weight 8.3kg)	Galvanised steel	100% recyclable	540mm	540mm	48mm	8.8kg	100	320001
			540mm	440mm	48mm	7.3kg	100	320005
			540mm	390mm	48mm	6.6kg	100	320007
			540mm	240mm	48mm	4.4kg	100	320011
30mm aluminium joist (weight 7.8kg)	Galvanised steel	100% recyclable	540mm	540mm	28mm	7.8kg	100	320003
			540mm	440mm	28mm	6.5kg	100	320006
			540mm	390mm	28mm	5.8kg	100	320008
			540mm	240mm	28mm	3.7kg	100	320012

SYSTEM SECTION



INSTALLATION INFORMATION

Structa panels sit between the joists of the Kinley terrace system, supported along their width by the Raaft® aluminium joists, which are in turn carried on Preventa adjustable pedestals. Choose the 48mm deep panels for 50mm joists and the 28mm deep panels for 30mm joists.

FIRE RATED

Fire rated in accordance with BS EN 13501-1 to achieve a B_{ROOF}(t4) classification. Consult our certification documents for verification.

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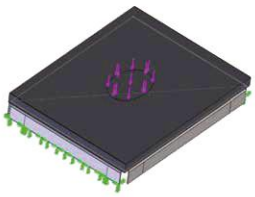
LOADING ANALYSIS

Loading analysis information has been collected using Finite Element Analysis. Please note the following information.

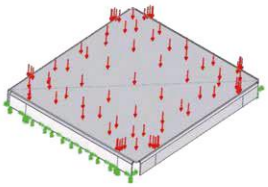
Point load. Analysis on Structa floor structure panels in mild steel, supported along their width by the Raaft® joist system, with the surface covered in rubber to simulate safety surfacing. In this instance the panel will take a load of 150kg at its centre for a deflection of 5mm. Under these conditions the panel has a factor of safety of 1.5.

Soil load. Analysis on Structa floor structure panels in mild steel, supported along their width by the Raaft® joist system. A soil load of 18kN/m^2 will produce a maximum deflection of 6.6mm at the centre of the panel. However, the safety factor is only 0.9, giving a risk of failure under this loading.

Recommendation: mild steel panels should not be used where the soil load exceeds 11kN/m^2 (approx. 600mm soil depth).



Point load model



Soil load model

STORAGE AND HANDLING

Steel floor structure panels are typically palletised and wrapped to ensure stability during transport. A single pallet will normally transport 50 floor panels.

Panels should ideally be stored in a sheltered location prior to installation; however, it will not be detrimental to the panels if this is not possible.

The following guidelines may be useful:

a) Each person should be fully trained in manual handling techniques.

b) Handling aids such as a trolley, fork-lift, pallet truck or conveyor should be used if moving large volumes of panels.

c) Break up large consignments into more manageable loads.

d) Ensure the product is stored at a reasonable height, avoiding lifting panels from floor level or above shoulder height.

e) Reduce carrying distances of panels.

PROTECTIVE EQUIPMENT

Installers should be aware that the edges of the steel panels may be sharp. Protective gloves should be worn at all times when handling the panels.

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