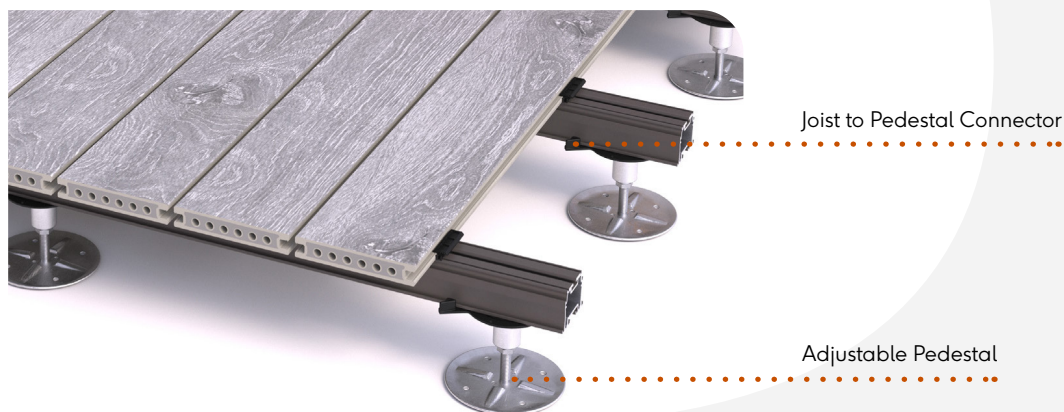


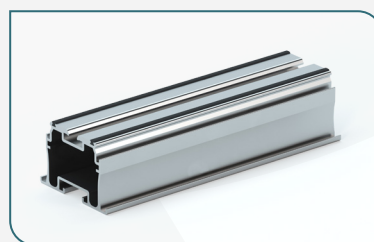
# Aluminium Joists

## Technical Datasheet

Rigid aluminium extruded joist rails for use as a support structure system to decking and paving. Raaft joists are designed to be used on roof terraces, balconies and other external podium construction areas.



30mm height joist



50mm height joist

### PRODUCT INFORMATION

DIMENSIONS			MAX SPAN*	WEIGHT/ LENGTH	MAX CANTILEVER	MAX LOADING**	MATERIAL	FINISH	CODE
H	W	L							
30mm	60mm	2.4m	500mm	3.87kg	100mm	250kg	6063 T6 aluminium	Mill	301015
50mm	60mm	2.4m	900mm	4.26kg	200mm	250kg	6063 T6 aluminium	Mill	301012

\* Between supports, see overleaf

\*\* Point load based on Finite Element Analysis (FEA) with a x1.5 factor of safety



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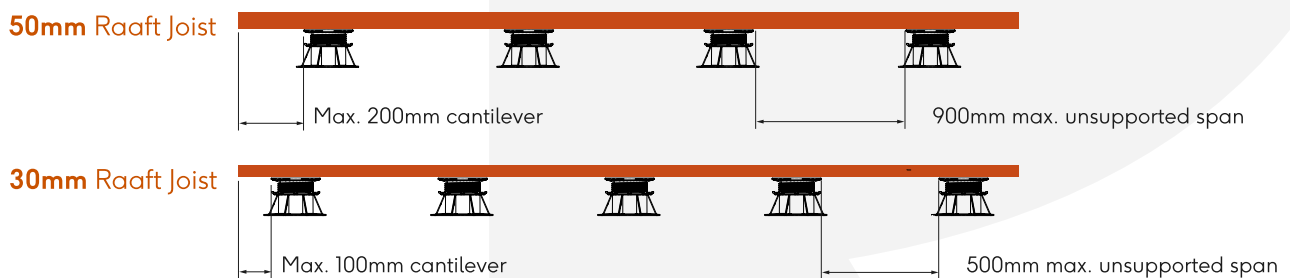
# Aluminium Joists

## Technical Datasheet

### 30 & 50MM JOIST WEIGHT LOADINGS

JOIST HEIGHT	CENTRES (CL)	JOIST LOAD (kN)	SAFE WORKING LOAD (kN)
30 mm	400	2.812	2
	600	1.054	0.8
	900	0.624	0.4
50 mm	400	5.362	4.5
	600	2.264	1.8
	900	1.77	1.2

### MAXIMUM UNSUPPORTED SPANS



### FIRE RESISTANCE

Joists are manufactured from extruded aluminium alloy 6063A T6 which is a non-combustible material deemed to be Class A in accordance with the European Commission decision of 4 October 1996 (Document: 96/603/EC).

Approved Document B (Building Regulations relating to Fire Safety) states under Regulation 7(2) that the requirements on external walls and roof tops of buildings does not include seals, gaskets and fixings.

### CUTTING AND PPE

RaafT aluminium joists can be simply cut on site using an angle grinder or chop saw with the appropriate disc or blade. We recommend that PPE (Personal Protective Equipment) is used when cutting and installing joists:

- cut-resistant safety boots/shoes with toe protection
- protective eyewear
- strong gloves to protect the hands.
- if using loud cutting equipment then ear plugs or defenders should be worn.



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# Aluminium Joists

## Technical Datasheet

### STABILITY

Joists are manufactured from aluminium alloy 6063A which is a highperformance alloy with a high natural resistance to corrosive conditions in most environments.

### STORAGE AND HANDLING

The product is securely packed in a single flute cardboard carton to ensure no movement of the product in transit and each carton is sealed with a fibre tape. Depending on the size/weight of the consignment this may be palletised.

Joists should be stored laid horizontally and off the floor to avoid damage. It is highly recommended that they are kept in a dry environment with the packaging left on until installation to avoid damage and trapped moisture.

Joists can be lifted by one person however it is recommended that, due to their length, they are carried by two people to avoid injury.

### SUSTAINABILITY

Joists are manufactured from recycled aluminium (80% recycled content minimum) and are 100% recyclable. As a result the whole life cost of aluminium joists are excellent as they are sold for recycling not paid disposal. The 20% virgin aluminium is blended with the recycled content to help achieve the proper chemical content for the alloy specification, which gives the specified mechanical properties for strength. Scrap aluminium is a valuable resource and can be recycled repeatedly.

There are plenty of raw materials for the production of aluminium. In a variety of forms, aluminium compounds make up a full 8% of the Earth's crust. Bauxite is the main starting point in the production of aluminium and given current rates of production there is enough bauxite to last another 200 to 400 years, based on no increases in the use of recycled aluminium and no further discoveries of bauxite. Furthermore the volume of aluminium being recycled is at a level where the requirement for virgin alumina is decreasing – further lessening the environmental impact.



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