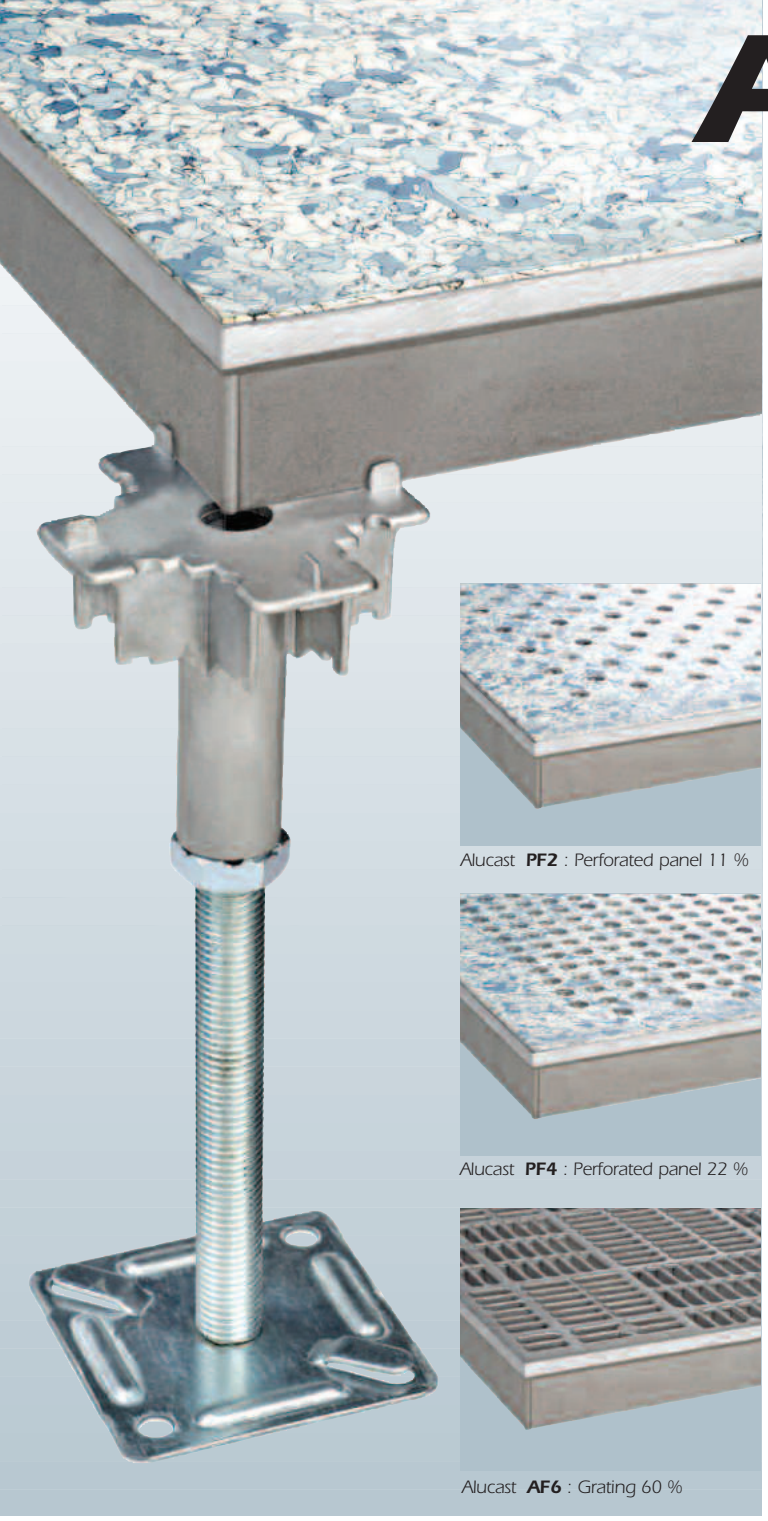
Alucast

Alucast is an aluminium die-cast panel of great strength.
Alucast is suitable for industrial and high-tech clean room installations, and for rooms with non-magnetic requirements.
The panel is suitable for all the soft coverings normally used for access flooring.



Alucast **PF2** : Perforated panel 11 %

Alucast **PF4** : Perforated panel 22 %

Alucast **AF6** : Grating 60 %

Composition

The **Alucast** aluminium is made up as follows :

- A top distributor plate, 3 mm thick.
- A double peripheral reinforced rib.
- A network of central ribs.

The monolithic conception of Alucast panels enables to reach the levels of performance and accuracy required for high-tech applications.

Coverings

The **Alucast** panel, plain or perforated, is available with the following finishes :

- vinyl.
- rubber

The **Alucast** grating (**AF6**) is available rough or epoxy painted.

Dimensions

Standard size : 600 mm.

Fire classification

Without covering, the Alucast panel is classed M0 (incombustible), by nature.

Electrical Resistance

It varies from $5x10^{5}$ to $2x10^{12}$ ohms, depending on the properties of the covering.

Range of perforations

- Alucast **PF1** : Perforated panel, 7 % free area.
- Alucast **PF2** : Perforated panel, 11 % free area.
- Alucast **PF3** : Perforated panel, 15 % free area.
- Alucast **PF4** : Perforated panel, 22 % free area.
- Alucast **AF5** : Perforated panel, 40 % free area.
- Alucast **AF6** : Grating, 60 % free area.

Load classes

	Framework	Class	Certificate
Alucast plain panel	Self-supporting	**6A** (or 6B or 6C)	Nr. 03.10.30.13
Alucast PF4 (22%)	Self-supporting	**6A** (or 6B or 6C)	Nr. 03.10.30.14

NB : A system classed **6A** is a system for which the ultimate load is at least 12 kN (**load class 6**).
The working load of this system is at least 6kN, **with a safety factor of 2**, for a deflection less than 2.5 mm (**deflection class A**).

See tables below for the other classes

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Load classes according to NF EN 12825 and using safety factor = 2.0.

Load class	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
Ultimate load	>4kN	>6kN	>8kN	>9kN	>10kN	>12kN
Working load	>2kN	>3kN	>4kN	>4.5kN	>5kN	>6kN

Deflection class	Maximum deflection
A (the most stringent)	**2.5 mm**
B	3.0 mm
C (the least stringent)	4.0 mm

Pedestals

Standard pedestal

Pedestal low height

Pedestal great height

The pedestals are made up of :

- a square baseplate of galvanized steel.
- a steel galvanized column welded to the baseplate.
- a die-cast aluminium or steel head, according to the type of pedestal.
- a locking nut for height adjustment.

Standard pedestal

The head has a sufficient length to adjust the height + or - 20 mm.
Ridges moulded on the head allow a positive location of the panels.

Pedestal for low finished height

The threaded steel head allows an adjustment of + or - 7 mm.
The panels lay directly on a conductive pad. These pedestals allow a minimum finished height of 70 mm.

Pedestal for great finished height (**more than 800 mm**)

The column is a square hollow section of galvanized steel.
The base, the head and the locking nut are the same as for the standard pedestal.

Installation

The pedestals are bonded to the concrete by way of a special adhesive, or may be mechanically fixed.
A device on the baseplate permits a quick and safe fixing of the copper earthing strap.

Stringers

Lockable stringer

Lockable stringers

They are made of galvanized steel . They are designed for location on pedestal heads.
The stringers provide rigidity to the understructure, and stability against lateral strain.
The depth of the section is adapted to the required performances :

- 30 mm deep : type 30/15.
- 45 mm deep : type 45/15.

Special stringers

When pedestals are omitted due to obstructions, i.e. electrical services, air ducting, etc., special bridging stringers may be used.
Within these particular areas, its is admitted that the deflection may be 20% more than for the rest of the raised floor.

31bis, rue des Longs Prés 92100 Boulogne-Billancourt (France)
Tel. : 33 (0)1 41 23 10 21 - Fax : 33 (0)1 41 23 10 01
www.gamma-industries.com