



Iteal®

Aluminium Support System - Facades



ideas + aluminium = dani alu



dani alu: comprehensive Know-how in the fields of flat roof and facades

For more than 35 years, dani alu has become a European leader in flat roof and facade systems. dani alu is a leader in the development, production and supply of aluminium building components. The company focuses on 4 areas of specialization: Flat Roof, Security, Facades and Structures. In particular the company is well known for the quality of its roof and balcony profiles, as well as collective roof edge protection systems and balustrades to name a few of the product ranges.

dani alu: customer focused and innovative research and development

Innovation is at the heart of the dani alu philosophy and the whole team is orientated towards customer expectations and to anticipate the future requirements.

The development of new ideas is carried out in co-operation with experts from the industry. Our engineers develop technical innovations based around need assessments. The original designs by dani alu are protected by patents. With Iteal, dani alu offers a series of innovations in terms of the energy efficiency of the buildings external envelope.

dani alu: specialist engineering services for your project.

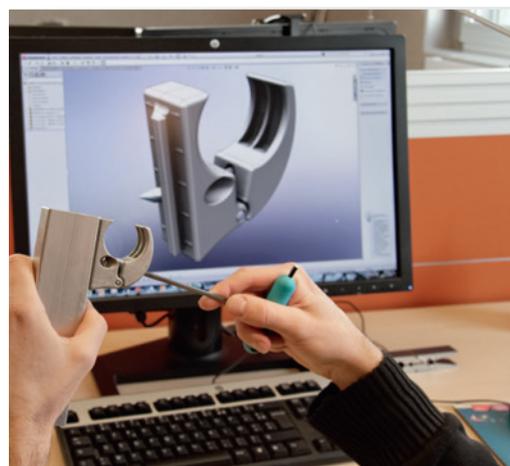
dani alu will accompany you and your project from concept to construction

dani alu: an integrated manufacturer

With production always carried out in its own facilities, dani alu can always guarantee the highest quality and on schedule delivery.

dani alu: the complete service for your project.

In addition to the planning and production of aluminium systems dani alu can also take care of any projects depending on your individual needs. Take advantage of our full consultation and design service!



Your facade partner



dani alu offers you a whole range of technical solutions for facades:

Parapet coping
Couvernet®

Balcony and terrace railings
fixed or self supporting

Balcony / Slab edge
profiles Dallnet

Window sills and reveals
Protègenet

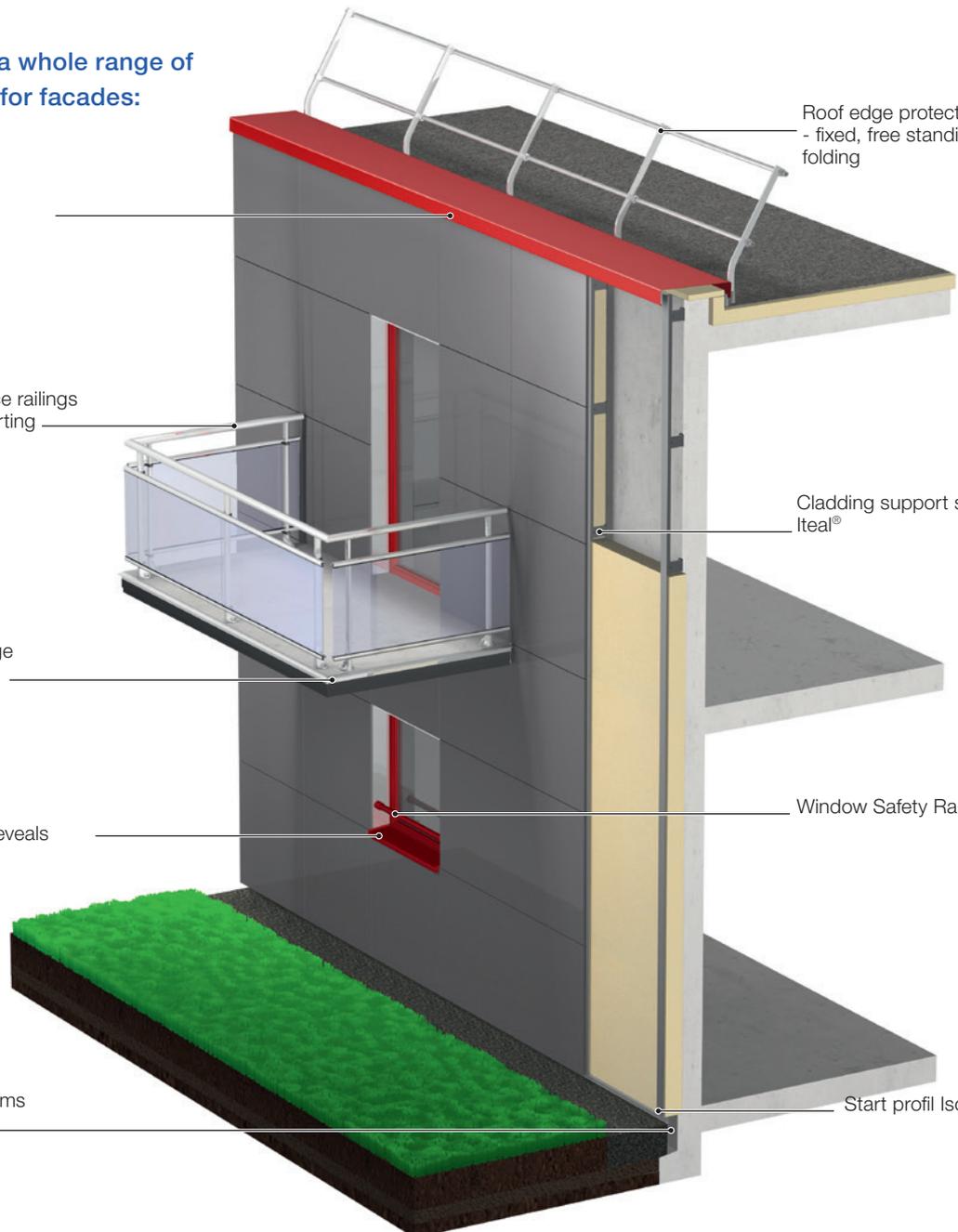
Wall finishing systems
-Solinet®

Roof edge protection systems
- fixed, free standing and
folding

Cladding support systems
Iteal®

Window Safety Rails Barnet®

Start profil Isonet



System Elements

All Itel system elements are made of aluminum 6106, which has a high mechanical strength of 250 MPa, enabling large centrespans.

The elements allow for free expansion (the vertical profile has one fixed and sliding mounts along the profile) or flanged (the profile is only attached to fixed points). The type of installation used is based on the technical specifications for the chosen exterior wall cladding.

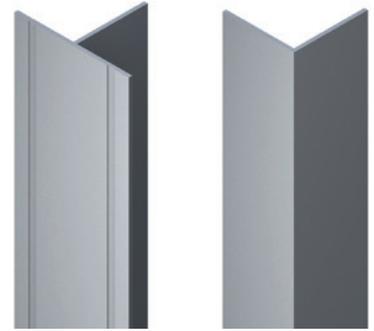
Three Piece System



Bracket



Pre-assembled thermal break profiles



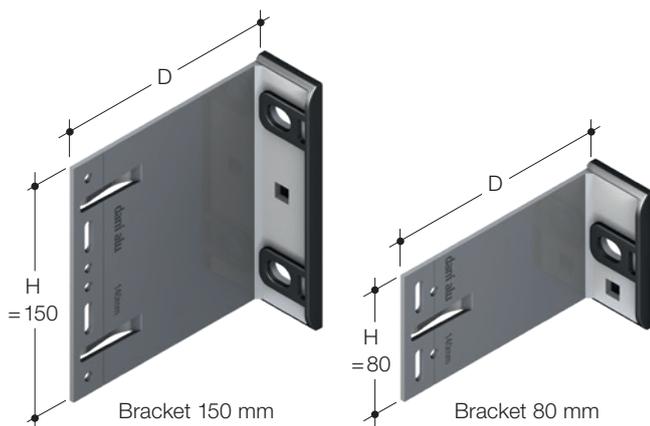
Vertical Profiles

Pre-assembled brackets with thermal break profiles.

The brackets contain fixed points and slots for installation flexibility.

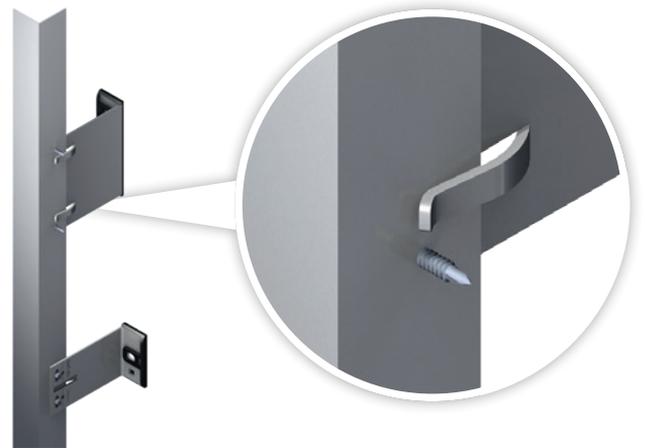
The reinforced brackets offer excellent strength against mechanical loads.

There are 2 heights (H) and 12 depths (D) available.



Spring clamps allow for vertical adjustment of the profiles.

Spring Clamps



Brackets and Vertical Profiles made of high strength alloy..

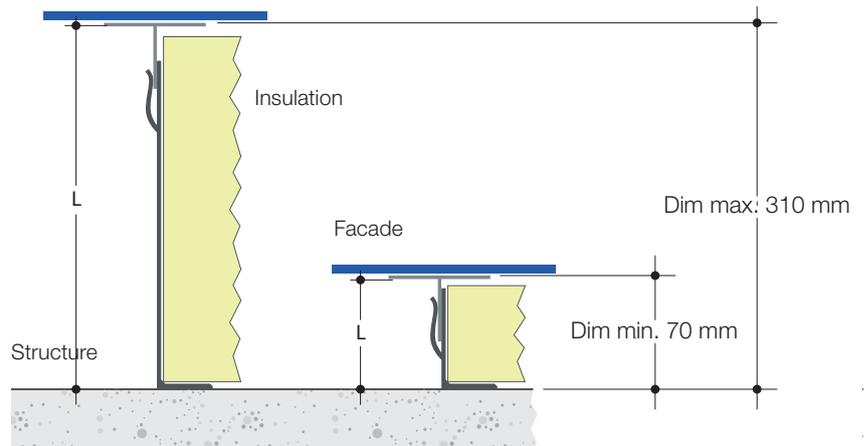


The thermal break profiles consist of reinforced synthetic material with low thermal conductivity.

Choice of Brackets

The bracket depths range from 60 mm to 280 mm depending on the cavity depth.

The thermal break profiles are factory assembled to the brackets.



Bracket Heights 80 and 150 mm

| | | | | | | | | | | | | |
|--------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Bracket Depth (D) | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | 240 | 260 | 280 |
| DNN min. | 70 | 90 | 110 | 130 | 150 | 170 | 190 | 210 | 230 | 250 | 270 | 290 |
| DNN max. | 90 | 110 | 130 | 150 | 170 | 190 | 210 | 230 | 250 | 270 | 290 | 310 |

Dim min: Minimum distance between structure and facade surfaces (mm)/ Dim max: Maximum between structure and facade surfaces (mm)

Nota

Value in the table without the thermal break.

For the implementation with the thermal break, add 3 mm to the DNN value.

Vertical Profiles

The vertical profiles are available in 4 types.



T 150 x 52

T 110 x 52

T 80 x 52

**L 50 x 52
(Edge Profile)**

In order to open joints between the cladding or render panels, whilst maximizing the aesthetic appearance, the vertical profile can be supplied:

- with Itéal black adhesive tape, installed on-site.
- Polyester Powder Coated (Danilac® process, RAL-colours of choice).



The installation of the vertical profile on the brackets is done with the help of a special self-drive fixing, by dani alu.

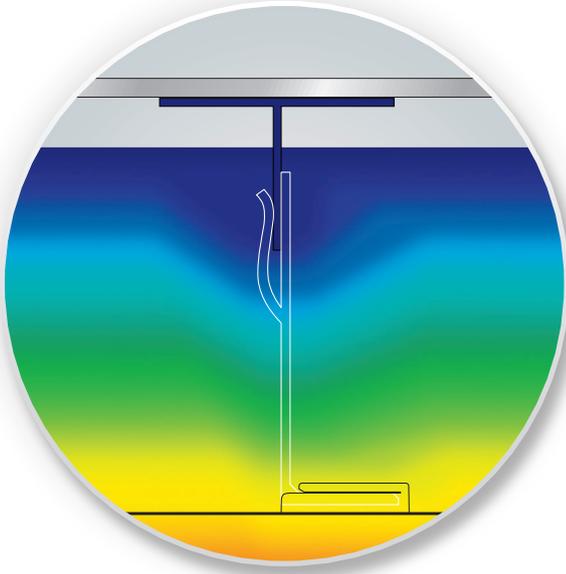


The Itéal system is completely de-mountable and fully recyclable.

The Iteal[®] innovation

Pre-assembled with thermal break spacers

Why Thermally Broken?



Thermal bridging*

compared to a conventional solution

Iteal-Facade without thermal break spacers:

$$U = 0.778 \text{ W/m}^2 \cdot \text{K}$$

Iteal-Facade with thermal break spacers:

$$U = 0.663 \text{ W/m}^2 \cdot \text{K}$$

The calculations were carried out using Trisco software. The reference software for the determination of the values of specific cold bridges.

Why you should choose dani alu thermal break spacers



To meet all the requirements in terms of low weight, durability and mechanical strength and its unique aluminium 'under construction system' with pre-assembled thermal break spacers is a unique system from dani alu.



The thermal break spacers combine three functions:

- Break the thermal path between aluminium structure and building.
- Avoid bi-metallic corrosion between brackets and structure.



The factory pre-assembled thermal break spacers speed up installation times. The spacers are securely clipped to the brackets which prevent loss / separation of the spacers during installation.



The Iteal thermal break spacers guarantees that the thermal bridges in the building are insulated and so improving the building heat loss calculations.

Installation Principle



Calculation

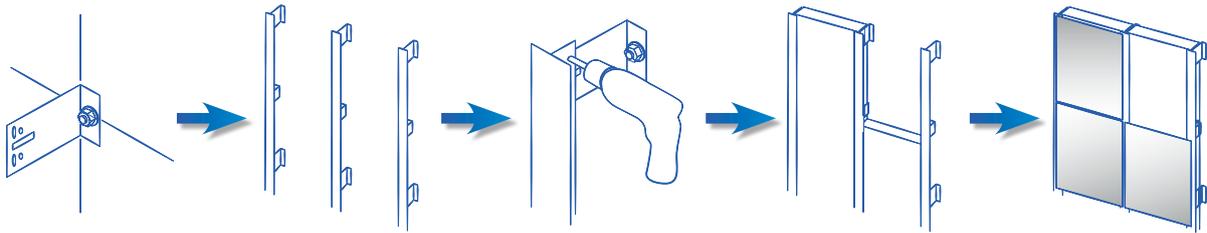
dani alu perform the necessary calculations for the system pre-construction.



Attachment to support

Select the correct fixing to mount the brackets depending on the actual substrate (concrete, stone, brick etc.). dani alu include the loading calculations for the fixings to achieve.

Installation Phases



Install the brackets

Install the vertical profiles

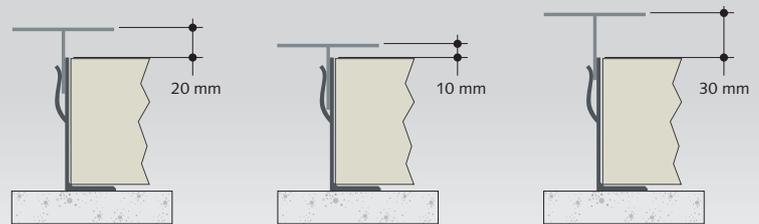
Secure the vertical profiles

Insert the insulation

Mount the facade system

Depth Adjustment

The system allows for an adjustment of +/- 10 mm to compensate for unevenness of the supporting structure.



Target position

20mm air gap in front of the insulation

Minimum position

10 mm air gap in front of the insulation

Maximum position

30 mm air gap in front of the insulation

Standards and regulations

Iteal® system underwent resistance tests that have been compiled in a report N° CLC13-26045014.

Sidings compatible

The iteal® system is compatible with most sidings available on the market. principally: Agrob Buchtal, Aluform, Carea, Eternit, Fundermax, Prodema, Rebeton, Rockwool, SCB, Terreal, Trespa, VMZ.

For other sidings type please contact us.



Company stamp

Order Quotation request

(Tick the options required)
Please give the following information.

Date:

Company (Address/Company stamp):

Contact: Mr/Mrs.

Telephone: Fax:

Mobile: E-Mail:

This check-list allows you to identify the information necessary for processing your request. On receipt of this information we will send you a free quotation on the basis of optimised quantities and the structural calculations diagram.

With delivery, your order will be accompanied by an installation guide detailing the recommended installation (document available at www.danialu.co.uk).

Project Information

Contact Details Project Name Address: Town: Postcode:

Type of project [] New build [] Refurbishment [] Concept [] Trade

Cladding Manufacturer Model Weight (kg/m²)

Facade Number of facade units Height Width % Of opening Support (concrete, brick, ...)

Grid for facade details with 4 rows and 5 columns.

Thickness of insulation mm

System Characteristics

Type [] Flange [] Free Expansion

Length of Vertical Profiles: [] 3 m [] 6 m

Finish of Vertical Profiles: 3 options are available:

[] Mill finish [] Black Adhesive Masking (not installed) [] PPC Aluminium Ral Number

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