



Aluminium coping systems

**Couvernet<sup>®</sup>**





## **dani alu** **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 specialisation: Flat Roof, Security, Facades and Facades & Structures. In particular the company is well known for the quality of its roof and balcony covers and protection, as well as edge protection systems and window cills 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 Couvertnet, dani alu offers a series of innovations in terms of weather tightness, strength, aesthetics and improving the energy efficiency of the building 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.

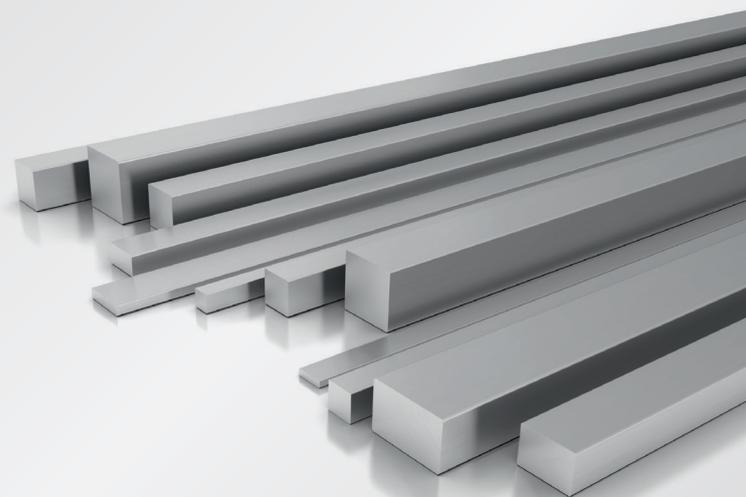
## **dani alu** **The complete service for your project**

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!

### **Why aluminum?**

Aluminium is an essential construction material due to its mechanical properties. It is three times lighter than steel; very easy to process; is stainless and is 100% recyclable.



# Couvernet®

## Description of the system

### Function

Couvernet is an aluminium coping which prevents water infiltration, whether the walls are sealed or not.

These copings are available in various secret fixed solutions, which allow free expansion.

The system comprises fixed supports, copings and accessories (angles, T-pieces and special factory-manufactured pieces.)

The system comprises fixing supports, copings and accessories (angles, T-pieces and special factory-manufactured pieces).

We will work to provide a solution for any design idea.

### Technical characteristics

#### Supports

The system is characterised by a fixing that allows free expansion on non-visible supports.

The supports are available in five versions:

- **automatic supports**
- **standard supports**
- **ribbed supports**
- **insulated parapet support 'Console system'**
- **insulated parapet support 'Thermal plate'**

The different supports allow you to adapt the system to any given design and are even compatible with the combined installation of a Barrial roof edge protection system.

#### Copings

Three patterns of copings are available:

- **symmetrical**
- **asymmetrical**
- **with required pitch (up to 25°)**

Two designs of copings are available:

- **rounded edges**

These add a more attractive touch; make the coping easy to clip on and provide better drainage for rainwater.

- **square edges**

To compliment, joint cover strips provide a perfect finish at junctions. A combination of the various elements of the system allows it to be adapted to all circumstances.

#### Detailed setting out drawing

Made to measure and ready to install; packaged and reference by roof area and accompanied by a plan layout

completed by dani alu ensures quick and trouble free installation.

### Finish

- Mill finished aluminium
- Anodised aluminium: treated aluminium, matt satin appearance, recommended near the sea or in a polluted atmosphere
- Danilac powder coating to your selected RAL color



### Specification

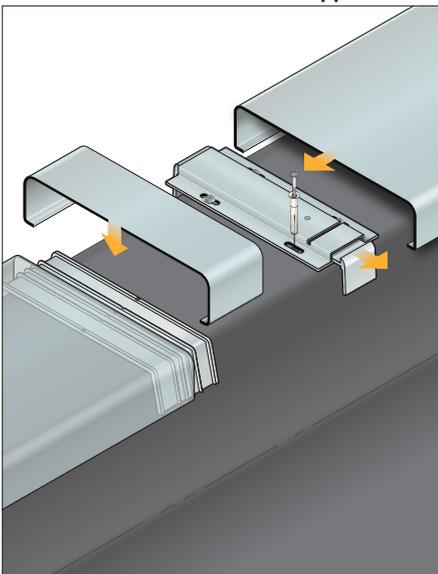
The recommendation of the type of Couvernet system will vary according to the dimensions of the parapet wall; the coping; and the height and accessibility of the building.

A certain number of indications are given in this documentation for the most typical cases.

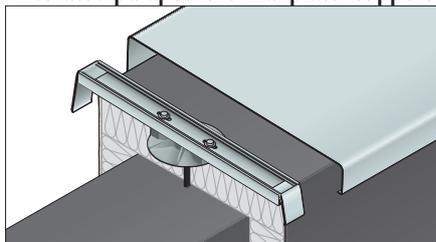
Our design office is at your service to define, right from the sketch design phase, the most suitable style of Couvernet for your particular case.

In order to guarantee the weathertightness and the perfect finishing of the system, all the elements of the system are made to measure in the factory, based on the given site dimensions.

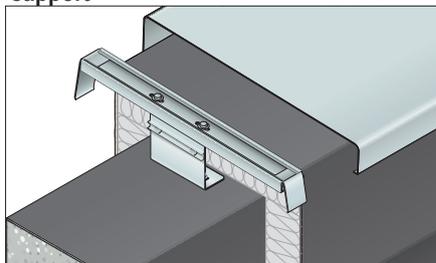
Couvernet with 'automatic' support



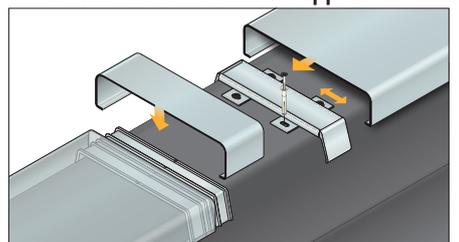
Insulated parapet 'thermal plate' support



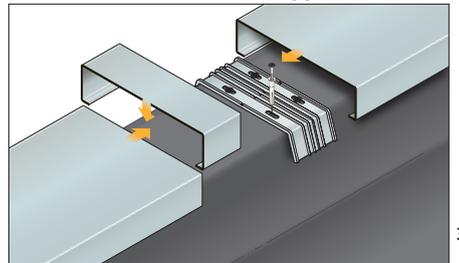
Insulated parapet with 'thermal console' support



Couvernet with 'standard' support



Couvernet with 'ribbed' support



# Couvernet® Models

Profiles up to 3000 mm

The system comprises of three models of copings:

- Couvernet symmetrical
- Couvernet asymmetric Couvernet
- Couvernet pitched (up to 25°)

The most suitable thickness of the Couvernet is a function of

many parameters. Our technicians can advise.

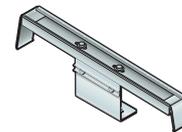
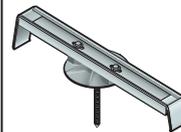
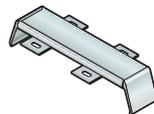
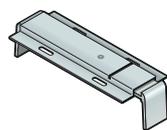
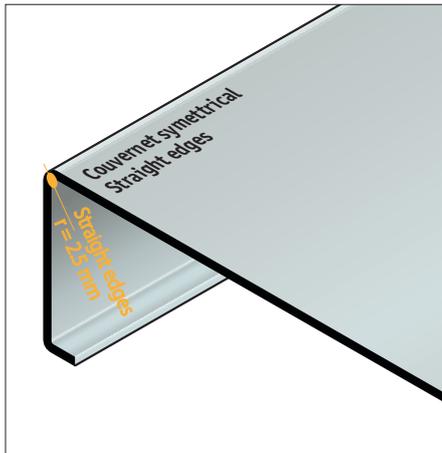
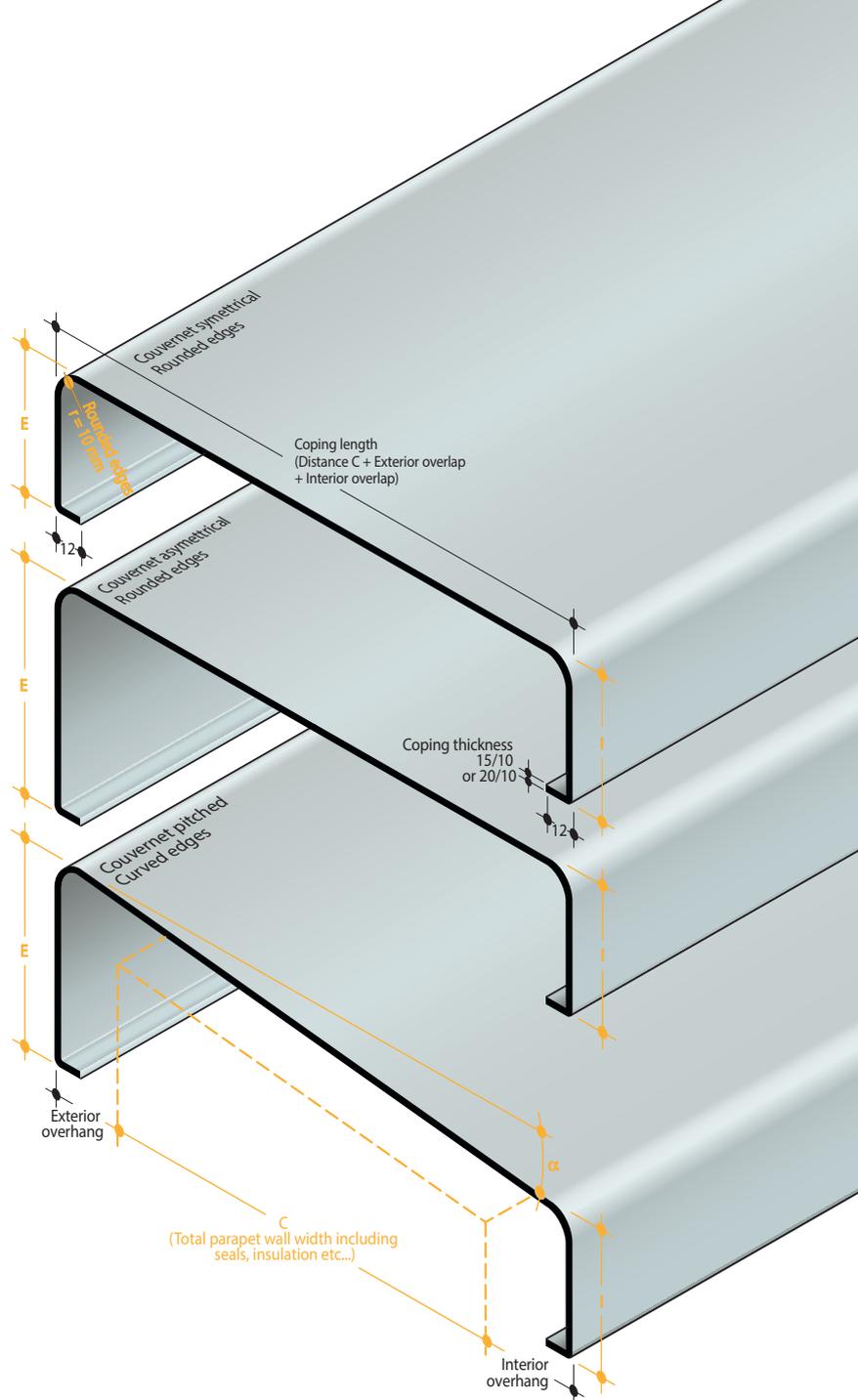
Two styles of copings are possible:

### Rounded edges

They provide a key additional aesthetic, make the fixing of the coping easier and allow for better drainage.

### Straight edges

All models are also available with right angle folds.



	Automatic support	Standard support	Thermal Plate Support for insulated parapets	Thermal Console Support for insulated parapets	Ribbed support
External face (E)	50, 80, 110 mm <sup>1)</sup>	50, 80, 110 mm <sup>1)</sup>	110, 140, 160, 180, 200 mm	110, 140, 160, 180, 200 mm	40 à 120 mm
Internal face (I)	50, 80, 110 mm <sup>3)</sup>	50, 80, 110 mm <sup>3)</sup>	70, 110, 140, 160, 180, 200 mm	70, 110, 140, 160, 180, 200 mm	40 à 120 mm
External overhang	30 mm	30 mm		30 mm	30 mm
Internal overhang	40 mm <sup>2)</sup>	30 mm <sup>2)</sup>		30 mm	30 mm
Maximum pitch	10°	10°		10°	25°

<sup>1)</sup> 80 and 110 mm for the raised positioning bracket

<sup>2)</sup> 70 mm for the raised positioning bracket

<sup>3)</sup> 80 mm for the raised positioning bracket

Maximum parapet width (C)  
 - between 130\* and 450 mm: 15/10 gauge  
 - between 400 and 760 mm\*\*: 20/10 gauge  
 \* 120 mm for 'ribbed' support  
 \*\* 540 mm for the 'ribbed' supports and 600 mm for the insulated parapet supports

Thickness of 20/10 is recommended where roof terraces are accessible.

Other dimensions and possible upon request.

We can advise of dimensions to best conform to EN norms.



# Couvernet<sup>®</sup>

## Automatic support

### 1 Automatic support

Tested for wind resistance up to 179 mph (288 km/h), this very strong support also makes installation much easier and facilitates subsequent easy removal, if required.

### 2 Light fixings 25 x 6 mm. They allow the adjustment of the support before tightening the fasteners.

### 3 Pushbutton: Triggers the support locking mechanism.

### 4 Locking plate

### 5 Fixing Danivit stainless steel Ø 6 mm

### 6 Connecting strip and drainage channel.

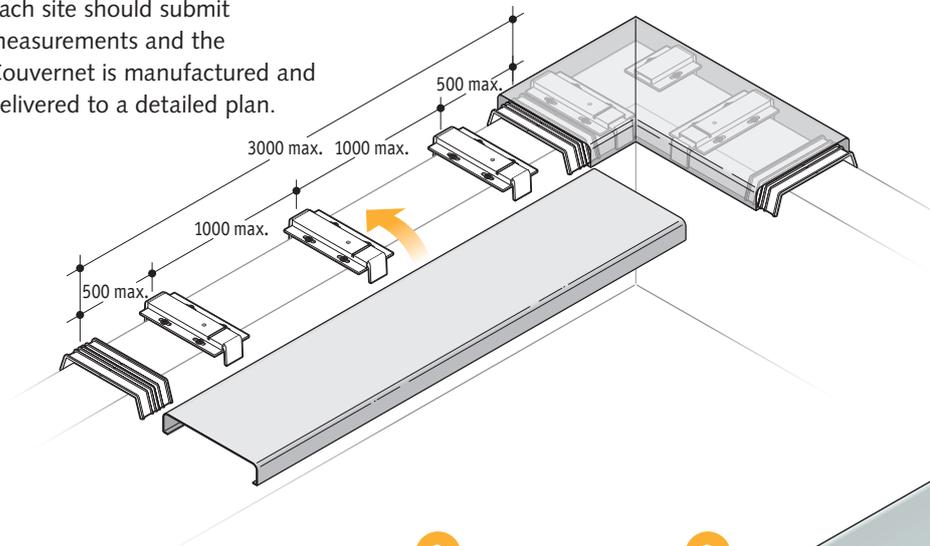
### 7 Joint cover strip:

- improves weather tightness at junctions
- masks inaccurate site cutting

### 8 Coping with rounded, or straight edges (see page 4)

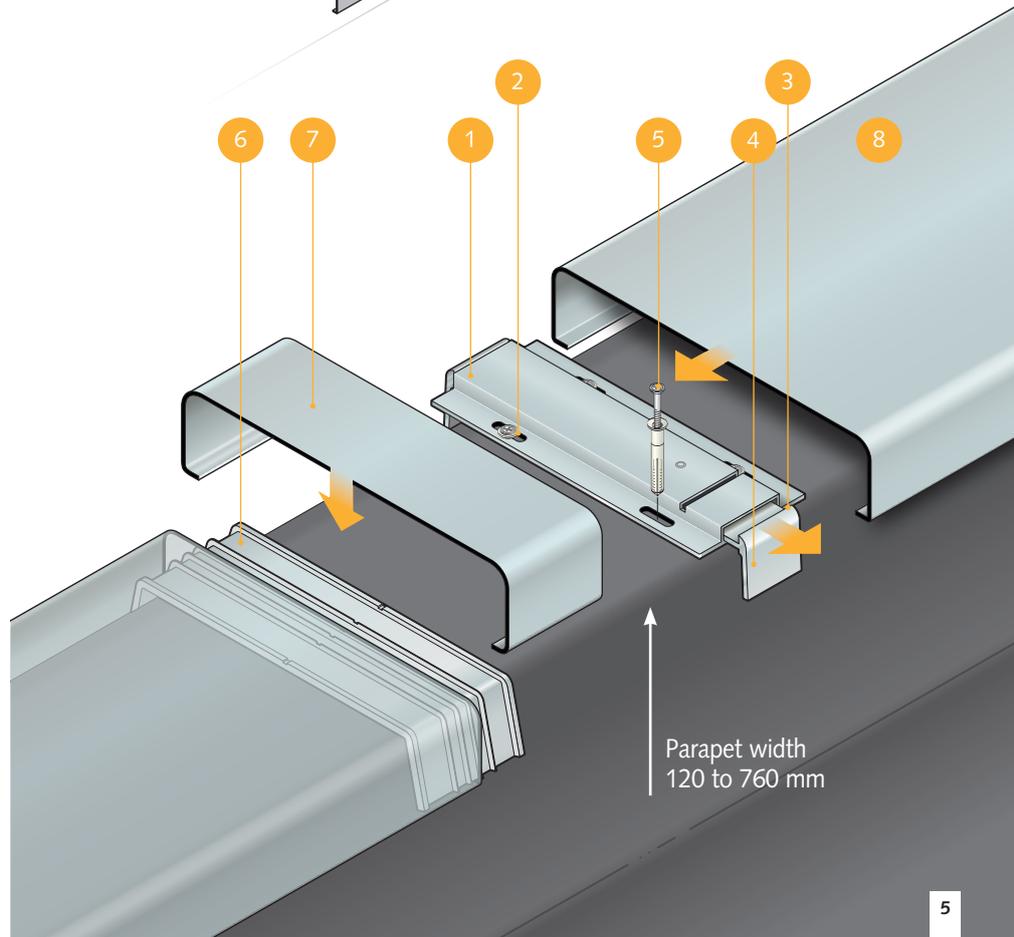
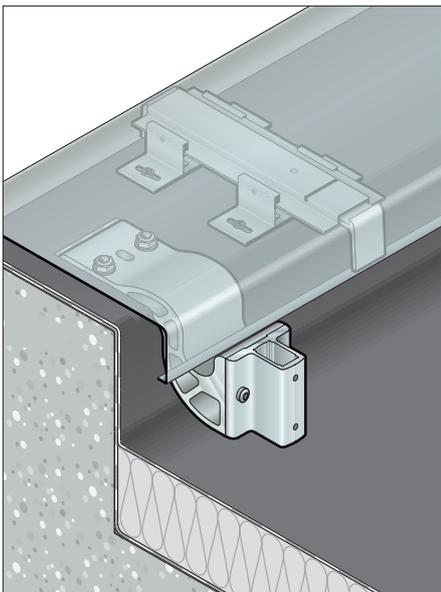
### Installation diagram:

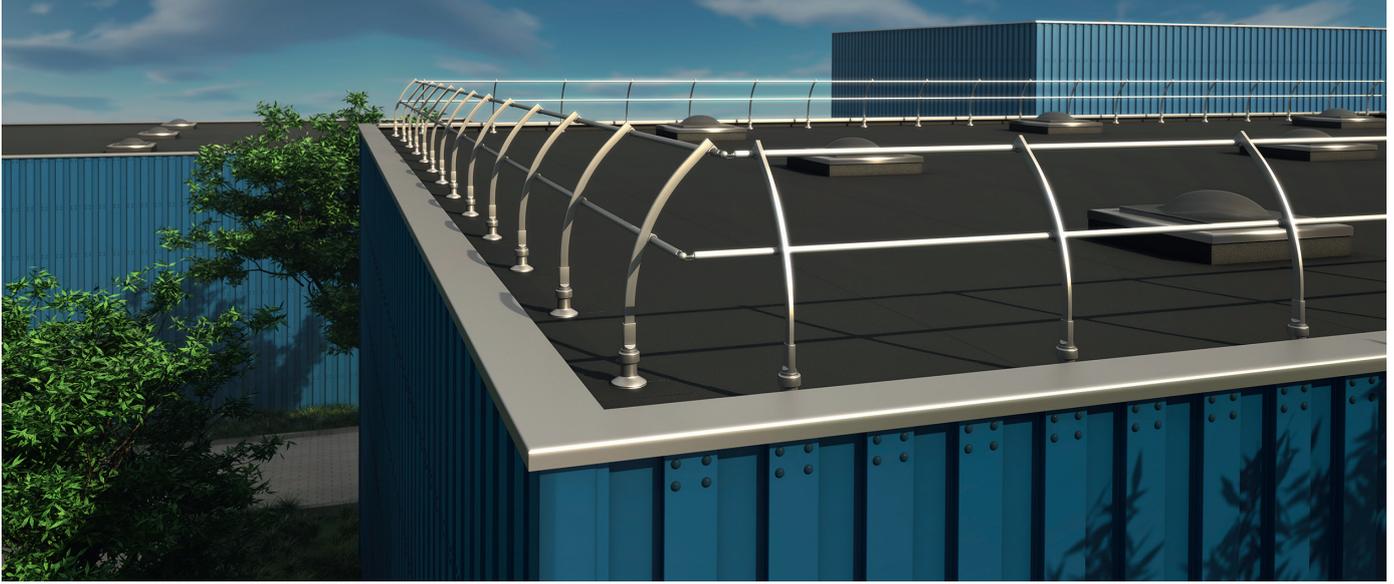
Each site should submit measurements and the Couvernet is manufactured and delivered to a detailed plan.



### Automatic support with the raised positioning bracket

The perfect solution for combining Couvernet and Barrial edge protection.



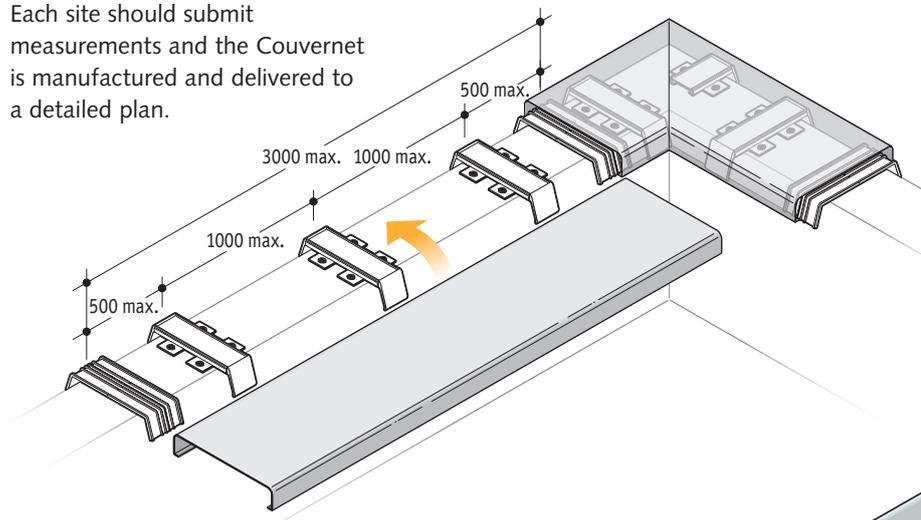


## Couvernet® Standard support

- 1 Standard support  
Reinforced support consisting of extruded aluminum elements, designed for an easy installation.
- 2 Easy to secure external sliding mounts
- 3 Easy to secure fixed internal mounts
- 4 Lightweight fixings 16 x 6 mm.  
They allow the adjustment of the support before tightening the fasteners.
- 5 Fixing Danivit stainless steel Ø 6 mm
- 6 Connecting strip and drainage channel.
- 7 Joint cover strip:  
- improves weather tightness at junctions  
- masks inaccurate site cutting
- 8 Coping with rounded, or straight edges  
(see page 4)

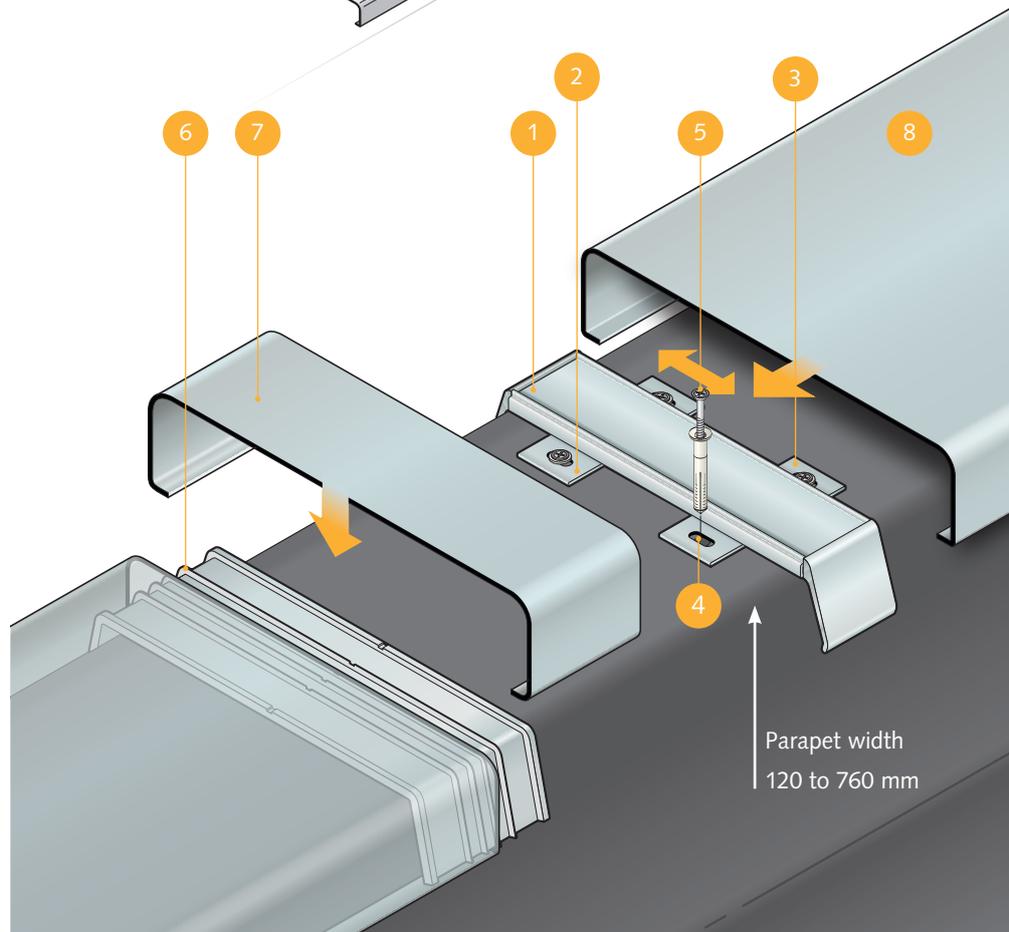
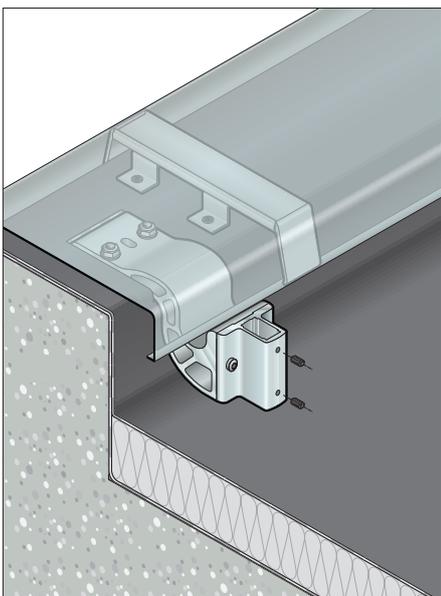
### Installation diagram:

Each site should submit measurements and the Couvernet is manufactured and delivered to a detailed plan.



### Standard support with the raised positioning bracket

The perfect solution for combining Couvernet and Barrial edge protection.



# Couvernet® for Insulated Parapets

## System Overview

Couvernet coping system has been specifically designed and manufactured, in aluminium for a parapet with external wall insulation. in aluminum for parapet wall with thermal insulation.

The specific supports allow you to reduce the thermal bridges caused by the fixing of a coping on to the insulated parapet, helping to contribute towards improving energy efficiency in buildings.

### 'Thermal Console' support

The aluminum support is comprised of a console bracket for fixing to the parapet wall and a slider to position and secure the coping.

The console is adjustable in height (30 mm), pitch (-10 degrees) and width ( +/- 15 mm). It integrates a thermal break which allows you to reduce by 22.5 per cent the thermal bridge effect\*.

The slider allows an initial setting of +/- 15 mm to facilitate the easy installation of the coping.

(\* Thermal Bridge: 0.24 W/mK for a concrete parapet wall of 200 mm wide, 325mm high,  $R_{\text{current}}$  and  $R_{\text{facade}} = 5 \text{ m}^2 \text{ K/W}$ ,  $R_{\text{parapet}} = 4 \text{ m}^2 \text{ K/W}$ )

## System components

- 1 Coping with rounded edges
- 2 Slider
- 3 Console
- 4 Thermal break
- 5 Insulation
- 6 Drainage channel
- 7 Joint cover strip:
  - improves weather tightness at junctions
  - masks inaccurate site cutting

2 Types of support are available:

- 'Thermal console' support
- 'Thermal plate' support

These brackets will combine with copings external face of 110 mm; an internal face of either 70 or 110 mm and a maximum width of 600 mm (although other dimensions are available - just ask).

### Scope of application:

Any type of insulation.

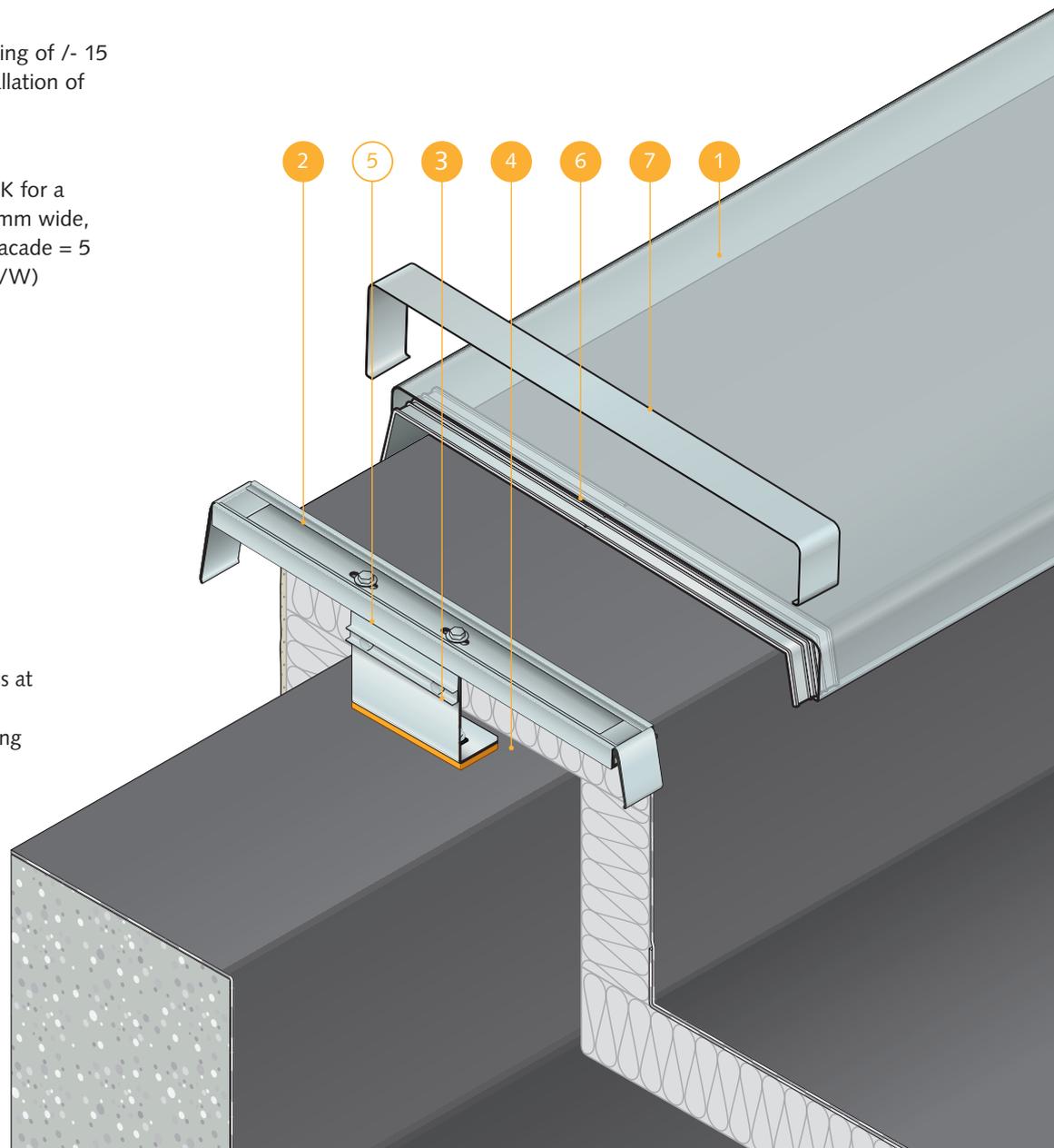
This system is also suitable for specific cases without insulation (rainscreen cladding solutions etc..)

## Technical Validation

dani alu can help define the most suitable solution adapted to the buildings required energy performance and provide written calculations upon request.



- + Integrated thermal break
- + Adjustable pitch to improve water shedding
- + 2 mechanical fixed per support
- + Adjustable height and slider for accurate alignment





### 'Thermal Plate' support

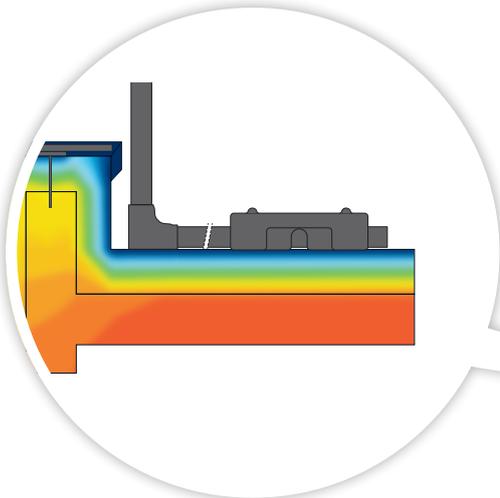
The support is comprised of a 'platinum' bracket in zamac (alloy insensitive to corrosion) for fixing on to the parapet wall and an aluminium slider to attach to the fixing plate to position and secure the coping.

The **plate** allows you to distribute the clamping pressure, avoiding damage to the insulation layer. It incorporates a slope of 2° which promotes the runoff of water toward the inside of the parapet wall.

The **slider** allows an initial setting of +/- 15 mm to facilitate the easy installation of the coping.

### Scope of Application

Insulation types of Class C minimum (Rigid insulations)



### =45% reduction in thermal bridging\*

compared to a traditional solution

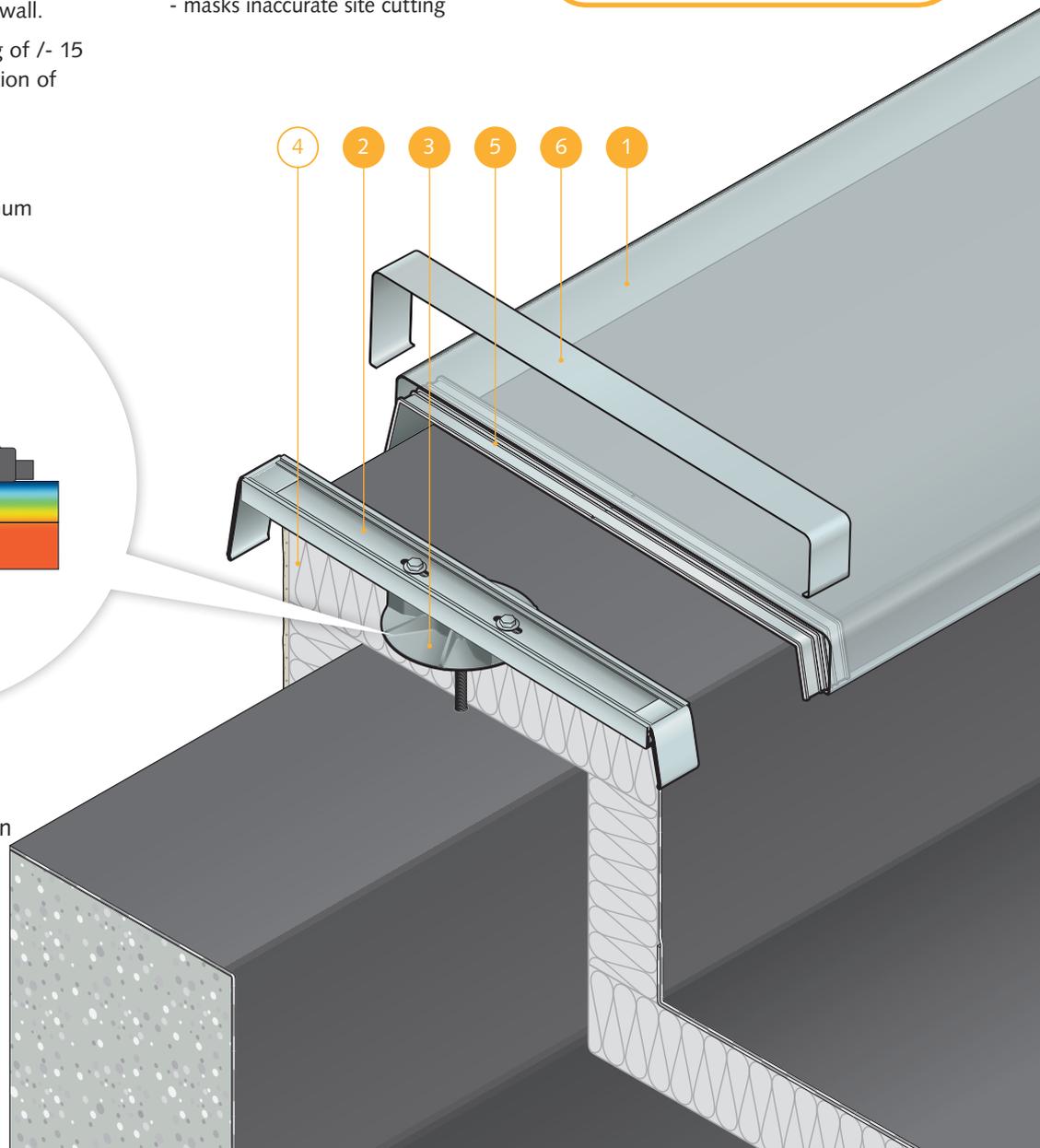
(\* Thermal bridge: 0.17 W/mK for a concrete parapet wall of 200 mm wide, 325 mm high,  $R_{\text{current}}$  and  $R_{\text{facade}} = 5 \text{ m}^2 \text{ K/W}$ ,  $R_{\text{parapet}} = 4 \text{ m}^2 \text{ K/W}$ )

### System components

- 1 Coping with rounded edges
- 2 Slider
- 3 Plate
- 4 Insulation
- 5 Drainage channel
- 6 Joint cover strip:
  - improves weather tightness at junction
  - masks inaccurate site cutting



- + Optimal reduction of the thermal bridge
- + Integrated slope for water runoff
- + No cutting of the insulation
- + A single mechanically fixed bracket with adjustable slider for accurate alignment



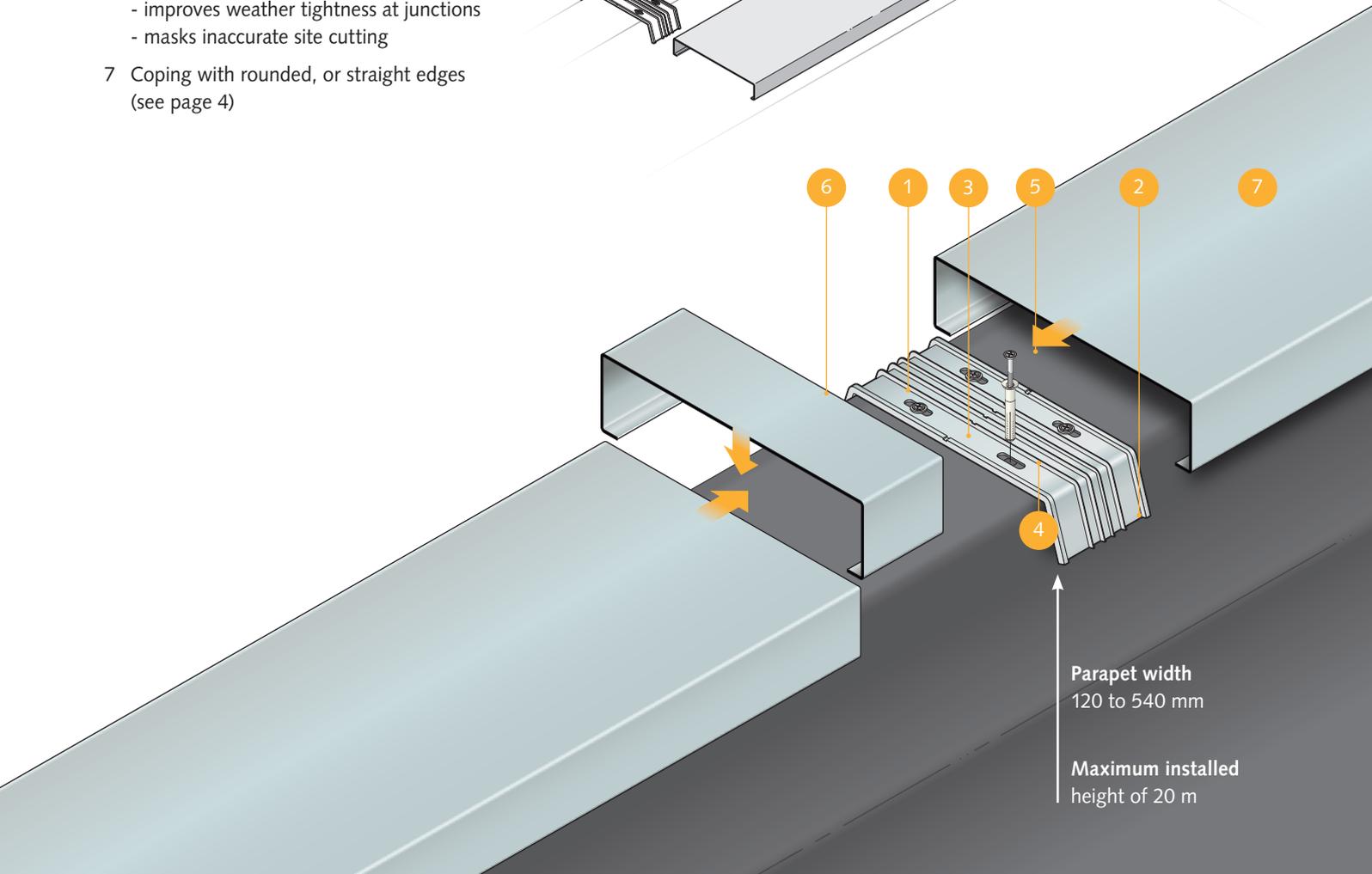
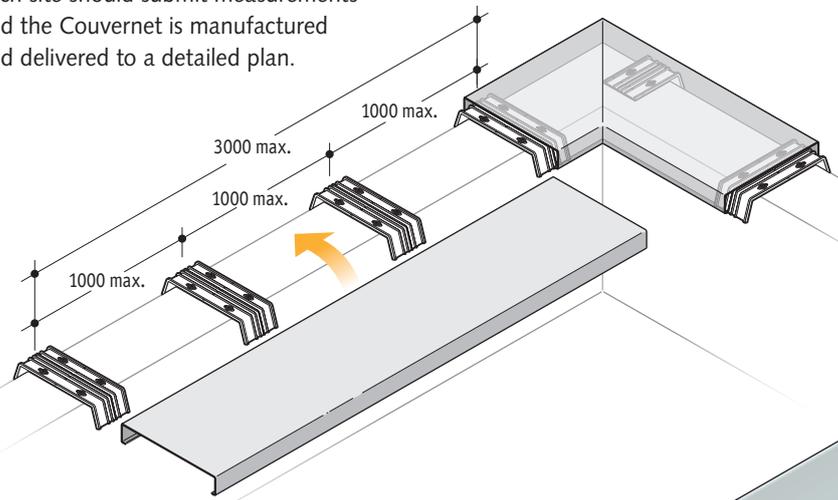


## Couvernet® Ribbed support

- 1 Ribbed support  
The same element acts as the support and junction for the coping.
- 2 The ribbed support also acts as the drainage channel
- 3 Factory formed to the specific size allows for accurate alignment and installation.
- 4 Lightweight fixings 16 x 6 mm.  
They allow the adjustment of the support before tightening the fasteners.
- 5 Fixing Danivit stainless steel Ø 6 mm
- 6 Joint cover strip:  
- improves weather tightness at junctions  
- masks inaccurate site cutting
- 7 Coping with rounded, or straight edges  
(see page 4)

### Installation diagram:

Each site should submit measurements and the Couvernet is manufactured and delivered to a detailed plan.



Parapet width  
120 to 540 mm

Maximum installed  
height of 20 m



# Couvernet®

## Combined with Barrial® roof edge protection systems

Barrial is a permanent aluminium edge protection system for use of roof areas and terraces inaccessible to the public.

The integration of both Couvernet and Barrial systems can be assessed for suitability on any project.

For more information on the Barrial range, or to book a design consultation visit [www.danialu.com](http://www.danialu.com).

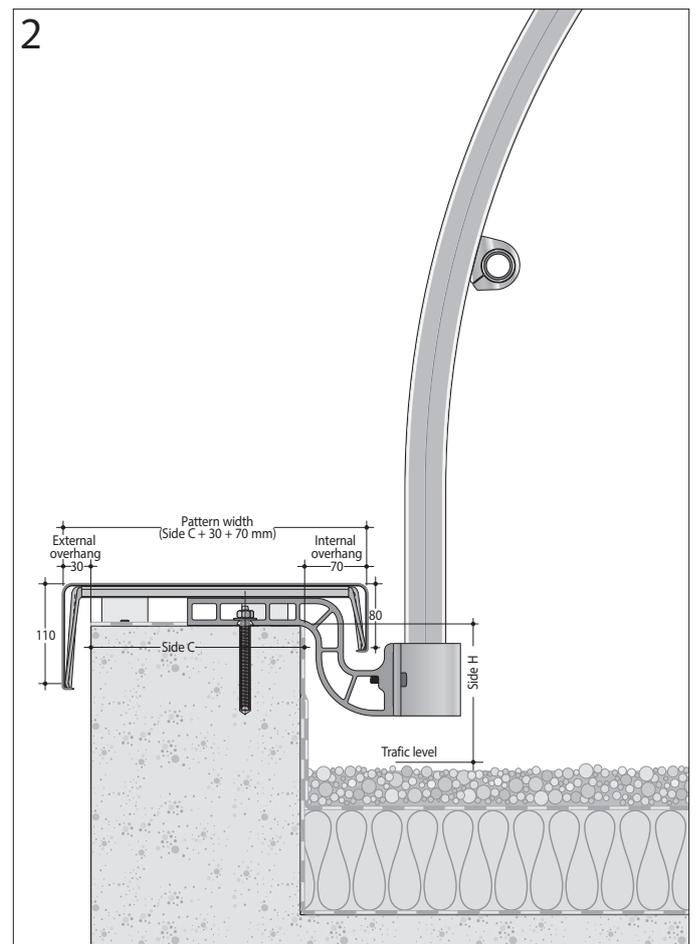
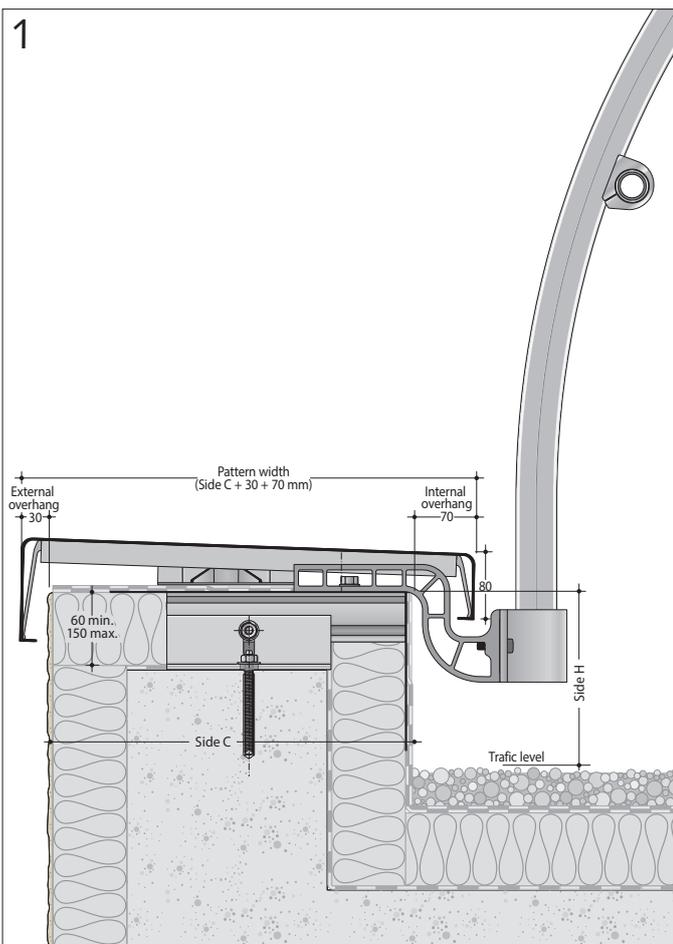
The many system configurations allows the system to be adapted to any given design.

The combined solution offer the optimal performance for securing roofing-terraces while maintaining protected parapets, without aesthetic compromise.

### Examples of use

1- Couvernet with 'automatic' support; symmetrical model; with rounded edges and combined with Barrial, fixed to the internal face of the parapet with shoe type 'A'.

2- Couvernet with standard support; asymmetrical model, with rounded edges and combined with Barrial fixed to the parapet with shoe type 'Z'.



# Couvernet®

## Tips for placing orders

Couvernet adapts to all types of flat roofs.

It is designed to be compatible with Barrial edge protection systems (inaccessible to the public) and Panorama balcony systems (with public access).

### Quotation - Order

For any price request, use the form on the back page and specify the following dimensions:

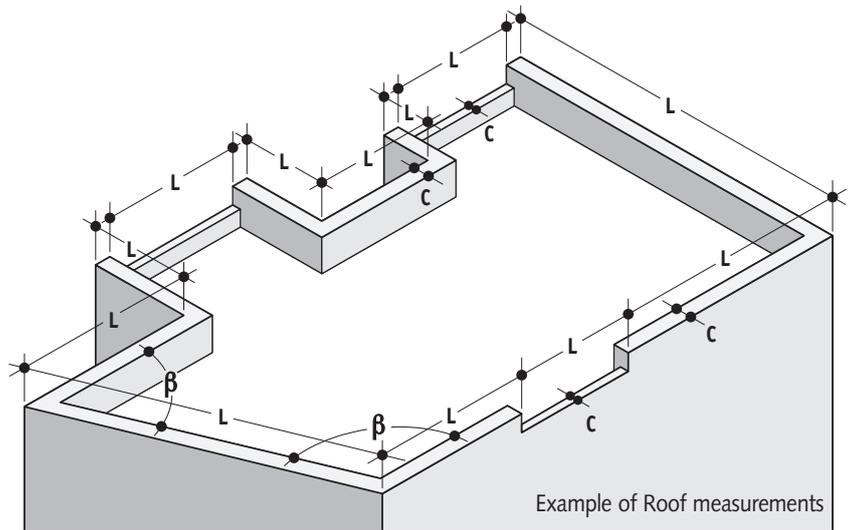
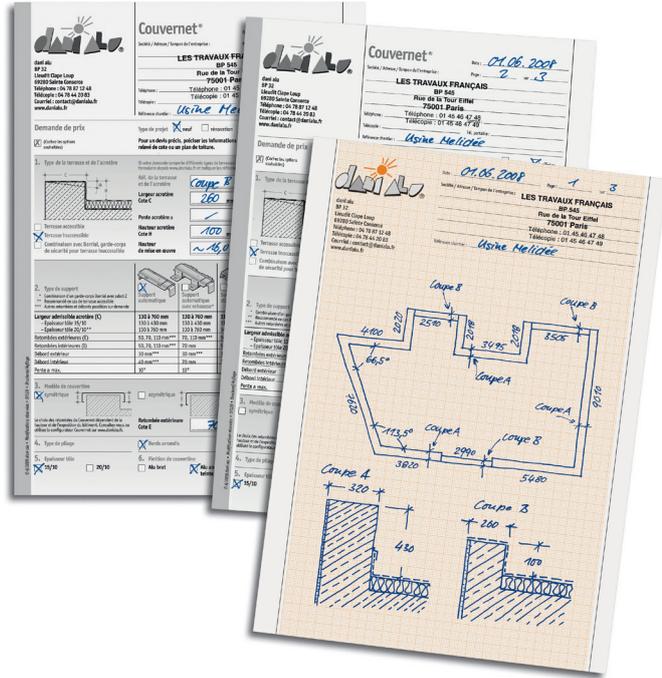
- Parapet width (side C)
- Parapet pitch (α)
- Parapet height (side H)  
(essential in the case of combination with Barrial)

The plan view of the scheme will also be required for the processing of your order with the following:

- outside length of the parapet (sides L)
- degree of angles (β)

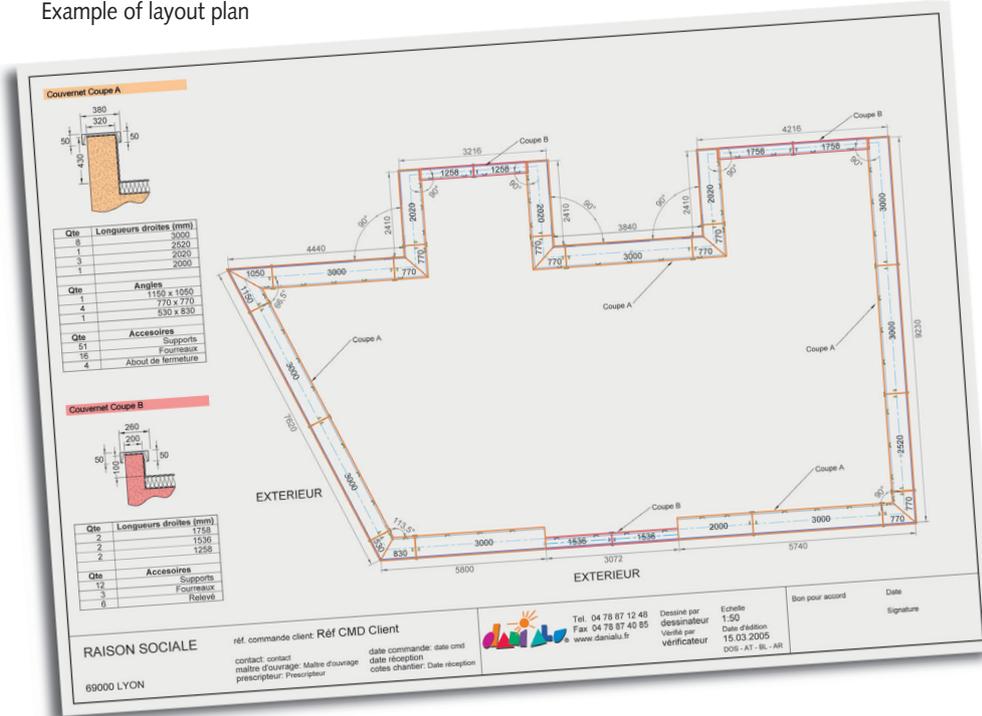
### Technical Assistance:

- Initial design and specification
- Technical assistance and development of specific solutions
- Developing the layout plan to given site dimensions with order - helping to deliver made to measure solutions for quick and trouble-free installation
- Site assistance and training



Example of Roof measurements

Example of layout plan



# Couvernet®

## Quotation request

Date: \_\_\_\_\_

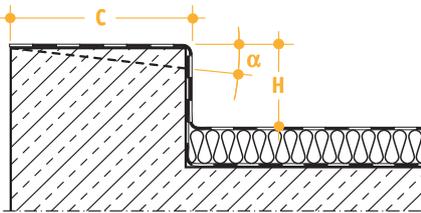
Company (Address/Company stamp): \_\_\_\_\_

Contact: Mr/Mrs \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Mobile: \_\_\_\_\_ E-Mail: \_\_\_\_\_

### Type of roof and parapet



For different parapet / roof combinations, use as many copies of the form as required and reference each area.

Réf. of the terrace and the parapet \_\_\_\_\_ Interior insulation \_\_\_\_\_ mm

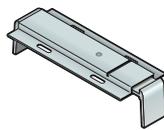
Parapet width (side C) \_\_\_\_\_ mm Exterior insulation \_\_\_\_\_ mm

Parapet pitch ( $\alpha$ ) \_\_\_\_\_ ° Insulation on parapet \_\_\_\_\_ mm

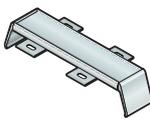
Parapet height (side H) \_\_\_\_\_ mm Total linear metres \_\_\_\_\_ (exterior dimensions)

Hauteur de mise en œuvre \_\_\_\_\_ mm No. of corners/angles \_\_\_\_\_

- Roof accessible to the public
- Roof inaccessible to the public
- Combined with Barrial



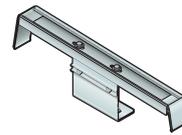
Automatic support



Standard support



Thermal Plate



Thermal Console



Ribbed support

Raised positioning bracket	<input type="checkbox"/>	<input type="checkbox"/>		
External face (E)	50, 80, 110 mm <sup>1)</sup>	50, 80, 110 mm <sup>1)</sup>	110, 140, 160, 180, 200 mm	40 à 120 mm
Internal face (I)	50, 80, 110 mm <sup>3)</sup>	50, 80, 110 mm <sup>3)</sup>	70, 110, 140, 160, 180, 200 mm	40 à 120 mm
External overhang	30 mm	30 mm	30 mm	30 mm
Internal overhang	40 mm <sup>2)</sup>	30 mm <sup>2)</sup>	30 mm	30 mm
Maximum pitch	10°	10°	10°	25°

<sup>1)</sup> 80 and 110 mm for the raised positioning bracket

<sup>2)</sup> 70 mm for the raised positioning bracket

<sup>3)</sup> 80 mm for the raised positioning bracket

Maximum parapet width (C)  
 - between 130\* and 450 mm: 15/10 gauge  
 - between 400 and 760 mm\*\*\*: 20/10 gauge  
 \* 120 mm for 'ribbed' support  
 \*\* 540 mm for the 'ribbed' supports and 600 mm for the insulated parapet supports

Thickness of 20/10 is recommended where roof terraces are accessible. Other dimensions are possible upon request. We can advise of dimensions to best conform to EN norms.

### External face



External face side E \_\_\_\_\_ mm Internal face side I \_\_\_\_\_ mm

Choice of external face of Couvernet may depend on the height and the building aspect. Contact us.

Two designs of copings

rounded edges

square edges

### Thickness

15/10

20/10

### Parapet finish

Mill finished aluminium

Anodised aluminium

Danilac powder coated colour RAL n° \_\_\_\_\_

