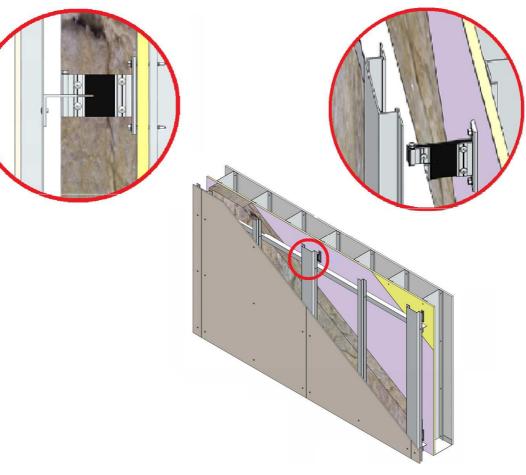


Thermally broken (really) Large range of clips Very easy to install Robust:



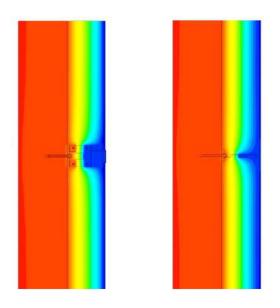
example



Thermal performance:

The thermal break of an ECOLITE façade clip is created by a high performance GFRP strut (mechanically fastened), a real breakpoint (at least 25 mm distance (ca. 1 inch)) and the breakpoint is <u>not</u> bypassed or penetrated by mounting bolts.

Internal studies show that thermal ECOLITE clips perform far better than other so called "thermally broken" clips!

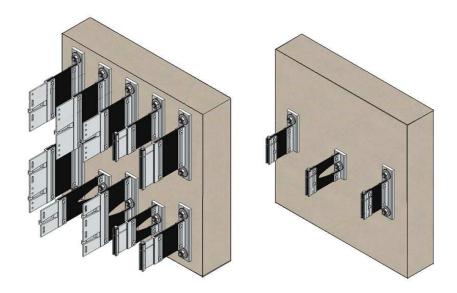


Thermal image of an installed ECOLITE horizontal thermal clip k-1-80, V=133mm



Large range of ECOLITE clips

ECOLITE has a large portfoglio with varying types of clips. The images below showcase only a part of all ECOLITE clips. It does not show all of them but it could still be confusing.

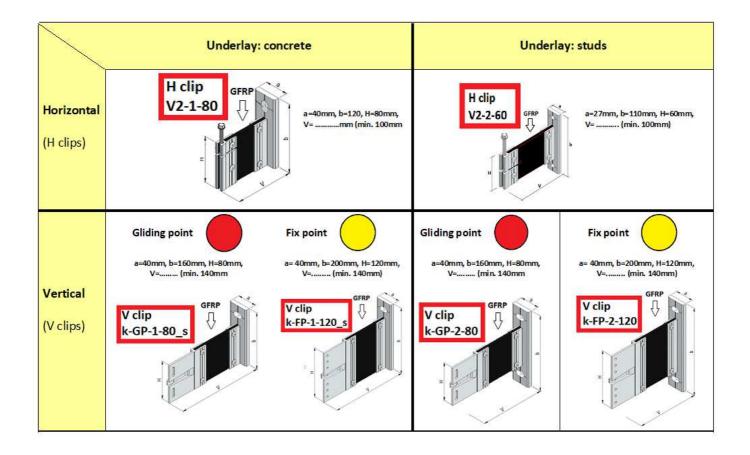


In order to see the complete range, download the "catalog ECOLITE clips". Or contact us.



Most popular ECOLITE clips

With the wide variety of models available, we chose to display the most commonly sold clips for easy finding:



thermally broken (premium!), robust and easy to install

(for bigger view go to Download > most popular ECOLITE clips)



ECOLITE thermally broken façade clips ECOLITE

Defining the correct ECOLITE-clips for your project:

<u>Every project is unique</u>. ECOLITE understands this fact and has therefore designed many different clips to meet all your design needs. In order to see the entire ECOLITE variety of clips contact us or go to Download > catalog ECOLITE clips.

<u>Your project:</u> You will find the clip (or clips) you need for your project most likely in the above round up chart "most popular ECOLITE façade clips".

In order to define the correct ECOLITE clip for your project you may:

- Option one: contact us and we will do it. (In this case please fill and submit our form "basics" at download)
- Option two: follow the 5 steps mentioned below:
- **1.** Horizontally or vertically oriented subframing:

This is the main decision. The decision depends often on the shape and measurement of the facade. Also the number, the location and size of the windows, the thickness of the entire wall assembly as well as the underlay are substantial. In general, if the façade looks complex and the underlay is studs, then we recommend to choose horizontally oriented (primary) subframing. With horizontally oriented (primary) subframing you have more flexibility. However, the regarding sections in "most popular ECOLITE clips" is to follow. See also page "Step 1, (horizontally or vertically subframing)".

2. Underlay:

Onto what kind of underlay will the façade be attached? Depending on the underlay, you can find the right ECOLITE clips in the sections underlay in "most popular ECOLITE clips" (no extra page for step 2).

3. Defining Gliding point (GP) and Fix point (FP): In case you go with vertically oriented subframing, you have to define which clips will be Gliding points (GP) and which clips will be Fix points (FP). See page "step3 (Gliding point or Fix point)".

4. Defining the correct product indication: See page "step 4 (correct product indication)".

5. Defining how many clips: In general the number of clips depends on the distance V, the tensil-strength of the underlay, the deadload of the façade as well as the windload. We urge you in this regard to talk to us or to a professional engineer. As a bench mark for estimating you can assume 1,4 clips per m2 façade (or per 10 SFT) on studs and 1.2 per m2 façade (or per 10 SFT) clips on concrete (no extra page for step 5).

6. Finished, congratulations!

Do not hesitate to contact us in case you have questions or if you don't find the perfect solution for your project. ECOLITE has years of experience meaning that they have likely completed a project similar to yours. If not ECOLITE will create a custom made solution! (custom made does not mean expensive! Not at all!)



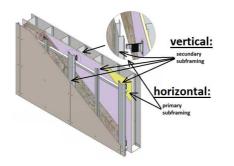
ECOLITE thermally broken façade clips ECOLITE

horizontally or vertically oriented subframing

Step 1: What is horizontally or vertically oriented subframing?

Usually a façade subframing consists of two layers of bars (mostly aluminum, see also products / façade subframing bars). The primary subframing (usually horizontally) is the layer that is attached to the clips. The secondary subframing (usually vertically) is located between primary subframing and façade. It is supporting the façade and is also creating the cavity for the airflow (ventilation).

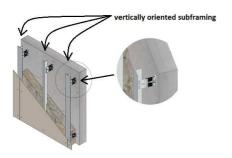
The following picture shows **horizontally oriented primary subframing**. Those horizontal bars have the vertically oriented bars attached. The horizontal bars are partly located inside the insulation. The vertical bars are the support for the visible part of the façade (panels in this example) and are creating the cavity for ventilation (rainscreen). The vertical bars can be placed where they need to be, not where the underlay ensures fastening. That makes this subframing structure very flexible! It is very common for rainscreen facades with panels and boards but it is also recommended for other facades.



horizontally oriented primary subframing

We recommend also to visit our subframing section (products > façade subframing bars) or download "more info about subframing bars".

The following picture shows **vertically oriented subframing**. The vertical bars are attached to the clips and are partly located inside the insulation. They are at the same time the support for the visible part of the façade (panels in this example). Since they stick out of the insulation, they are also creating the cavity for the ventilation (rainscreen). The bars (and with them the clips) need to be placed where they can be fastened to the underlay. This subframing structure is mainly recommended for concrete underlay and is very common for rainscreen facades with panels and boards. It is also recommended for other facades.



vertically oriented subframing

We recommend also to visit our subframing section (products > façade subframing bars) or download "more info about subframing bars".



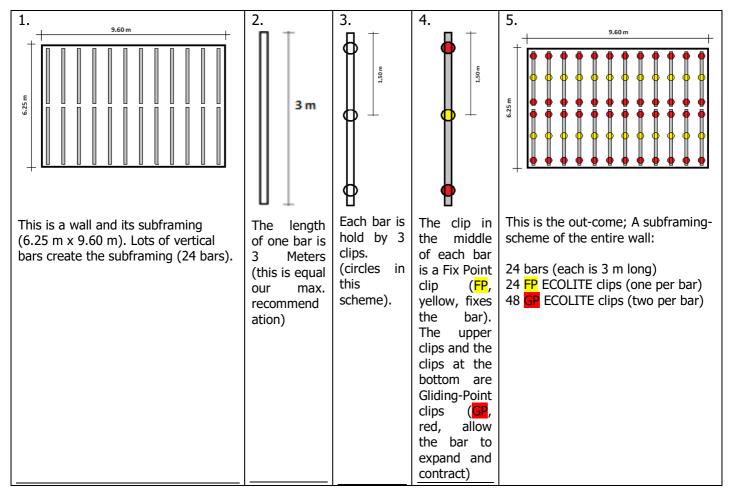
ECOLITE thermally broken façade clips ECOLITE

Defining Gliding point (GP) and Fix point (FP):

Step 3: Every façade has a subframing. The visible part of the façade is attached to it. For rainscreen-facades with panels and boards we recommend for the subframing our aluminum-bars (see products on our website). Every bar is expanding and contracting due to temperature-differences. A 3 Meter long aluminum bar is expanding and contracting about 2.88 mm caused by a temperature-difference of 40 C. That means the subframing bars need to be enabled to expand and contract in order to stay flat.

a) At subframing with horizontal oriented bars, expanding and contracting of the bars is taken into account by the clips and therefor no Fix points and Gliding points are to define.

b) Vertically oriented subframing; Every bar needs one Fix point (not more!). At bars with 3 clips and more in, or next clip above the middle / at bars with 2 clips at the top. Every bar has at least 2 clips. Let`s do an example:



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Defining the correct product indication:

Step 4: Once you know what clip (or clips) you need, it's easy to define the correct product indication. Just add the length "V" in mm. The correct product indication is essential for communication and manufacturing!

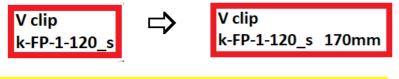
Example:



You need 24 pieces of those Fix point clips but so far the length (V) is not considered. And therefore is no product indication applied.

However, the length (V) is in our example 170 mm.

1.



this is the correct product indication

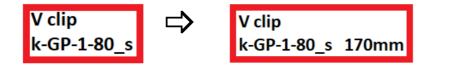
Result 1: 24 pieces V clip k-FP-1-120_s 170mm



2.

You need also 48 pieces of those Gliding point clips but so far the length (V) is not considered. And therefore is no product indication applied.

However, the length (V) is in our example 170 mm.



this is the correct product indication

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Result 2: 48 pieces V clip k-GP-1-80_s 170mm
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questions and pricing:

Contact us in case you need more information regarding ECOLITE façade clips or in case you need a quote:

info@mostdefined.com

We are happy to assist. Thank you very much!

24.07.18