MOST DEFINED

product documentation
edition spring 2020

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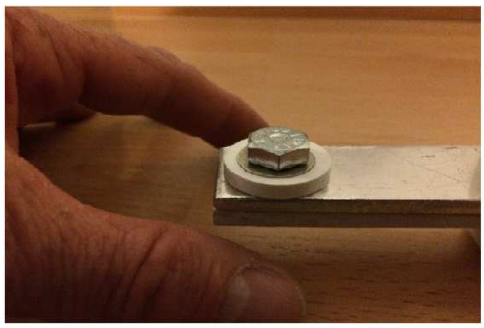
english version

Most Defined Building Products

Thermo Donut © System



System for thermally broken attachments

- **Thermal breaks:**
  plates, cubes, tubes and bushings (donuts)
- **Option: gasket**
  (new 2020, prevents water infiltration)
- **Option "noncombustible"**
  (new 2020 ⇨ 800 °C)
- **Standard or create your own**
  attachment system (custom made)

new: "tube"
(page 6)

worldwide available

attach thermally broken in the construction industry!

www.mostdefined.com info@mostdefined.com

Thermo Donut ©

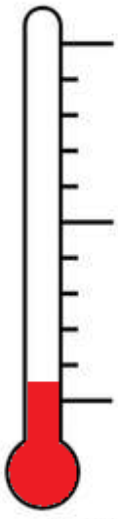
Thermo Donut © is a state of the art system for attaching "things" to a building

(examples: attaching rainscreen facades / curtainwalls / canopy / railings / guards / advertisement board / water meter / etc……)

● **Thermally broken!**
(cold and warm areas are clearly separated)

● **custom sizes and shapes of thermal breaks are available**

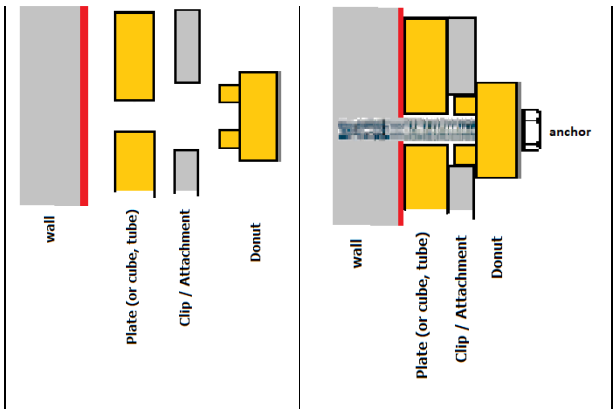
● **high performance** ● **flexible and robust** ● **economical** ● **easy and fast to install**



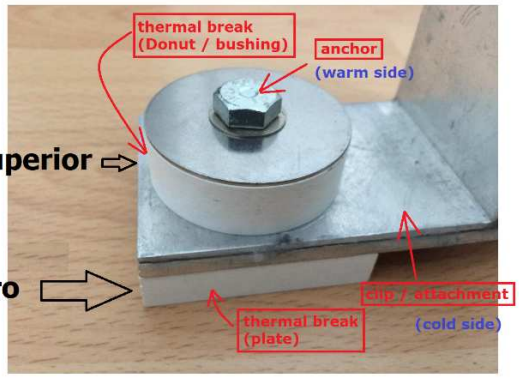
Thermo Donut ©

The components of the Thermo Donut © System are plates, cubes, tubes and bushings (donuts). They separate clearly the cold side and the warm side of a building. Because of the donuts (bushings) not even the fasteners (or anchors) are creating a bridge for the flow of temperature! High performance!

Principal of the Thermo Donut © system: (The clips and attachments (metal parts) are "by others")



Versions:



versions: ⇩

plate (or cube, or tube) only = version "pro"

add donut = Version "superior"

- **all components are available in different Standard shapes and sizes as well as customized**
- **and they can be made from many different materials**
- **option "gasket"**
- **option "noncombustible"**

Thermo Donut ©

Ecofriendly: The Thermo Donut © system is for thermally broken attaching facades and other "things" to a building. It is eliminating the thermal bridges. Because of the bushings (Donuts, page 7) not even the fasteners (or anchors) are creating a new thermal bridge. Therefore it reduces efficient the flow of temperature from the warm side to the cold side. The performance is excellent! A building with thermally broken façade attachment (and other things like for example canopies) is not leaking so much energy. The buildings carbon footprint is very small!

Noncombustiblity: Finally you have a way of attaching a façade thermally broken (really!) and at the same time noncombustible! Choose the option "noncombustible" !

1. The façade clips and the attachments are "made of metal" and are therefore noncombustible

2. The thermal breaks have the option "noncombustible".

Health: "Besides designing our buildings more energy efficient, we must also create healthier buildings!" Thermo Donut © system is responsible and takes care of that. With the option "gasket" (page 8) the thermal breaks are a solution for energy efficient **plus healthy** attachments.

Safety: Fire is not the only thread to a building (noncombustible). For example; The Thermo Donut © system does not use any structural adhesive and for every component can be made an understandable and comprehensible calculation.

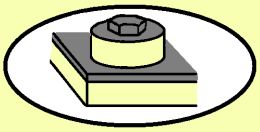
Robust: All components of the Thermo Donut © system are designed to be very strong, tough and robust!

Flexible: The Thermo Donut © system has solutions for vertical oriented façade subframing, horizontal oriented façade subframing, option "noncombustible", option "built-in gasket", solutions for other things (like for example canopies), different versions, any size of thermal break plates, individual components are available and if you don't find a solution for your case, do not hesitate to contact us. Our team is well known for its tailored solutions and is looking forward. info@mostdefined.com

Easy installation: The Thermo Donut © system is a straight forward concept and is therefore very easy and fast to install. It is very logic how to install the system. Anyways, we are happy to advice. info@mostdefined.com

Thermo Donut ©

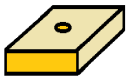
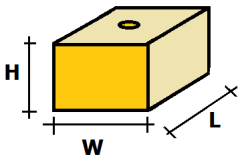
Thermal break plates
(and cubes)

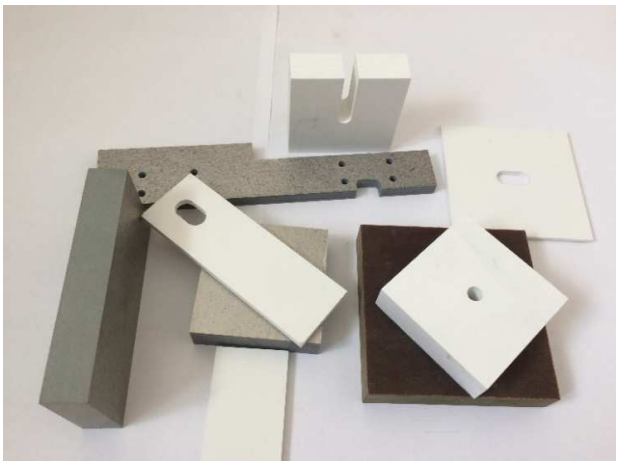


different sizes and shapes, four different materials

- **a) ECO material (hard PVC) / 0,085w/mk / use -30 to + 60 ºC**
- **b) standard material (high performance composite plastic material) / 0,13 w/mk / use -50 to +200 ºC**
- **c) noncombustible material (high performance composite plastic) / 0,12 w/mk / use -50 to +800 ºC**
- **d) phenol resin hard composite material "EBHC "/ 0,2 w/mk / use -50 to +120 ºC**
- **e) glue laminated wood/ ca. 0,15 w/mk / use -50 to +ca. 270 ºC**

Tolerance: DIN ISO2768MK (a,b,c)

Plate universal 1 25,4mm x 25,4mm x 10 mm, 1 bore (middle)		(1 inch x 1 inch)
Plate universal 2 50.8 mm x 50.8 mm x 10 mm 1 bore (middle)		(2 inch x 2 inch)
Plate universal 3 70 mm x 70 mm x 20 mm, 1 bore (middle) plus option built-in gasket		
Plate 4 (all measurements customized, see also page 9) length …….. mm x width …….. mm x height …….. mm, bore(s): number ?, diameter / shape ?, location? Option gasket? (page 8)		

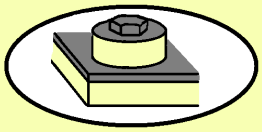


Large variety of different materials

Flexible

Thermo Donut ©

Thermal break tubes



different sizes,

two different materials

- **c) noncombustible material (high performance composite plastic material) / use -50 to +850 ºC ***
- **d) phenol resin hard composite material "EBHC " / 0,2 w/mk / use -50 to +120 ºC**
- **e) glue laminated wood/ ca. 0,15 w/mk / use -50 to +ca. 270 º** (inner Ø 12 mm)

tube 1: outer diameter 45mm, inner diameter 20mm, length 25.40mm

tube 2: outer diameter 45mm, inner diameter 30mm, length 25.40mm

tube 3: outer diameter 45mm, inner diameter 20mm, length 50.80mm

tube 4: outer diameter 45mm, inner diameter 30mm, length 50.80mm

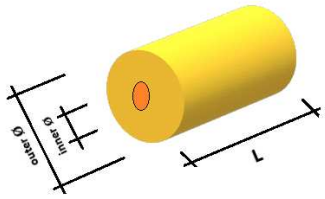
tube 5: outer diameter 45mm, inner diameter 20mm, length 100mm

tube 6: outer diameter 45mm, inner diameter 30mm, length 100mm

tube 7: (all measurements customized, see also page 9)

outer diameter .....mm / inner diameter .....mm / length .....mm

New !



Large length well suitable
(thick insulation)

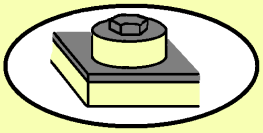
Small surface (round form)

Version "superior" page 7

* Thermal conductivity varies

Thermo Donut ©

Thermal break donuts
(bushing)



two different materials

- **b) standard material (high performance composite plastic material) / 0,13 W/mk / use up to 200 °C**
- **c) noncombustible material (high performance composite plastic) / 0,12 W/mk / use up to 800 °C**

donut 4

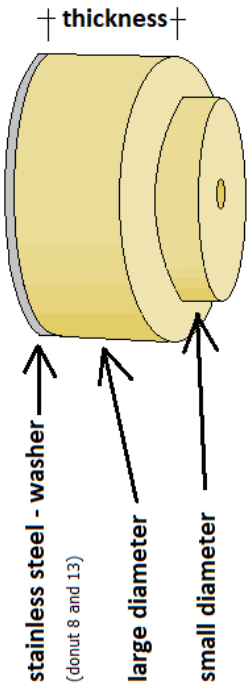
Large diameter 24 mm
Small diameter17 mm
Thickness 4 mm

donut 8

Large diameter 45 mm
Small diameter20 mm
Thickness 8 mm
adhered big stainless steel washer

donut 13

Large diameter 45 mm
Small diameter 35 mm
Thickness 13 mm
adhered big stainless steel washer



donut 4 is suitable for façade attachments

donut 8 is suitable for version "superior of "tube" (page 6)

donut 13 is suitable for universal attachments

Tolerance: DIN ISO2768MK

Version "superior" !

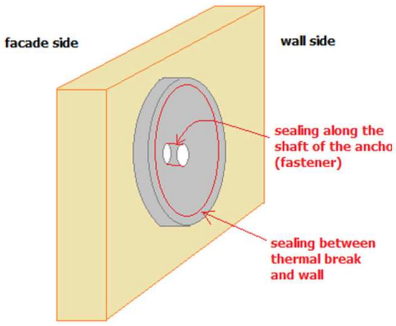
Other dimensions on demand (info@mostdefined.com)

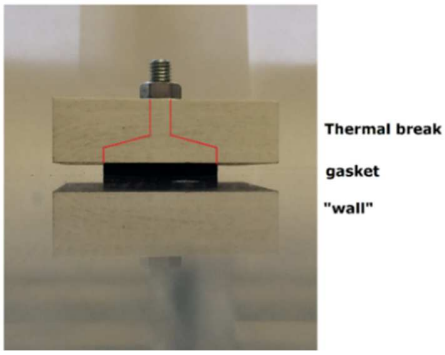
Option: built-in gasket

(as per 2020, applicable for plates and cubes)

Many buildings have water leaking walls! Mold and mildew is often the result. That's very unhealthy! This means, besides designing our buildings more energy efficient, we must also create healthier buildings! "Most Defined" is responsible and established the option "built-in gasket" for their thermal breaks! We wanted to have a solution for *energy efficient plus healthy* façade attachments!

After many calculations and tries, the optimal material and size of the gasket as well as the best form and size of the pit in the thermal break were determined.





The cellular EPDM gasket (rubber) comes preassembled (built-in the plates or cubes). During the process of tightening the thermal break onto the substratum (wall) the gasket gets pressed against:

- the wall (substratum) and seals that way between thermal break and wall.
- and along the shaft of the fastener (shaft, not thread) and seals that way between fastener (anchor) and thermal break.

Gasket: black cellular EPDM (rubber), compressible, elastic, soft, water resistant, durable, though, etc.

Pit (recess in thermal break): optimal form, diameter and angle (guiding flow of rubber gasket while tightening thermal break onto substratum (wall).

Conditions: thermal break needs to be big enough (normally min. 68 mm wide and 17 mm thick). The material qualities "Standard" and "noncombustible" are suitable (machinable).

The gaskets are already preassembled (already mounted into the thermal break (adhesive). For example **Plate universal 3** (page 5), or **Individual components** (page 9).

Individual / custom made components:

We custom design thermal breaks. Just let us know your needs:

- Size (measurements), if possible a drawing
- Material quality (ECO, STANDARD, NONCOMBUSTIBLE, EPOXY BASED HARD COMPOSITE or special?)
- Including gasket (or without)

From very small to very large, any shape even machined parts, everything are possible!

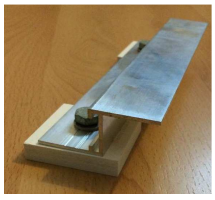



Tell us about the application. For example extreme temperatures, or humidity, or sliding parts, or .....

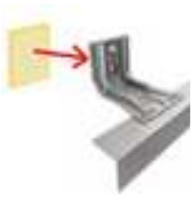
We make it possible!

possible applications:

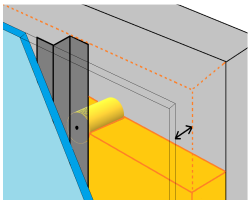
(listing incomplete)

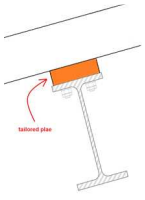


plate



plate


tube



plate

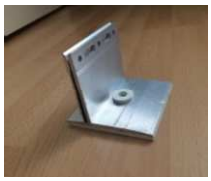


Plate plus donut

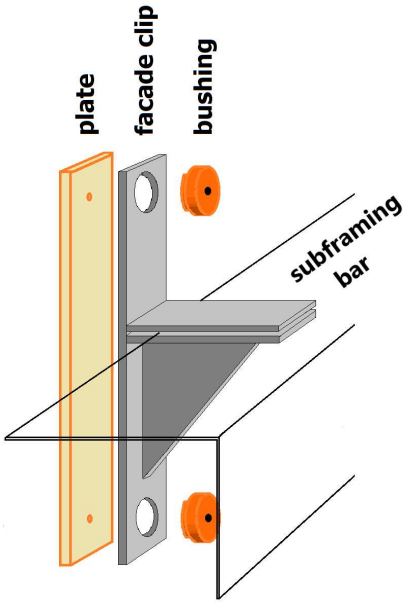
Ask us for a quote!

Examples:

Example 1:

1 x thermal break plate (page 5)
2 x donut 4 (page 7)
façade clip (by others)

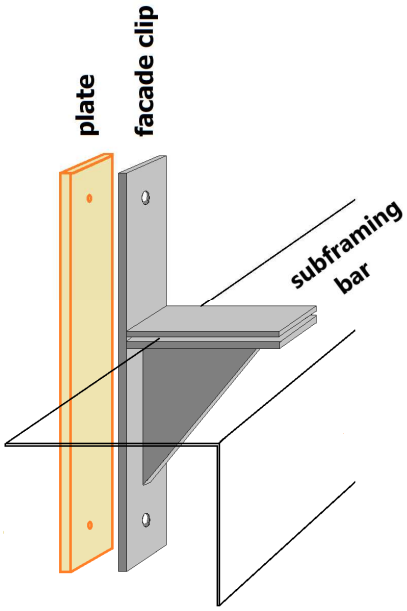
(application for attachment of rainscreen façade with horizontal subframing bar, version "superior")



Example 2:

1 x thermal break plate (page 5)
façade clip (by others)

(application for attachment of rainscreen façade with horizontal subframing bar, version "pro")



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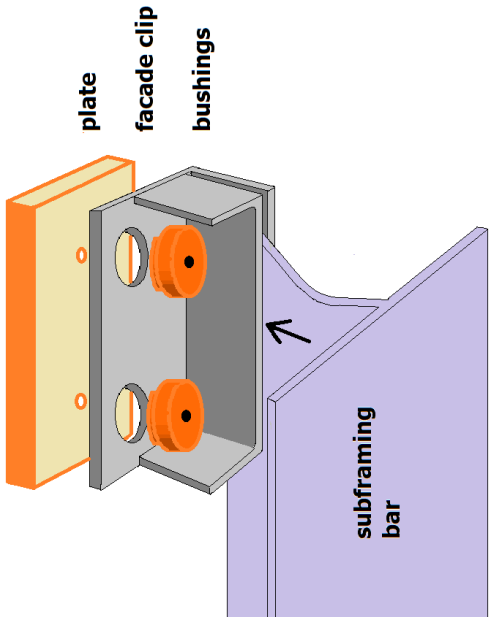
Example 3:

1 x thermal break plate (page 5)
2 x donut 4 (page 7)
façade clip (by others)

(application for attachment of rainscreen façade with vertical subframing bar, version "superior")

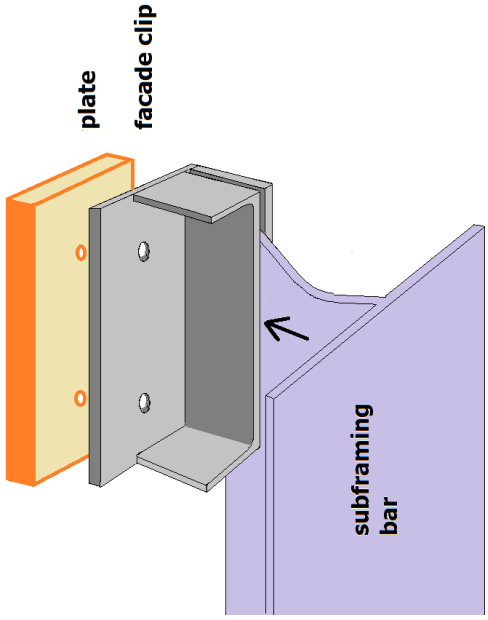


Example 4:

1 x thermal break plate (page 5)

façade clip (by others)

(application for attachment of rainscreen façade with vertical subframing bar, version "pro")



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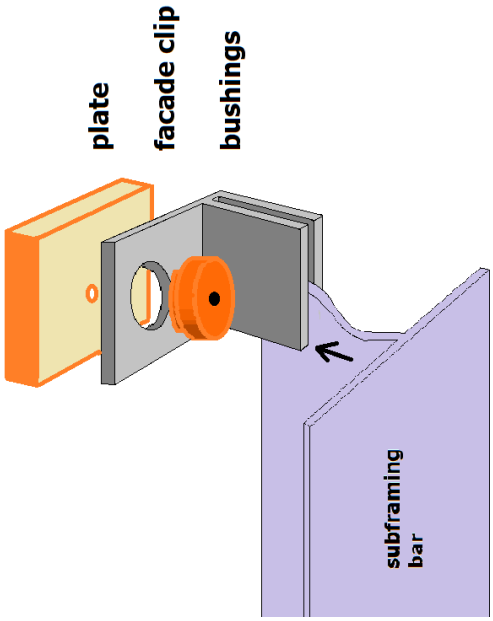
Example 5:

1 x thermal break plate (page 5)
1 x donut 4 (page 7)
façade clip (by others)

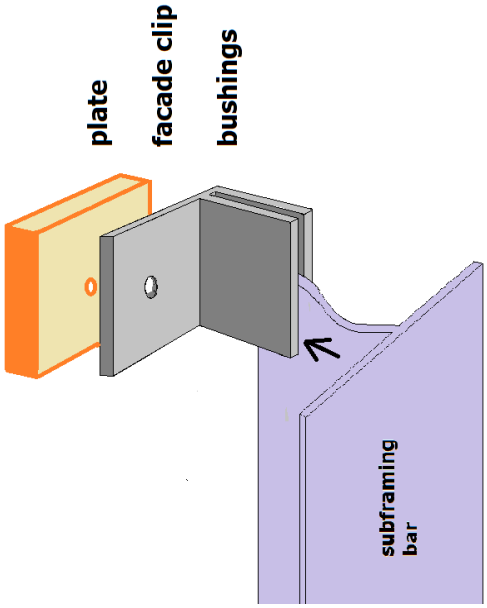
(application for attachment of rainscreen façade with vertical subframing bar, version "superior")



Example 6:

1 x thermal break plate (page 5)
façade clip (by others)

(application for attachment of rainscreen façade with vertical subframing bar, version "pro")



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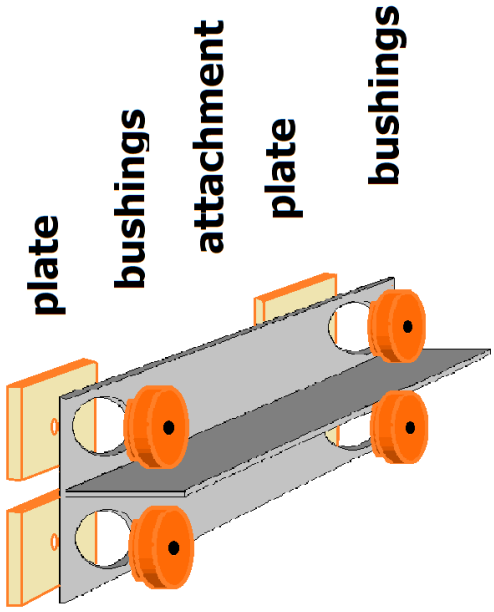
Example 7:

4 x thermal break plate "universal 2" (page 5)
4 x donut 13 (page 7)
Metal Attachment (by others)

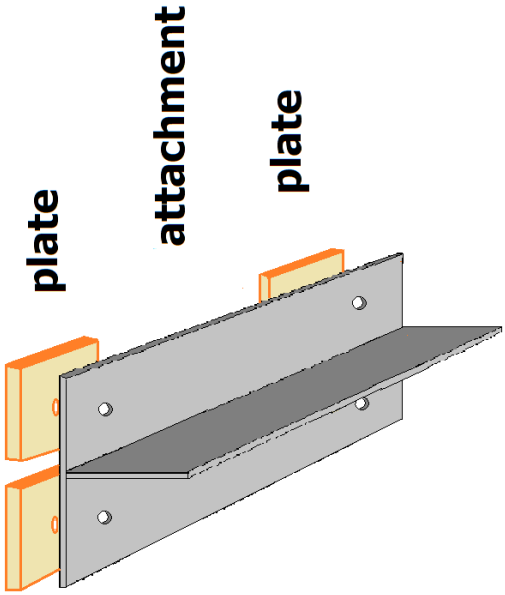
(application for universal attachment, version "superior")



Example 8:

4 x thermal break plate "universal 2" (page 5)
Metal Attachment (by others)

(application for universal attachment, version "pro")



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