

# ETICS & VARIETY

## Everything is possible

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## 1. Overview

## 2. Variation in techniques

Insulating material, mounting, accessories, plaster

## 3. Variation in design

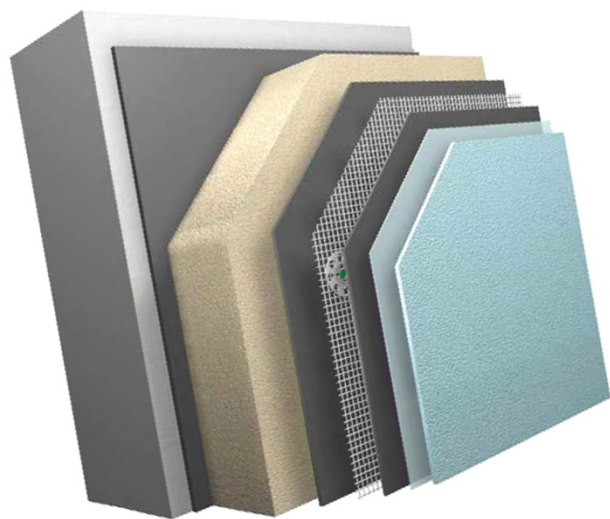
Surface, shape

## 4. Summary





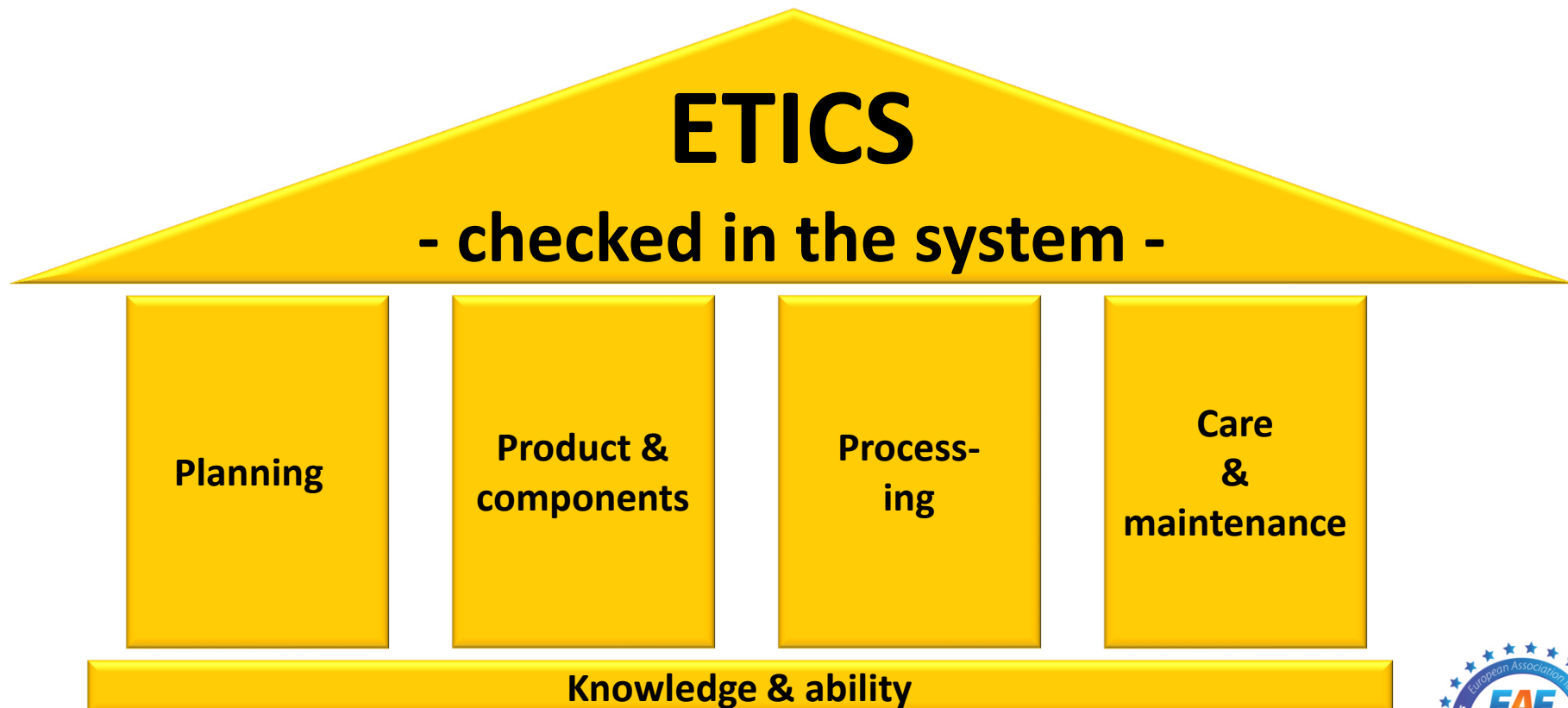
European Association for External Thermal Insulation Composite Systems (EAE)



**System loyalty pays off!**

Why respecting the system is essential for quality, safety and long-term performance of External Thermal Insulation Composite Systems (ETICS).





## Variety of insulating materials

There is not ONE perfect insulating material, but rather suitable solutions.

- Mineral foam
  - Polyurethane
  - XPS
  - Wood fibre panels
  - Insulating materials made from renewable raw materials
  - Phenolic foam
  - ...



## Variety of mounting techniques

Adhesive methods:

Edge-bead-point method

Buttering-floating method

Machine application to the wall



## Variety of mounting techniques

Based on the selected system, the sub-surface conditions, the insulating material and wind loads, the following mechanical mounting options are also possible in addition to adhesion.

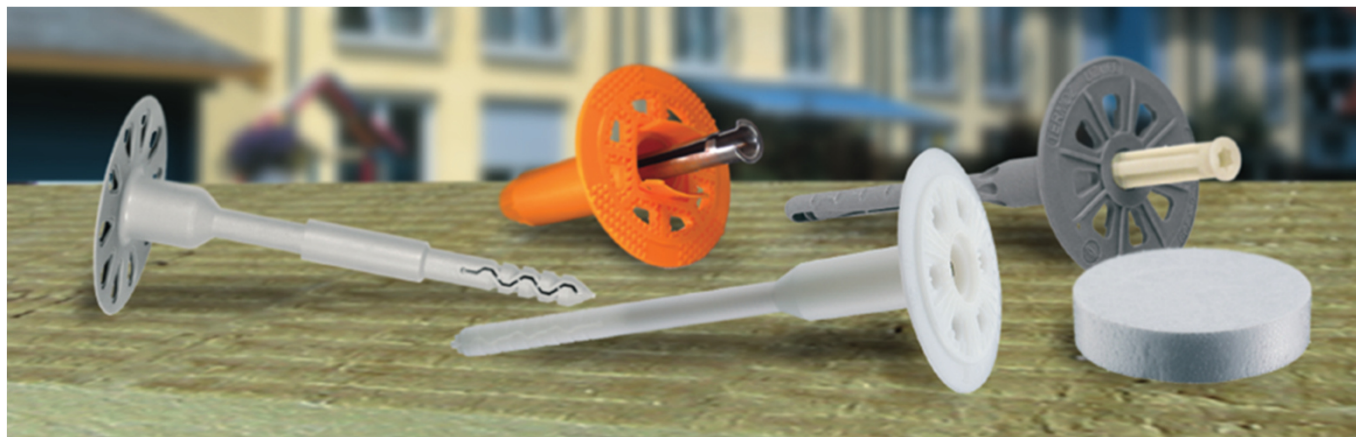
## Variety of mounting techniques

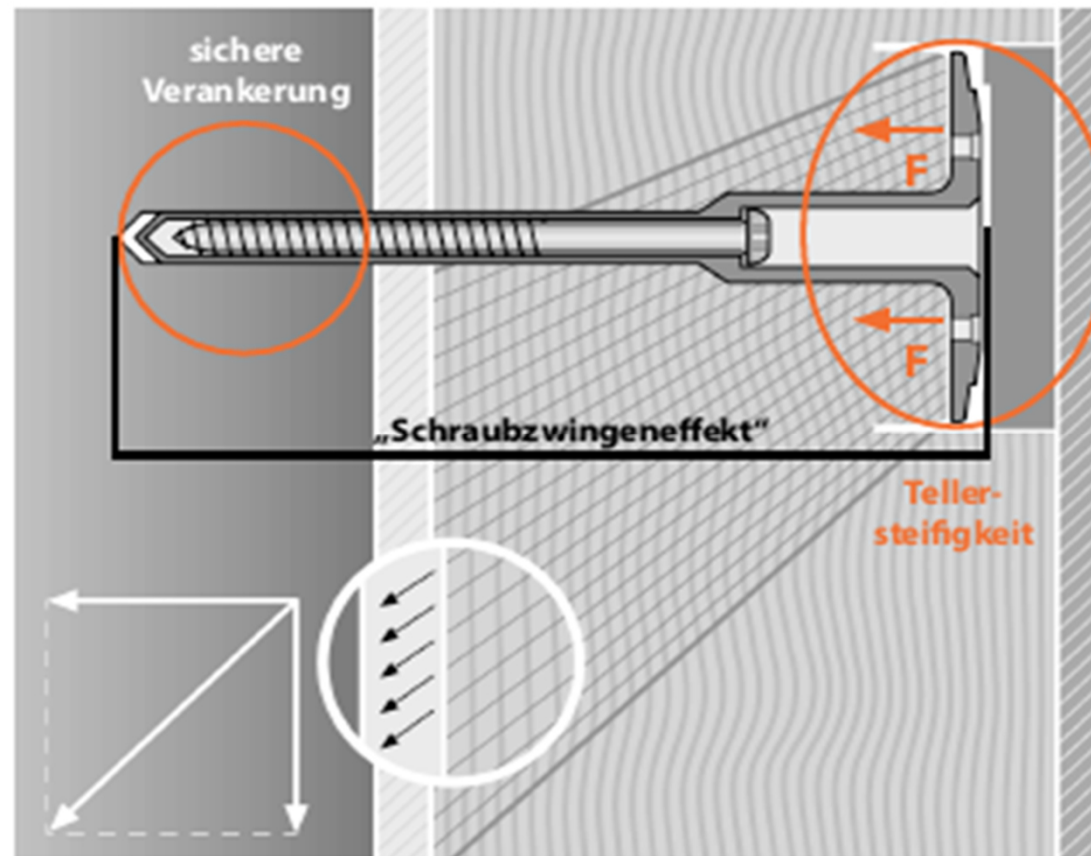
Dowels – differentiation according to the following criteria:

Anchoring in the wall  
(expansion dowels, drilled dowels, set dowel)



Anchoring in the insulation material  
(plate dowel, recessed mounting, additional plates)

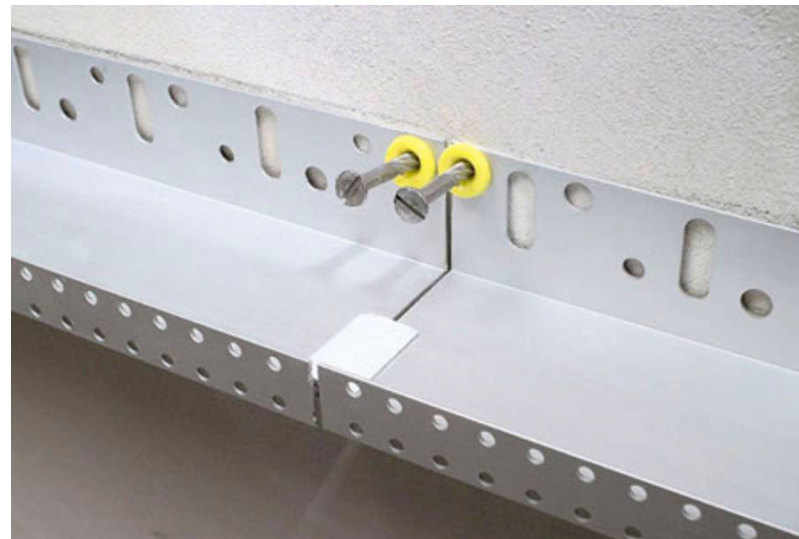




## Variety of mounting techniques

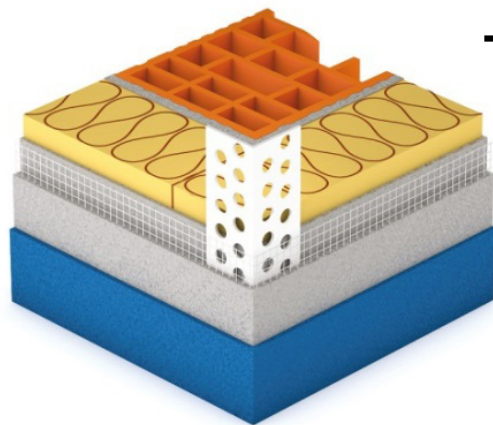
### Rail mounting

Mounting method serves to bridge non-load-bearing surface coatings or to compensate for significant unevenness in the sub-layer.

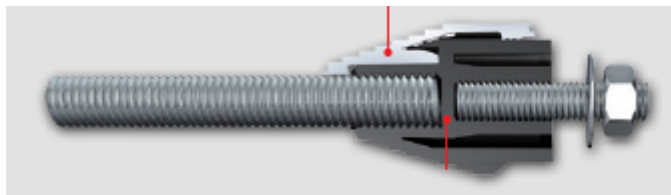
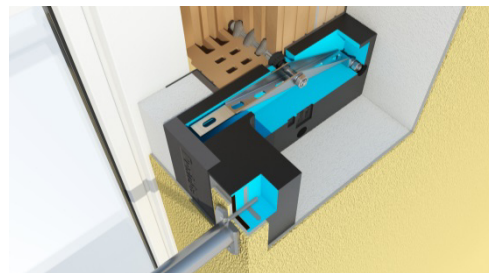


## Variety of accessories

The spectrum of accessory solutions ranges from seals, corner plates, connections for windowsills and support brackets to options for facade greening



→ Free from thermal bridging



## Variety of plaster systems

... Shaping the surface with a wide variety of structures, thicknesses, shapes and colours

- Mineral plasters
- Silicone plasters
- Silicone-resin plasters
- Dispersion / synthetic resin plasters
- ...



## Craftsmen give the facade an individual look

## Diversity in surface design

In addition to traditional plaster, it is also possible to use high-quality metal, glass and ceramic applications as well as wood and



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## VARIATION IN DESIGN SHAPE

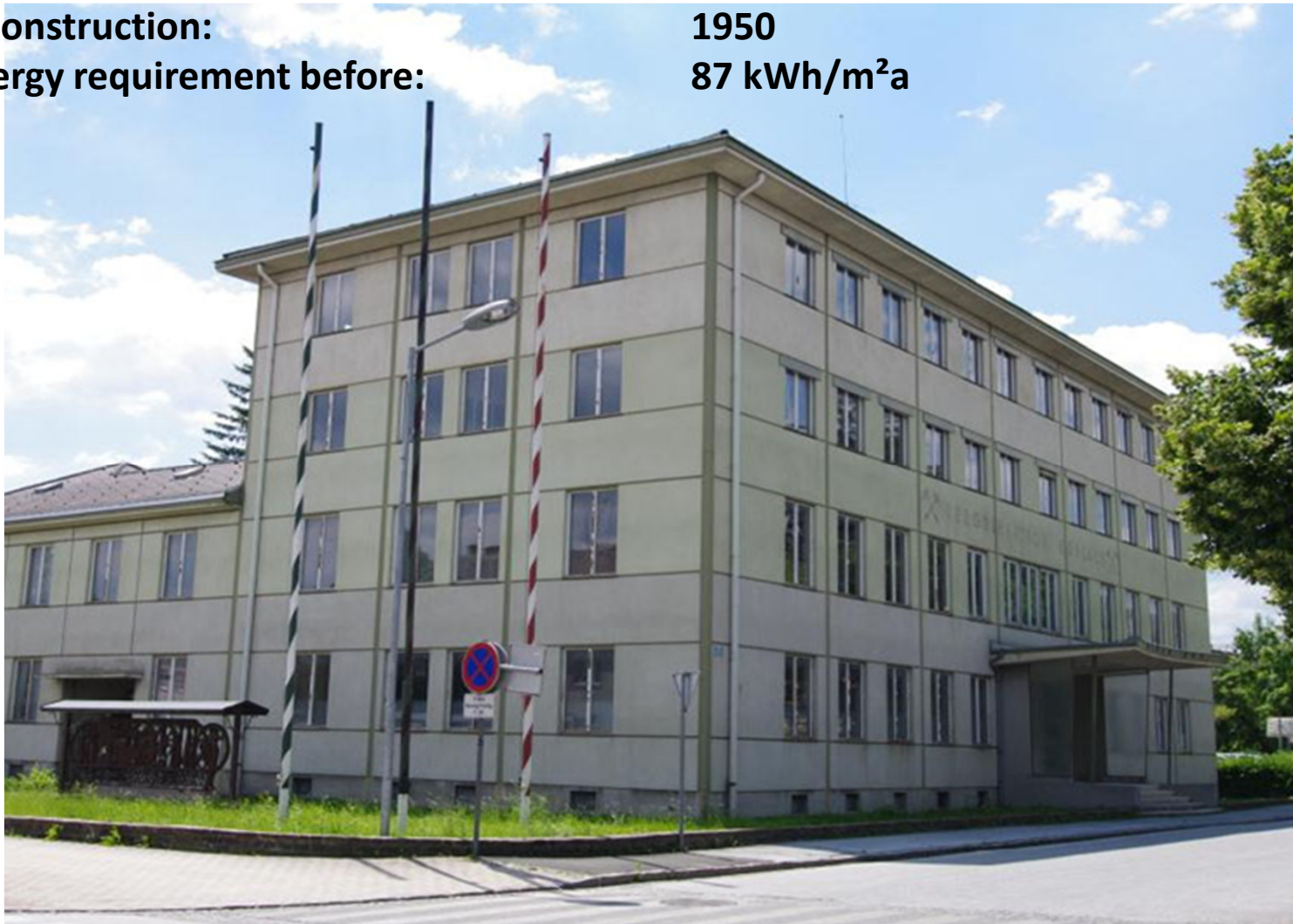


Year of construction:

1950

Heat energy requirement before:

87 kWh/m<sup>2</sup>a



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VARIATION IN DESIGN  
SHAPE






Heat energy requirement after: 29 kWh/m<sup>2</sup>a  
Improvement: 67%



## SUMMARY





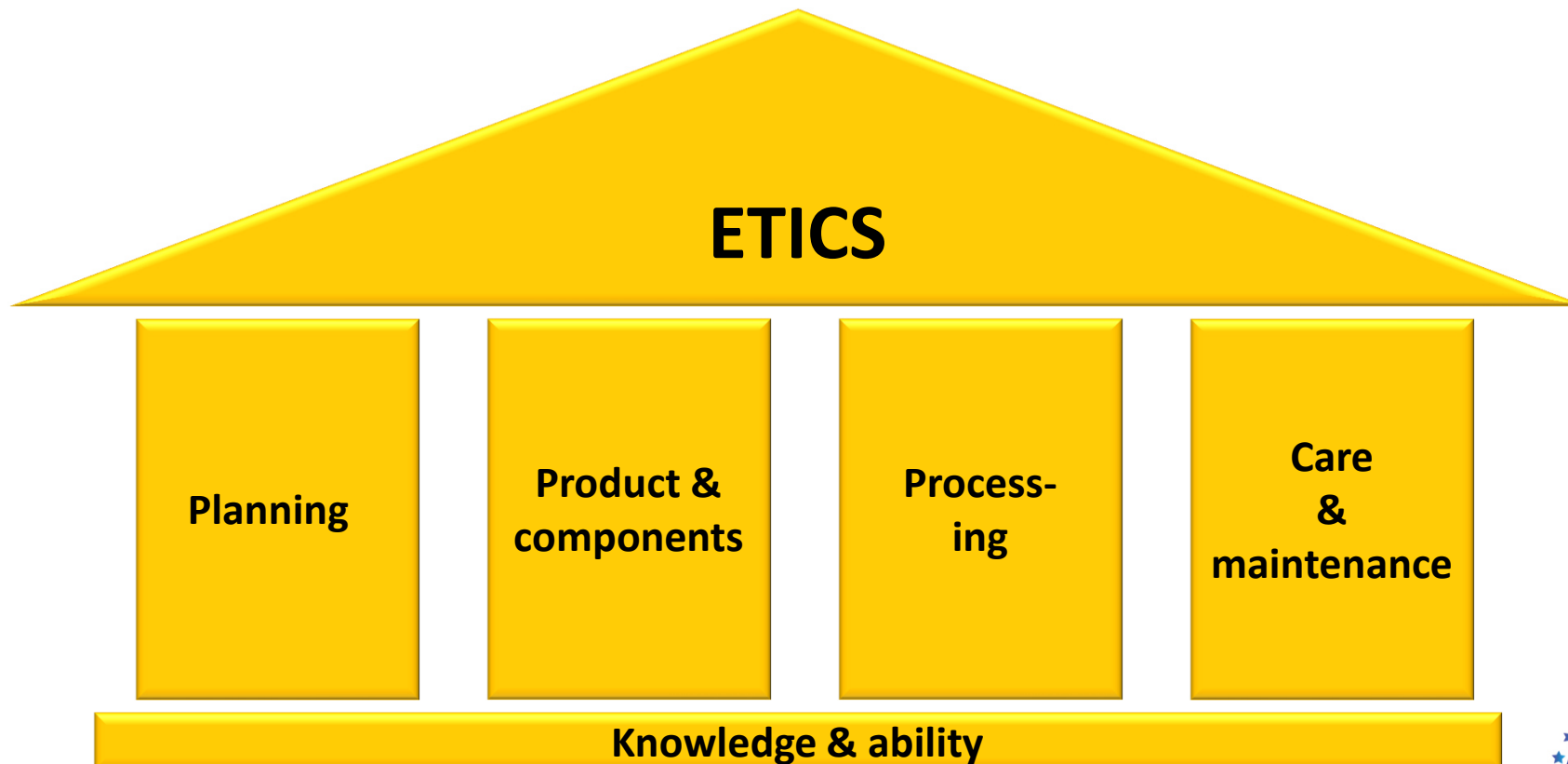
Platz	Land	Punkte
1	 <i>Argentinien*</i>	1419
2	 <i>Deutschland*</i>	1401
3	 Belgien	1387
4	 Portugal	1235
5	 Kolumbien	1228
6	 <i>Spanien*</i>	1223
7	 <i>Brasilien*</i>	1204
8	 Wales	1195
9	 Chile	1177
10	 <i>England*</i>	1161
11	 Österreich	1100
12	 Schweiz	1044
13	 Rumänien	1042
14	 <i>Niederlande</i>	1004
15	 Tschechien	983
16	 Kroatien	965
17	 <i>Italien*</i>	962

## This variety of technical and attractive systems...

<div>λ-Wert (Bemessung) [W/(m²K)]</div> <div>Baustoffklasse im System (DIN 4102-1)</div> <div>Klebmörtel organ.</div> <div>Klebmörtel mineral.</div> <div>Klebschaum ohne Dübel</div> <div>Verdübelung erforderlich rein mechanisch</div> <div>Unterputz organ.</div> <div>Unterputz mineral.</div> <div>Kunstharzputze</div> <div>Silikonharzputze</div> <div>Silikatputze</div> <div>Trockenmörtel mineral.</div> <div>Flächverblender</div> <div>Außendopplung</div>																
Dämmstoff	Wärme- leitung	Brand- schutz	Verklebung Dämmplatten			mechanische Befestigung			Unterputz		Oberputz				Beklei- dung	Sonst.
expandierter Polystyrol- Hartschaum (EPS)	0,032 0,035 0,040 <sup>1</sup>	B1 (B2) <sup>2</sup>	+	+	+	M	+	- M M	+	+	+	+	+	+	M	M
Mineralwolle (MW)	≤ 0,036 ≤ 0,040	A2	-	+	-	-	+	- M	M	+	+	+	+	+	- M	M
Mineralwolle-Lamellen (MW)	≤ 0,041	A2	-	+	-	+	M	-	+	+	-	+	+	+	M	M
Holzweichfaser (WF)	≤ 0,050	B2	-	M	-	-	M	+	M	+	+	+	+	+	-	-
Polyurethan-Hartschaum (PUR)	≤ 0,028	B1	+	+	-	-	+	-	+	+	+	+	+	+	-	-
Mineraleisplatten	0,045	A2 B1	-	+	-	-	+	-	+	+	-	+	+	-	-	-
Phenol-Hartschaum (PF)	≤ 0,024	B1	-	+	-	M	+	-	+	+	+	+	+	+	-	-
Kork (ICB)	0,040	B2	-	+	-	-	+	-	+	+	-	-	-	+	-	-
Schilfrohr	0,055	B2	-	-	-	-	-	+	-	+	-	-	-	+	-	-
Vakuum- Isolationspaneele (VIP)	0,008	B2	-	+	-	+	-	-	-	+	-	-	-	+	-	-
extrudierter Polystyrol- Hartschaum (XPS) <sup>3</sup>	≤ 0,036	B2	+	+	+	+	M	-	+	+	+	+	+	+	M	-

Adjustments to individual requirements

... is possible!





Thank you for your  
attention!

<http://www.ea-etics.eu/>

