



ZAK conference Sydney – 20 February 2025

Mastering the challenges & complexity of today's façades

A large background image showing a dense crowd of black birds, with one white bird standing out prominently in the center, facing left. The white bird is a small, stout bird with a dark beak and a small crest.

Hybrid steel curtain walls, the long-awaited disruption in the market?

Eric Claeys, ir MSc MBA

Co-founder Fassada Steel SA

*Patented in
over 70 countries*



Fassada Steel SA. Who?



Belgian engineering



Swiss manufacturing

Challenges & complexity of today's façades

Topics

1. Disruption means cost savings
2. The market needs disruptive solutions: hybrid steel curtain wall
3. USP's of hybrid steel
4. Drastic reduction of CO₂ emission & energy consumption
5. Comforting answer for air pollution in cities
6. Circularity
7. Shorter execution times
8. Social sustainability
9. External claddings
10. "keeping the sun out"
11. Fire resistance

Disruption means cost savings



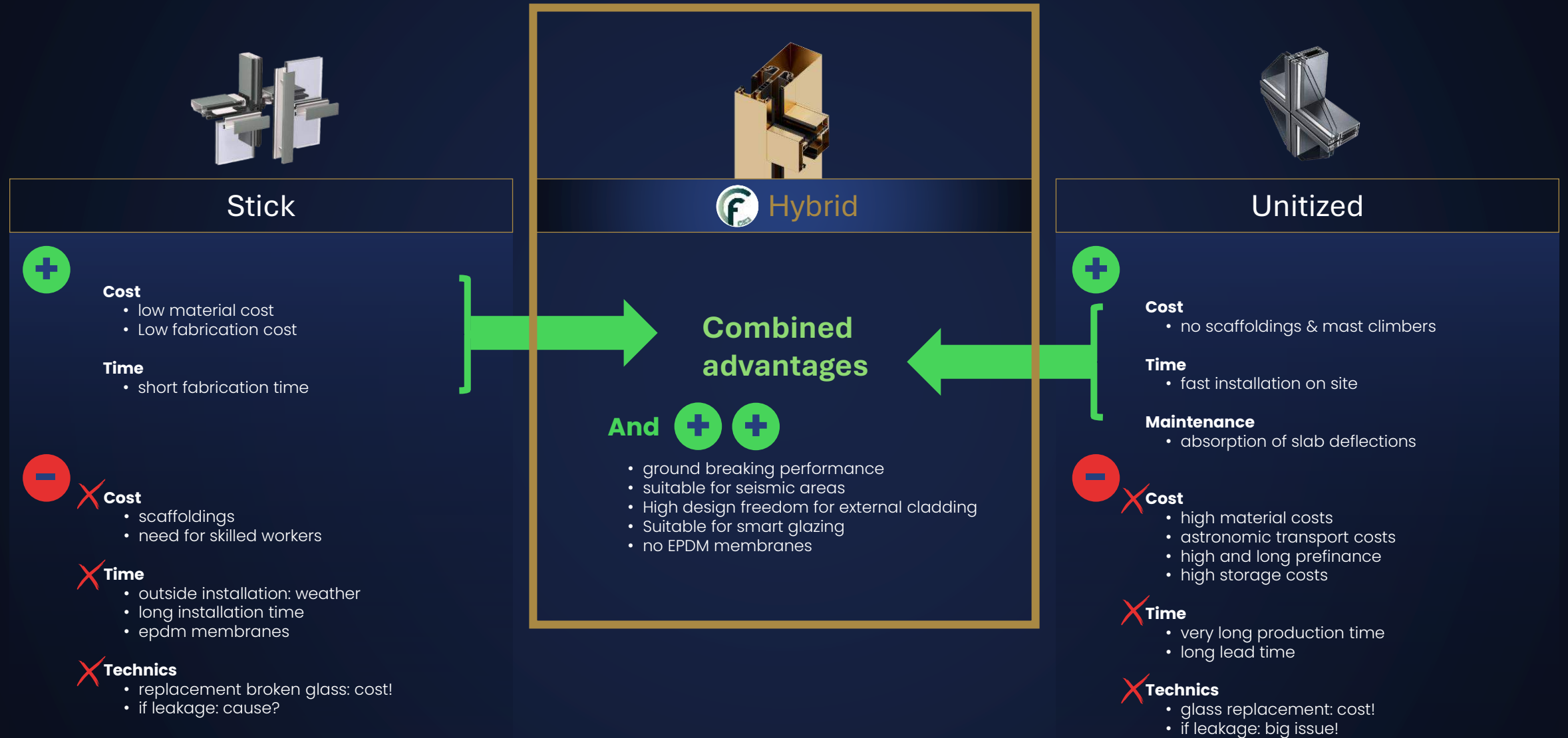
At the end of the day, it's all about money

Garry Kasparov



Disruption & cost-saving efficiency goes hand in hand

The market needs disruptive solutions: hybrid steel curtain wall



Fassada hybrid not only combines the best of both worlds, stick and unitized, but adds a long list of further USP's

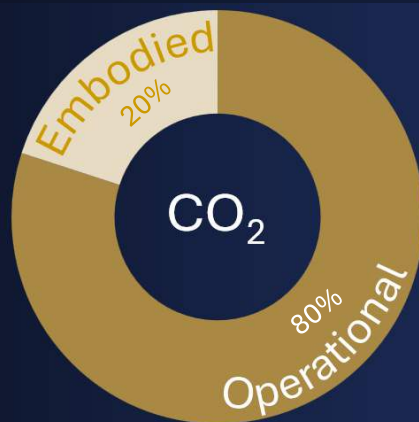
USP's of hybrid steel



Hybrid steel

- 10 times less CO₂ emission compared to aluminium
- steel = green
- easiness of fabrication: no welding required
- no issue of circularity
- fire resistance
- strong and structurally sound material
- competitive with stick aluminium systems
- significantly more economic than unitized aluminium systems

Drastic reduction of CO₂ emission & energy consumption

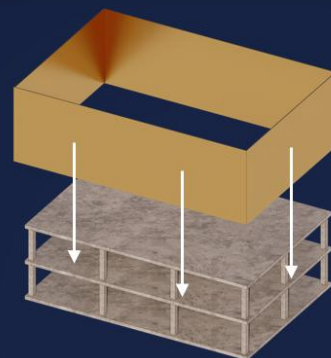


**CO₂ emission
conventional building**

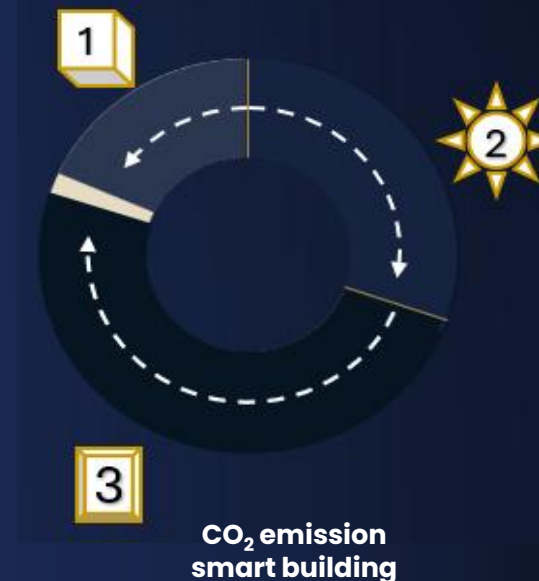
Embodied CO₂ **20%**

Operational CO₂ **80%**

Reduce the energy need



The façade is the physical barrier
between inside & outside
climate.



**CO₂ emission
smart building**

2% 1 alu --) steel 10x less

0% 2 50% balance: by archi. PV panels

3 30% reduction: keeping the sun out

Green products are nice, however a debate in the margin.

The real challenge is to tackle the **80% of the operational CO₂ emission** ... by **a smart façade**

Energy costs – Keeping the sun out, a question of interpretation...

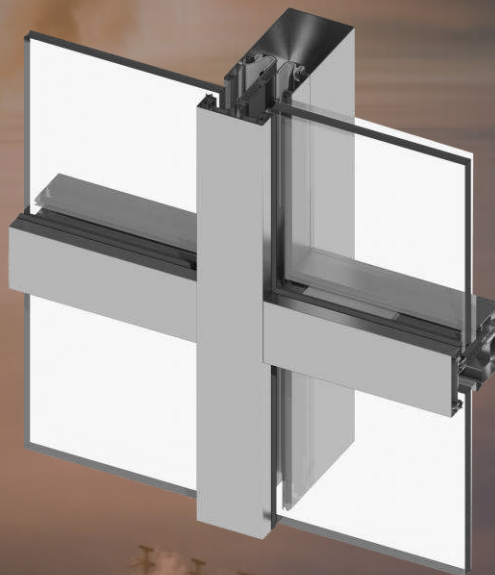


Common sense approach



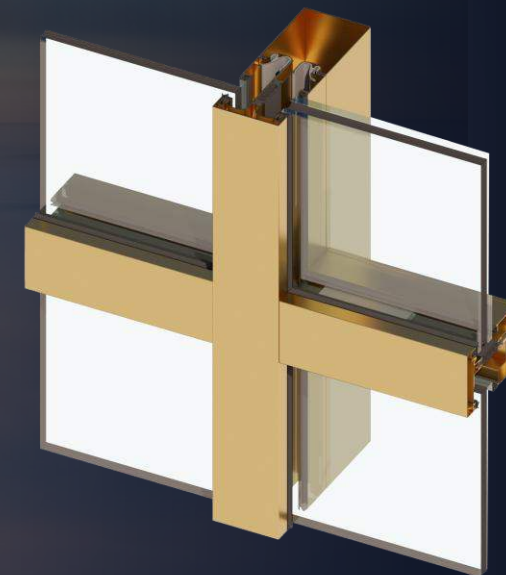
**BREEAM Gold building
but ... a real energy monster**

Comforting answer for air pollution in cities



H75-hybrid steel

- Galvanized steel system
- Powder coated or wet painted

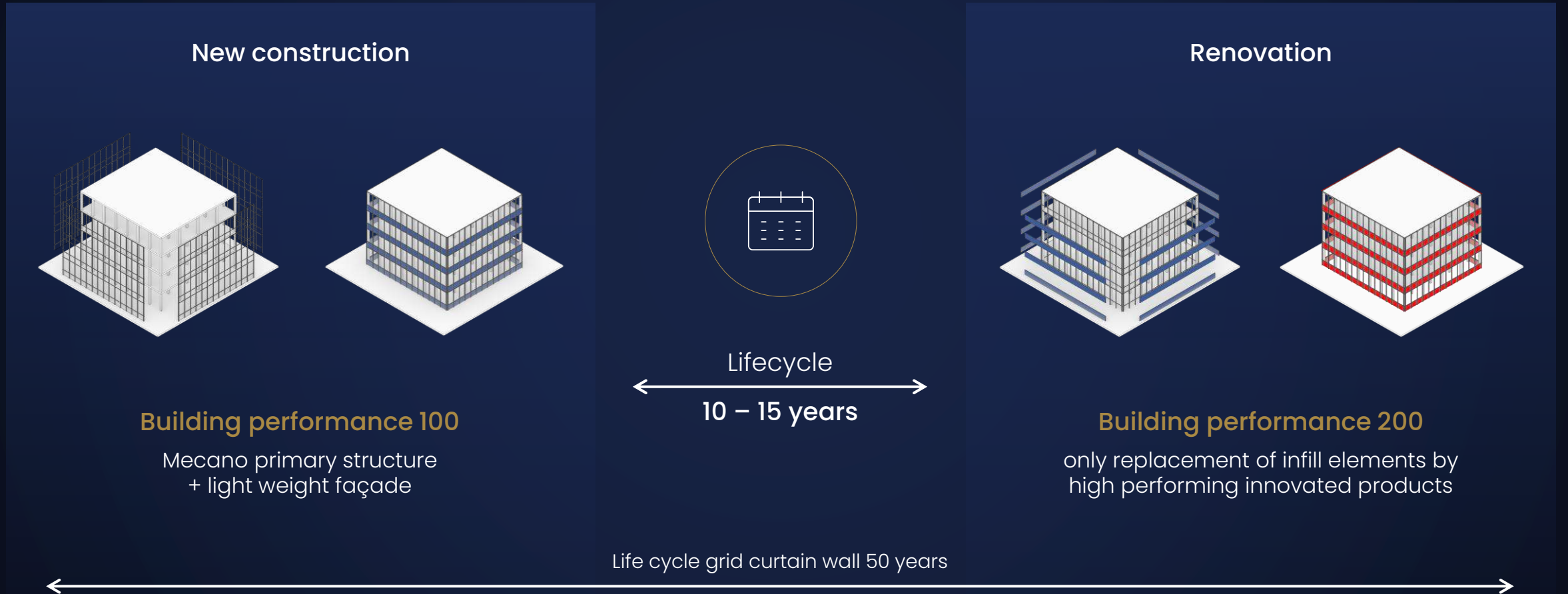


H75-hybrid stainless steel

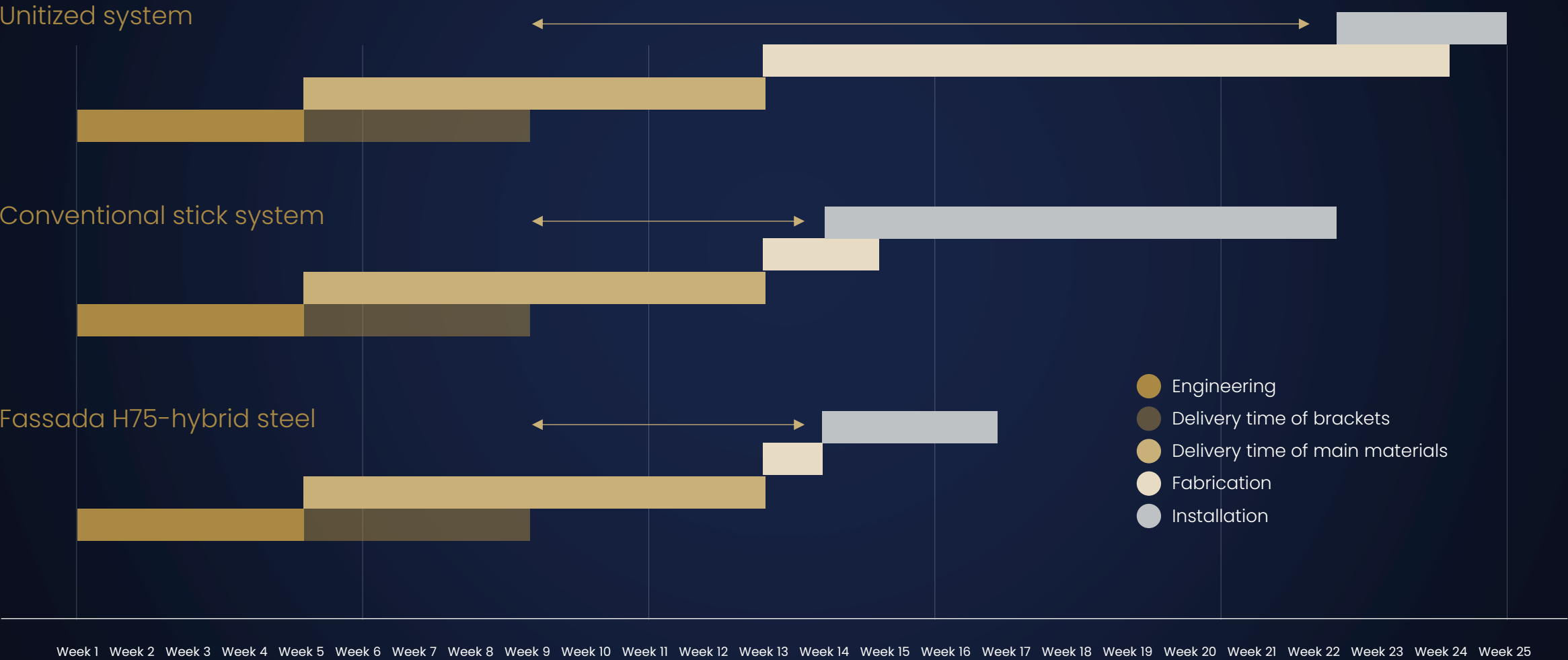
- Stainless steel system
- Inside 304L – Outside 316L

Circularity & future renovation: the need for a flexible skin

As the façade grid is not a disposable product ... the best circularity is no circularity!



Shorter execution times



Social sustainability

Our smart technology is fit for low-skilled workers.

- straightforward & stripped-down solutions
- can be implemented as well by low skilled workers

We do everything in our power to minimise risks.

- easily installable from the inside
- ensuring safest possible implementation



External claddings

External claddings?

Never been so easy and technically so outstanding good



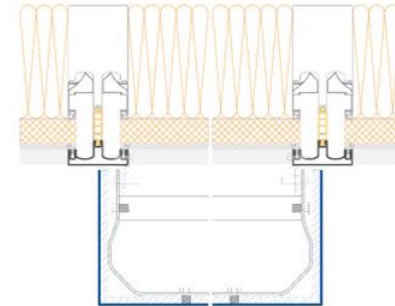
Full installation & glazing from inside



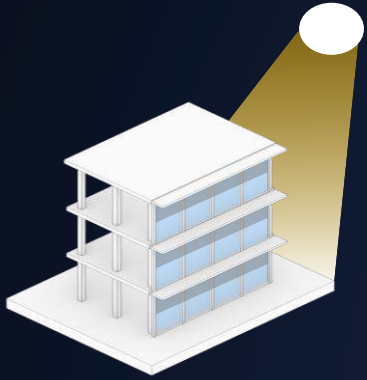
Perfect uninterrupted shield



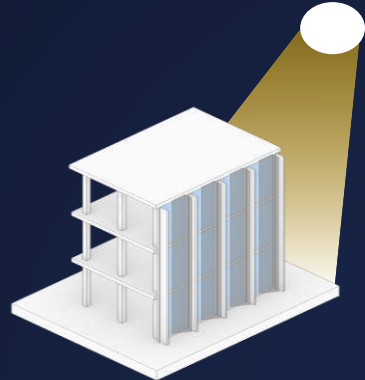
No silicone, no membranes



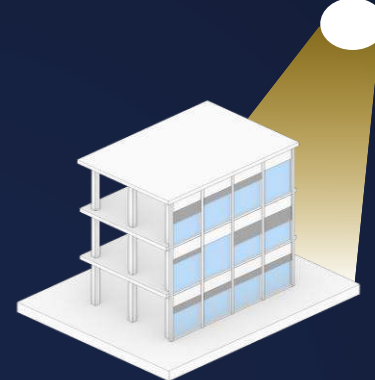
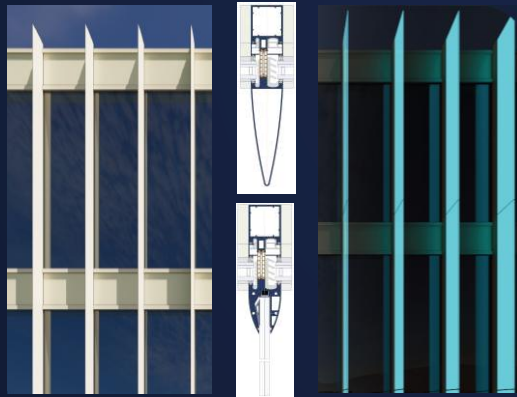
Keeping the sun out – Fassada patented smart solutions



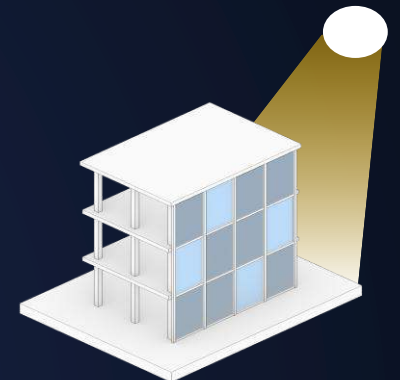
Horizontal louvres



Vertical louvres



Sunshading screens



Smart glazing



Full proof installation form inside, it's our DNA.
Keeping the sun out, it our mission.

Fire resistance

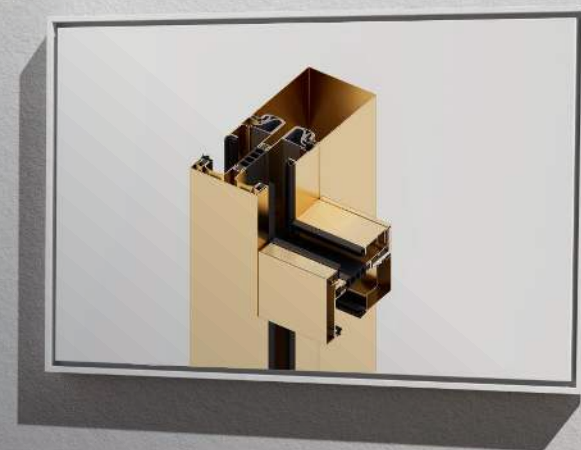


H75-hybrid steel curtain wall systems

Real fire resistance. Tower inferno belongs to the past, once and for all



First we think,
than,
we think to last.





*Dear ladies and gentlemen,
I thank you for your attention.*



HQ Fassada Systems BV – Kanaalstraat 1B, 2240 Zandhoven – Belgium | www.fassada.com | +32 3 385 88 64 | info@fassada.com

HQ Fassada Steel SA – Via Gerrette 4 6855 Stabio, Switzerland | info@fassada.com