More Space
More Safety
More Sustainability

How a new insulation material changes the game

Bettina Gerharz-Kalte | Evonik
Zak World of Façades Manchester, May 2nd 2019

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We consider ourselves as a solution provider

A modern Thermal Insulation of a building faces three main challenges

1. The lack of space
2. The need for high fire resistance
3. The rising demand for sustainable buildings and products

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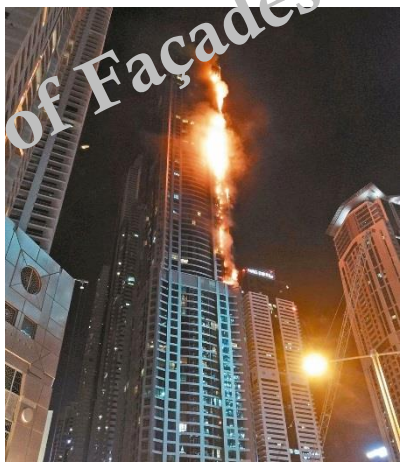

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CALOSTAT® saves space

- λ = 0.019 W/mK → gives you space for creativity
- λ = 0.019 W/mK → gives you more space to rent or sell
- < 4 inches (100mm) → R-value = 5.170 m² K/W (U-value = 0.193 W/m²K)

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CALOSTAT® raises safety in your building

CALOSTAT®

- is classified in accordance with EN 13501 as A2-s1, d0
- won’t contribute in any stage of a fire, including the fully developed fire
- is classified as being in the lowest smoke emission category
- has no burning falling droplets in accordance with the European standard
- isn’t affected by last year’s announced ban on combustible materials in cladding systems
- can continue to be used in the walls of buildings over 18m high

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CALOSTAT®

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CALOSTAT® is one of the most sustainable insulation materials in the market

CERTIFIED TM
cradletocradle
GOLD

THIRD-PARTY VERIFIED
EPD
ISO 14025 and EN 15804
Institut Bauen und Umwelt e.V.

CRADLE TO CRADLE
PRODUCTS
INNOVATION
INSTITUTE

Material Health
PLATINUM

ISSUED TO Evonik Resource Efficiency GmbH

STANDARD 3.1 **EXPIRES** 22 February 2021

LEAD ASSESSMENT BODY
EPEA GmbH

ASSESSED APPLICATIONS
manufacturing process:all operations for assembly, on side assembly;
use scenario:outdoor and indoor insulation product;

PRODUCTS COVERED
CALOSTAT®

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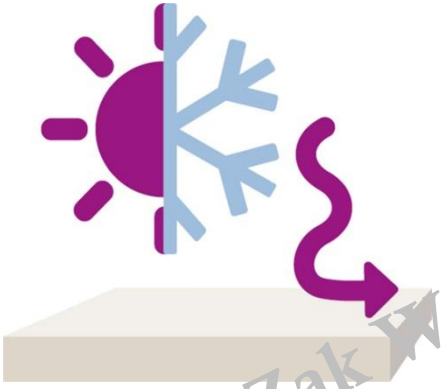
CALOSTAT® combines efficiency, safety and sustainability



λ = 0,019 W/mK

A2-s1, d0

Recyclable

C2C in Gold

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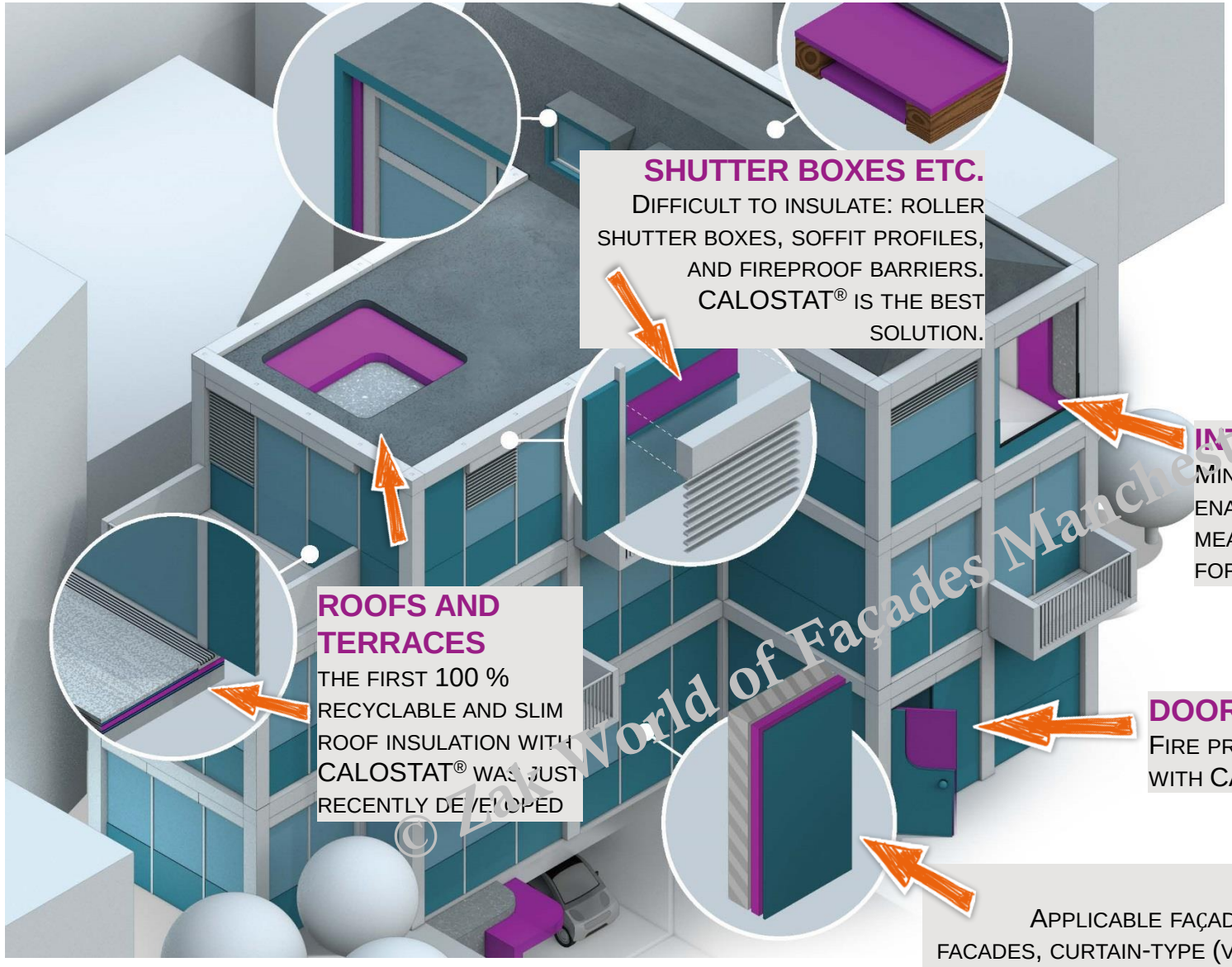
What is your main challenge?

SPACE? FIRE PROTECTION? SUSTAINABILITY?

CALOSTAT® CAN BE THE ANSWER



SHUTTER BOXES ETC.

DIFFICULT TO INSULATE: ROLLER SHUTTER BOXES, SOFFIT PROFILES, AND FIREPROOF BARRIERS. CALOSTAT® IS THE BEST SOLUTION.

INTERIOR

MINERAL AND ULTRASILM: CALOSTAT® ENABLES THE NEXT GENERATION OF MEANINGFUL INTERIOR INSULATION, MAINLY FOR RENOVATION.

ROOFS AND TERRACES

THE FIRST 100 % RECYCLABLE AND SLIM ROOF INSULATION WITH CALOSTAT® WAS JUST RECENTLY DEVELOPED

DOORS

FIRE PROTECTION DOORS BECOME SLIM WITH CALOSTAT®

FAÇADE

APPLICABLE FAÇADES ARE E.G. UNITIZED FACADES, CURTAIN-TYPE (VENTILATED) FACADES, AND CONCRETE SANDWICH ELEMENTS. BOTH FOR RENOVATION OR NEW BUILDINGS WHERE SPACE IS ARE AND EXPENSIVE.

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Gained space for rent and sell

CALOSTAT® high-performance insulating material was the only material that could meet these requirements, and offers facade planners great freedom of design – while being easy to handle and install.

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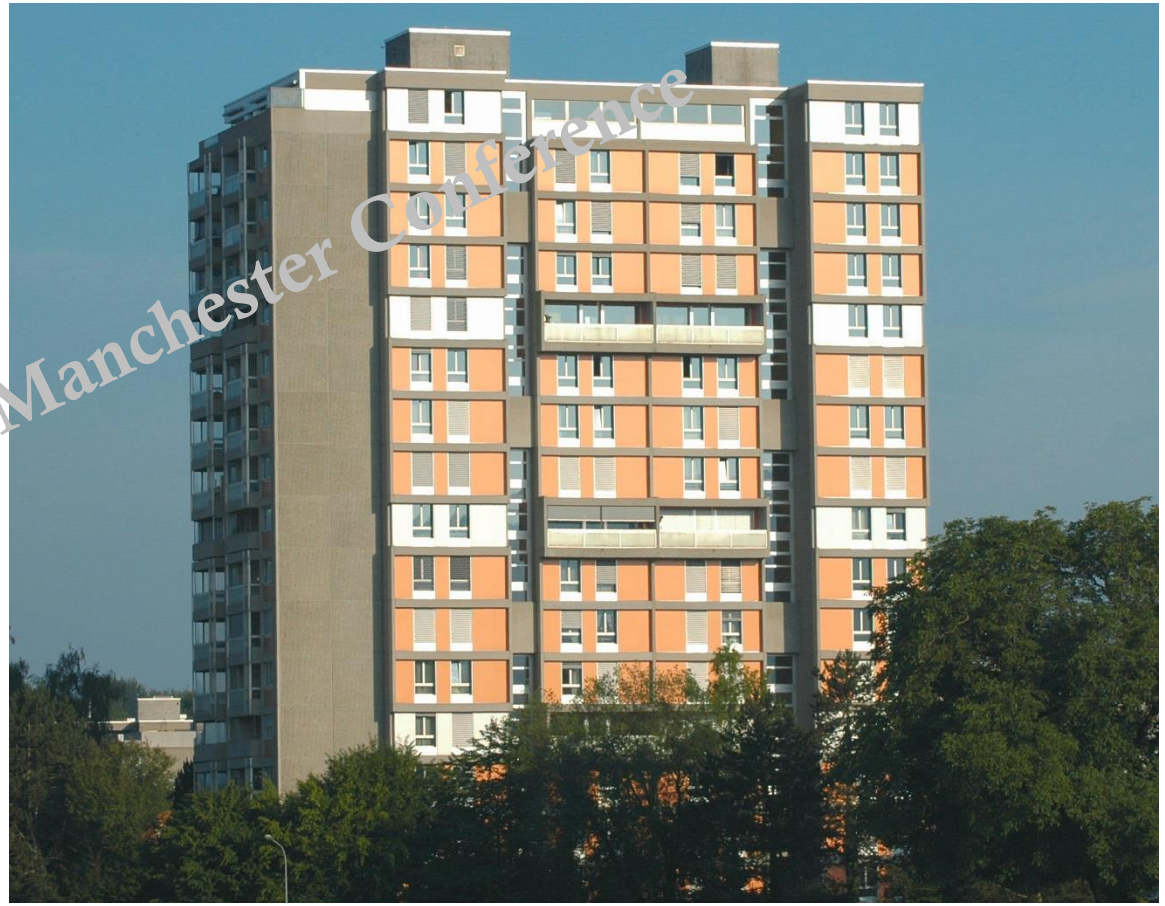
Safety –
there is nothing more important

CALOSTAT® can help you to save energy and refurbish safely

- A2-s1, d0 → even high rises are no problem
- CALOSTAT® serves as a passive fire protection without the loss of insulation

  or as insulation without any increase in the fire load
- Fire protection AND insulation → no contradiction any more



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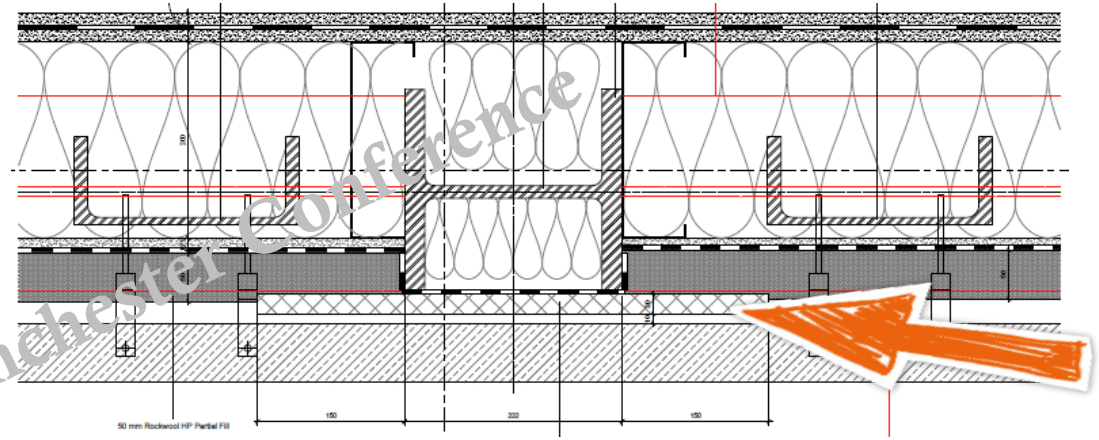
Fashion Flagshipstore 425 Oxford Street

CALOSTAT® Pad used in Rainscreen Facade



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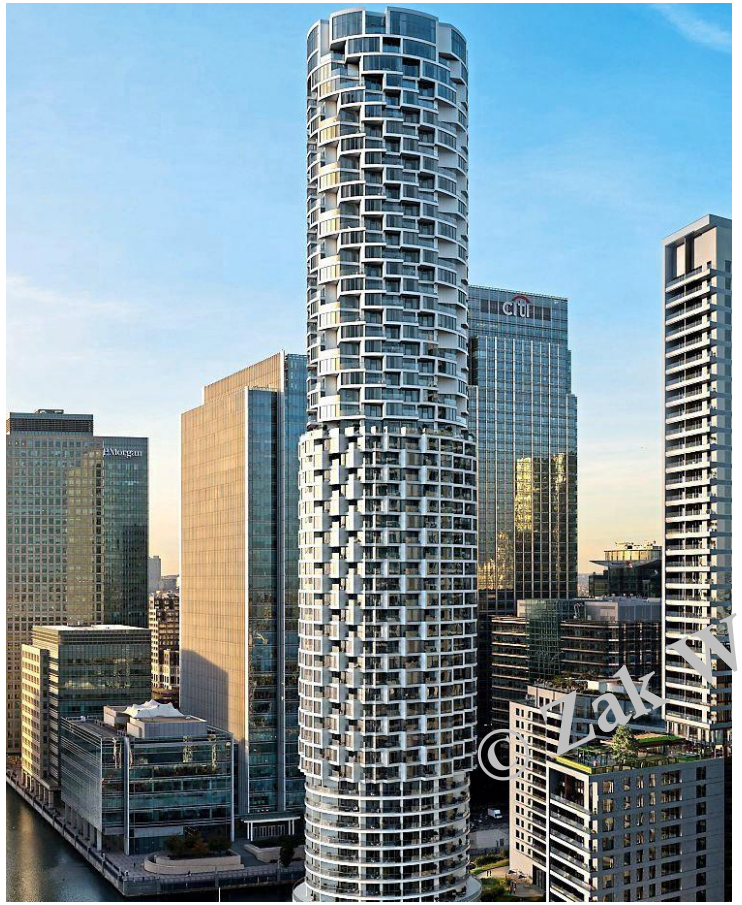
London: Wood Wharf A1 K16068 and Manhattan Loft Gardens



CALOSTAT® was used in specifically challenging an high performance requiring areas to ensure thermal integrity.

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Battersea Station, London

CALOSTAT® used in different areas (Focchi, Seele, Schneider Facade, Lindner)

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Office Building in Rheinfelden (Switzerland)

CALOSTAT® enables a thin non-flammable energetic refurbishment of a multi storey commercial building from the 70's

New U-Value: < 0,18 W/(m² K) with a 72mm panel

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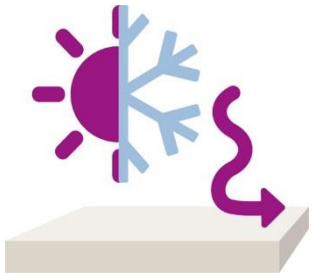
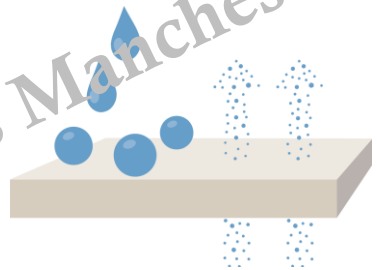
The sum of its properties makes CALOSTAT® unique and adds value to every building

INSULATION	FIRE RESISTANCE	SUSTAINABILITY	NO WATER UPTAKE	COMPRESSIVE STRENGTH	HANDLING
					
λ = 0,019 W/mK	A2-s1, d0	Recyclable C2C in Gold	Core hydrophobic Vapour diffusion open	> 90 kP	Easy processing

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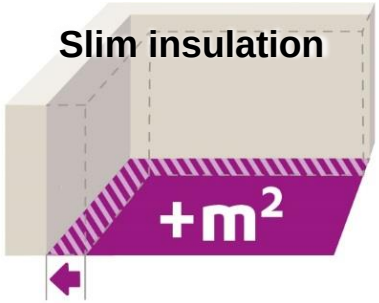
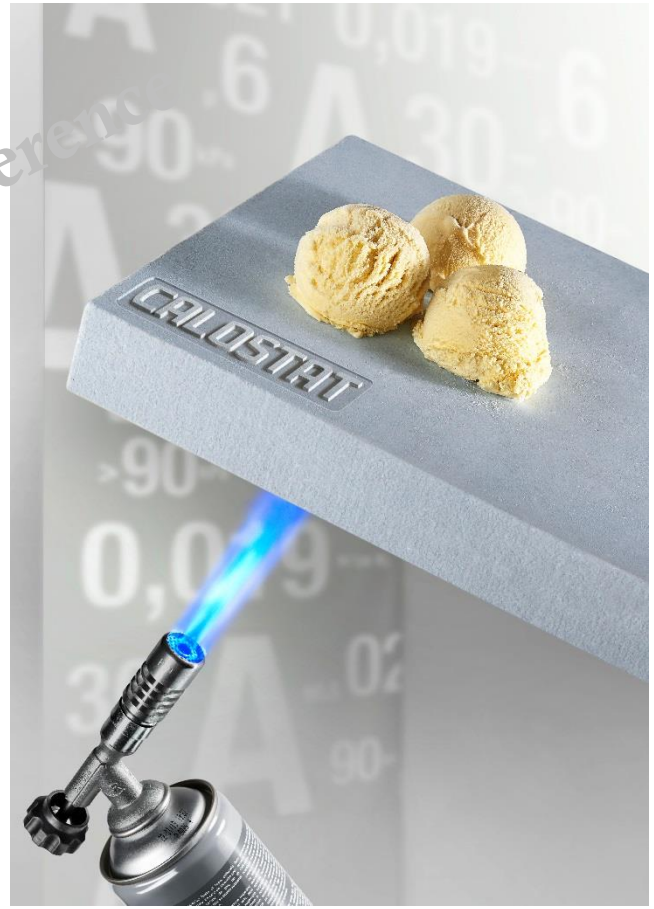
In a nutshell: What is in for you?



- More space to rent or sell
- Easier and cheaper renovation
- Interior insulation esp. for old buildings possible
- Savings of material and weight in the façade
- Slim and modern façades become possible

- Fire protection and insulation can be combined in one element
- Insulated building fulfills all fire safety requirements

- Gain credits for DGNB, LEED or BREEAM certification
- Buildings are easier to rent or sell with higher value
- Positive reputation as responsible investor / builder
- A safe and value stable investment



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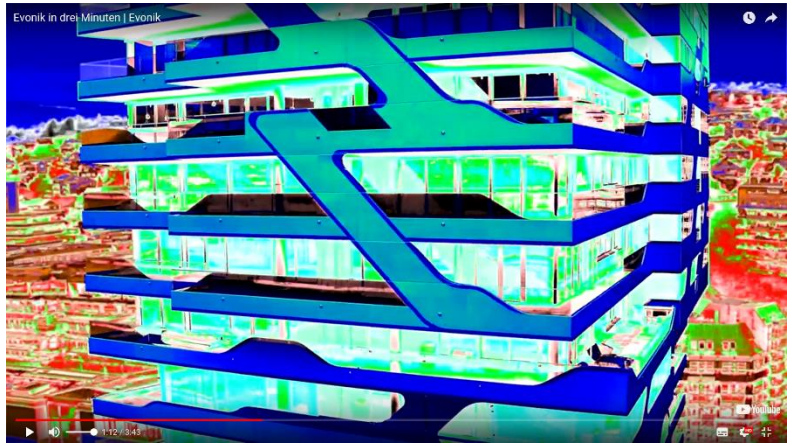
Feel the difference!

Learn more about CALOSTAT® at our table in the lobby



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