

# RE-THINKING CONSTRUCTION WITH FREE-FLOWING INSULATION







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energy store

energystore TLA<sup>®</sup> combines eps beads coated in an innovative additive with cement to create a pourable insulation.

Combining excellent thermal performance, enhanced compressive strength and an A2 fire rating for a unique insulation alternative. The free-flowing and self-levelling properties mean a faster and more efficient install.

**Technical enquiries** 

technical@energystoreltd.com Call +44 (0) 800 085 6687 Sales enquiries tla@energystoreltd.com



#### **Poured Insulation for Floors & Roofs**

Installed as a replacement for EPS/PIR. energystore TLA<sup>®</sup> can be installed to any depth from 50mm thickness.

#### Strong & Lightweight

Superior strength with very low density enabling weight reduction & reduced screed depth.



THE PERFECT MIX OF STRENGTH, FLEXBILITY AND THERMAL PERFORMANCE





Using energystore TLA<sup>®</sup> can realise benefits through programme speed gains and reduced material usage.



Exact amount of energystore TLA<sup>®</sup> needed is poured on-site leaving no insulation offcuts or waste for you to deal with.





### NON -Combustable

energystore TLA® has an A2 Reaction to Fire Classification



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Poured insulation means a continuous thermal layer with no gaps or breaks leading to superior in-life performance and enhanced Psi-Values.



energystore TLA<sup>®</sup> can be poured to any thickness and naturally absorbs any camber or unevennessin the floor slab.

## MPROVED PROGRAMME SPEED

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Rapid drying times & unrivalled install speed.

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Leisure

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We recently completed the flagship Chichester House project in Belfast comprising an extension of existing 6 storey commercial space being extended to 8 storeys and over 50,000 sqft. Energystore TLA was an ideal floor solution for the project which had floor height, weight and levelling issues. We are not aware of any product that could have solved our challenges so effectively.

#### MSM









Residential

Since discovering energystore TLA we have used it in a range of our projects. Springfield Developments are committed to the highest possible standards for our residential developments and are conscious of the environmental impacts of the building materials we choose.

For our Due South Development, we used energystore for their insulation products for both the walls and floors. Reducing the concrete we were using through energystore TLA was a big plus for us as it falls in with our aim of making sure we are creating minimal environmental impact during the build and our end user will be creating less emissions. Being able to rely on energystore for the insulation just made everything simpler – we can trust the products, service and their technical advice.



Springfield Developments Ltd. | Clarke Kennedy



Education

Isherwood & Ellis were offered energystore TLA for use in the Braidside Project by the main contractor Glasgiven Contracts Ltd. energystore TLA brought with it many benefits when compared with traditional insulation boards such as: faster install times, robustness with both thermal and airtightness detailing within the floor fabric and inherent self-levelling properties which benefited the incoming trades and suppliers later in the construction phase.

Isherwood + Ellis





## energystore TLA<sup>®</sup> combines EPS beads coated in an innovative additive with cement to create a pourable insulation.





#### TLA110 Grade

Cement Dosage kg/m<sup>3</sup> - **110** Dry Density kg/m<sup>3</sup> - **130 approx.** Thermal Conductivity W/mK - **0.043** 

#### TLA150 Grade

Cement Dosage kg/m<sup>3</sup> - **150** Dry Density kg/m<sup>3</sup> - **175 approx.** Thermal Conductivity W/mK - **0.051** 

#### **TLA200 Grade**

Cement Dosage kg/m<sup>3</sup> - **200** Dry Density kg/m<sup>3</sup> - **225 approx.** Thermal Conductivity W/mK - **0.054** 

#### **TLA250 Grade**

Cement Dosage kg/m<sup>3</sup> - **250** Dry Density kg/m<sup>3</sup> - **265 approx.** Thermal Conductivity W/mK - **0.067** 

#### **TLA300 Grade**

Cement Dosage kg/m<sup>3</sup> - **300** Dry Density kg/m<sup>3</sup> - **315 approx.** Thermal Conductivity W/mK - **0.08** 

#### All grades A2 Fire Rated

See technical data sheets for more info.

## **TLA** Ground floor insulation replacement

Ideal for domestic housing, energystore TLA<sup>®</sup> can be used as a direct replacement for insulation boards with no changes to membranes. Poured insulation leaves a continuous thermal layer with no gaps or breaks.

## Recommended Grade of energystore TLA®

TLA110 or TLA150

- Enhanced air tightness
- More robust surface enabling thinner screeds
- Suitable to apply underfloor heating (UFH) directly on top
- Suitable for ground bearing and suspended floors

#### Indicative U-Values

Installed		P / A Ratio					
Thick	ness	0.20	0.30	0.40	0.50	0.60	
150		0.15	0.17	0.18	0.19	0.20	
200		0.12	0.14	0.15	0.15	0.16	
250		0.11	0.12	0.13	0.13	0.13	

Calculated in accordance with BS EN 13370

For project specific U-Value,  $\Psi$ -Value, SAP or BER calculations get in touch with our technical team.

## TLA Insulated base layer on top of consolidated hardcore

Recommended Grade of energystore TLA®

TLA200 or TLA250

Ideal for domestic housing, energystore TLA<sup>®</sup> can be applied as a base layer directly onto a DPM above consolidated hardcore rapidly improving dry out times.

- Enhanced air tightness
- More robust surface enabling thinner screeds
- Suitable to apply underfloor heating (UFH) directly on top
- Ground bearing floors
- Significant reduction in CO<sup>2</sup> impact

**Indicative U-Values** 

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Installed Thickness		P / A Ratio					
		0.20	0.30	0.40	0.50	0.60	
200		0.13	0.14	0.15	0.16	0.17	
250		0.11	0.13	0.14	0.14	0.15	
300		0.10	0.11	0.12	0.13	0.13	

Calculated in accordance with BS EN 13370

For project specific U-Value,  $\Psi$ -Value, SAP or BER calculations get in touch with our technical team.

technical@energystoreltd.com

# TLA A2 fire rated alternative to high strength insulation and void former

Ideal when you need high strength, energystore TLA<sup>®</sup> can be poured as an alternative to void former or high strength insulation.

Recommended Grade of energystore TLA®

TLA250 or above

- Enhanced air tightness
- More robust surface enabling thinner screeds
- Suitable to apply underfloor heating (UFH) directly on top
- No gaps or breaks improving overall floor system integrity

#### **Bespoke Project**

Our technical team can design and test bespoke mixes of energystore TLA<sup>®</sup> to meet your project objectives.

If you need specific performance outcomes get in touch with our technical team.

technical@energystoreltd.com





# INSTALLED BY NDEPENDENTLY NDPROVED INSTALLERS

Only floor insulation with 3rd party quality assurance 10 year guarantee (UK Only) On-site verification of quality Product delivered and mixed in specialist vehicles Batched to your requirements Approved installers throughout the UK & Ireland





Technical Department	The energystore TLA <sup>®</sup> technical department are members of the Elmhurst Energy U-Value Competency Scheme. If you require a project-specific U-Value calculation, please get in touch at <b>uvalue@energystoreltd.com</b> or use the online U-Value calculator at energystoreltd.com/uvalue
Thermal Bridging Calculations	<ul> <li>Ψ (psi) values are becoming increasingly important in meeting compliance with building regulations. In modern buildings junction heat loss can account for up to 30% of total heat loss.</li> <li>The energystore technical team can produce project-specific 3D thermal modelling in accordance with BR 497, producing accurate Ψ values which can lead to enhanced thermal performance of junction details and greater flexibility in meeting building regulation's energy efficiency requirements.</li> </ul>
Certified energystore CPD	<ul> <li>energystore offer a range of certified CPD and factory tours to help support architects in meeting their annual CPD requirements. Our CPD courses focus on the principles of good-quality insulation and common on-site pitfalls that can reduce insulation effectiveness.</li> <li>Please get in touch with the energystore technical team to arrange a free CPD (See details below).</li> </ul>



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