



RE-THINKING
CONSTRUCTION
WITH FREE-FLOWING
INSULATION



energy
store

TLA



NSAI
Agrément



THERMAL LIGHTWEIGHT AGGREGATE. TRANSFORM YOUR BUILD WITH POURED INSULATION.

energystore TLA® combines EPS beads coated in a specially formulated additive with cement and water to create a pourable insulation.

Combining excellent thermal performance, compressive strength and an A2-s1,d0 fire rating for a unique insulation alternative. The free-flowing and levelling properties mean a faster and more efficient install.

Technical and Sales enquiries

tla@energystoreltd.com

Call +44 (0) 800 086 6687

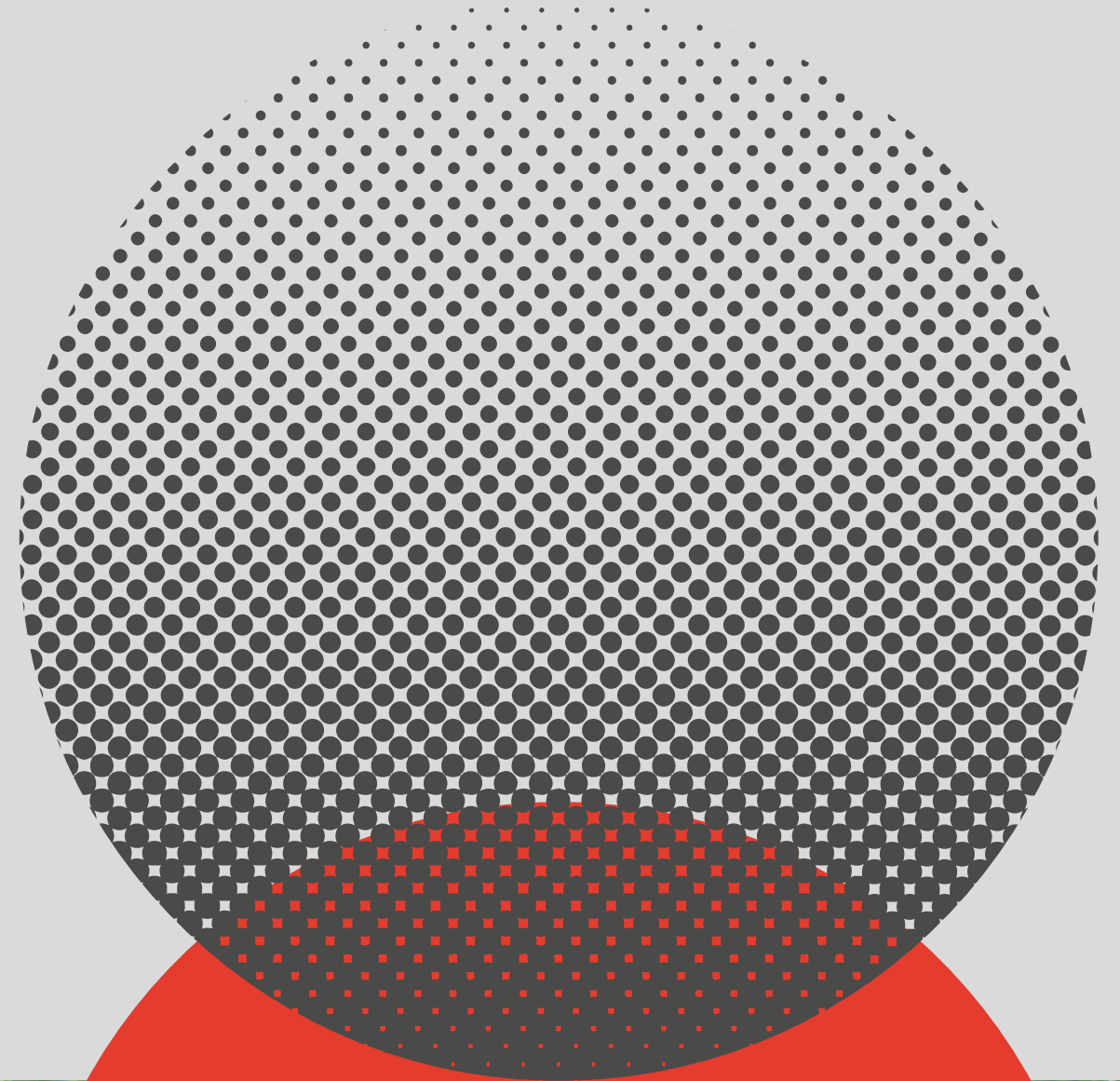
FLOORS, WALLS, ROOFS. INSULATE YOUR PROJECT FROM THE GROUND UP

Poured Insulation for Floors & Roofs

Installed as an alternative for EPS/PIR, energystore TLA® can be installed to any depth from 40mm thickness.

Strong & Lightweight

High strength, low density poured insulation enabling weight reduction and reduced screed depth.



COMBINING
STRENGTH,
FLEXIBILITY AND
THERMAL
PERFORMANCE



PROJECT COST BENEFITS

Using energystore TLA® can realise benefits through
programme speed gains and reduced material usage.
*Compared to traditional methods.

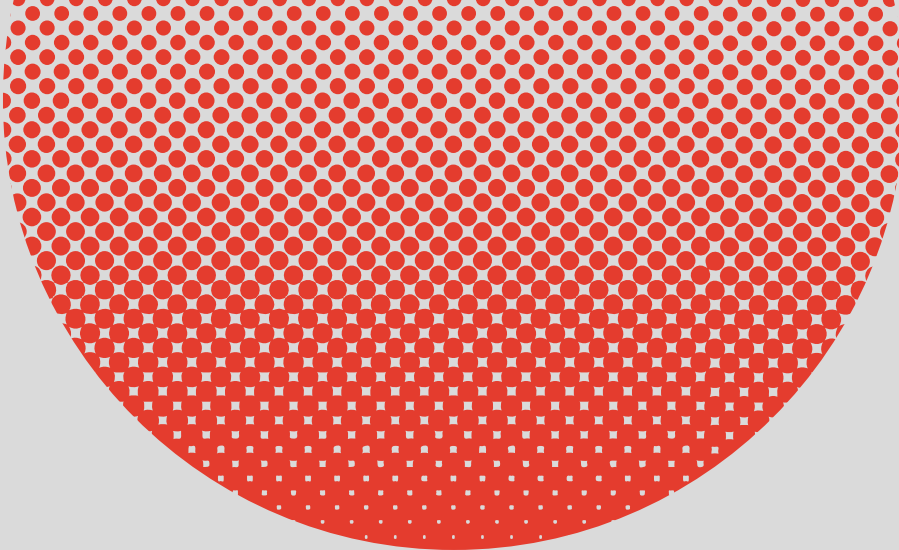
ZERO WASTE ON-SITE

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



A2-S1,D0

energystore TLA® has an A2-s1,d0
Reaction to Fire Classification



REDUCED THERMAL BRIDGING

Poured insulation means a continuous thermal layer with no gaps or breaks.

DESIGN & BUILD FLEXIBILITY

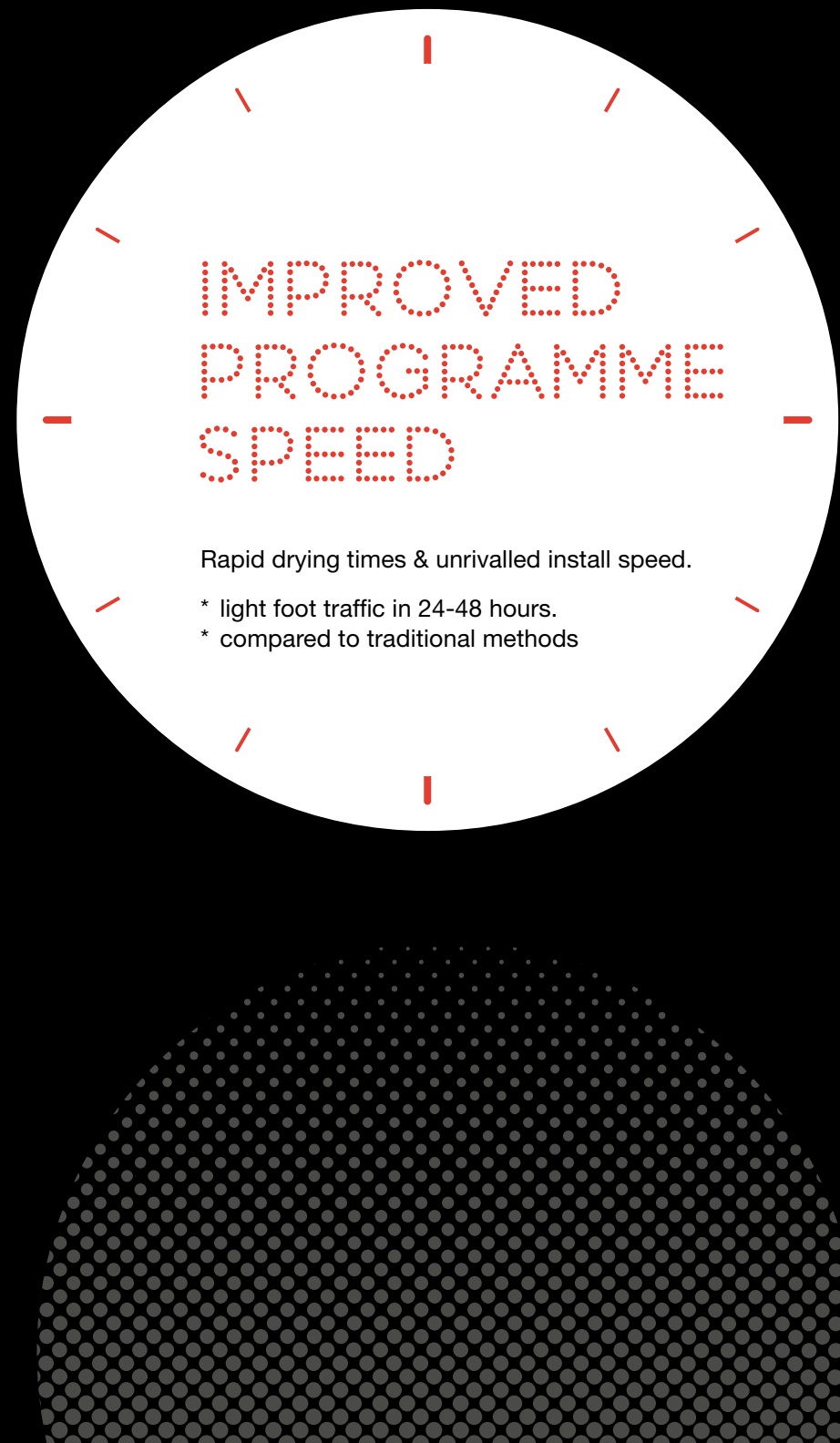
energystore TLA® can be poured to any thickness above 40mm and naturally absorbs any camber or unevenness in the floor slab and can be laid to falls on roofs.



IMPROVED PROGRAMME SPEED

Rapid drying times & unrivalled install speed.

- * light foot traffic in 24-48 hours.
- * compared to traditional methods



Commercial

CHURCH OF OAK DISTILLERY

Floor and roof project in Co. Kildare comprising a refurbishment with an additional floor to existing grain mill.

energystore TLA® was an ideal floor and roof solution for the project which had mini floor pillars in the existing slab, “with standard sheet insulation, wastage as well as a time consuming exercise in accurately cutting around all the mini pillars. We will use TLA on future works due to its cost effectiveness and efficiency”.

Ormonde Construction Ltd





MUNCRAFT GATE HOUSING

Residential

The development by Homeland Group consists of three and four bedroom family homes just outside Limerick city centre that are modern and stylish but also sustainable, with an abundance of green communal space for children to play in and families to enjoy.

“The quality and consistency of energystore TLA® was key for us when deciding to use it. The product was brought to site and installed straight away meaning we had less bulky materials on site. energystore offered great service and technical support throughout the process and we will be using it in other projects going forward.”

Homeland Group | Michael Quaid



BELMAYNE ETSS SECONDARY SCHOOL

Education

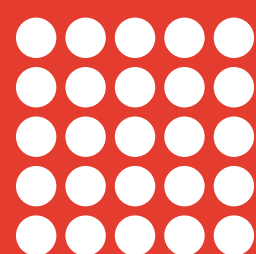
The design and construction of the new school in Dublin needed to accommodate 1,000 students and consisted of two and three-story areas. energystore TLA® was specified by the architect and had previously been used on another project by OHLA/OHMG JV.

“Using TLA improved construction programme and reduced material waste on site. As a city based project, there was reduced space available for material storage on site. No storage was required for TLA. The Installer worked with me to ensure deadlines were met and schedule was efficient. We will be considering TLA for future education/school projects”.

OHLA/OHMG JV | Jaylan Jaftha



**energystore TLA® combines
EPS beads coated with a specially
formulated additive with cement and
water to create a pourable insulation.**



TLA



Cement



Water

TLA110 Grade

Cement Dosage kg/m³ - 110
Dry Density kg/m³ - **130 approx.**
Thermal Conductivity W/mK - **0.043**
Compressive Strength kPa - **200**

TLA150 Grade

Cement Dosage kg/m³ - 150
Dry Density kg/m³ - **175 approx.**
Thermal Conductivity W/mK - **0.051**
Compressive Strength kPa - **300**

TLA200 Grade

Cement Dosage kg/m³ - 200
Dry Density kg/m³ - **225 approx.**
Thermal Conductivity W/mK - **0.054**
Compressive Strength kPa - **600**

TLA250 Grade

Cement Dosage kg/m³ - 250
Dry Density kg/m³ - **265 approx.**
Thermal Conductivity W/mK - **0.065**
Compressive Strength kPa - **800**

TLA300 Grade

Cement Dosage kg/m³ - 300
Dry Density kg/m³ - **315 approx.**
Thermal Conductivity W/mK - **0.079**
Compressive Strength kPa - **1500**

**All Grades
A2-s1, d0
Fire Rated**



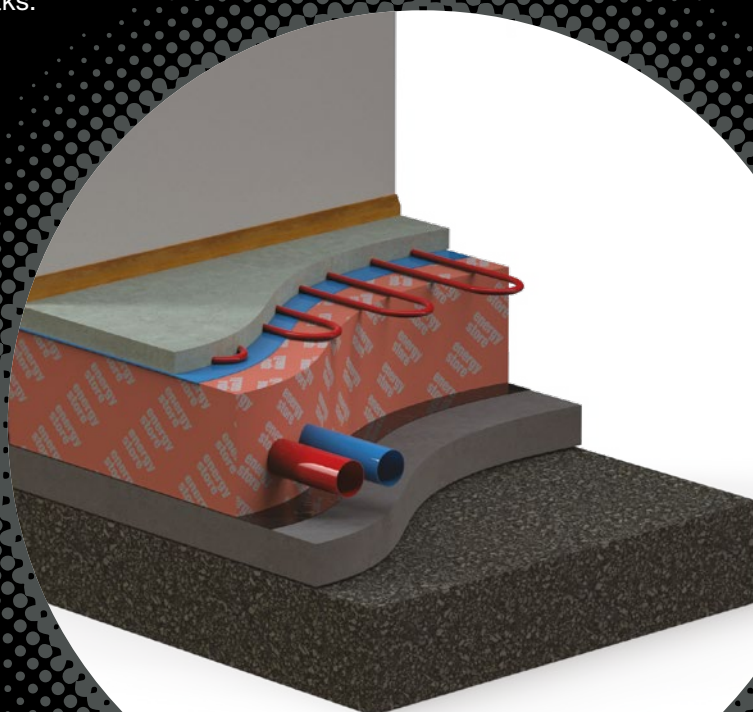


TLA

Ground floor insulation replacement

Ideal for domestic housing, energystore TLA® 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.

- High strength poured insulation
- <0.5% drying shrinkage
- Suitable to apply underfloor heating (UFH) directly on top
- Suitable for ground bearing and suspended floors



Recommended Grade
of energystore TLA®

TLA110
or **TLA150**

Indicative U-Values W/m2K

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

Calculated in accordance with **BS EN 13370**

For further U-Value or Psi-Value calculations see the energystore guide to thermal performance. Get in touch with our technical team.

tla@energystoreltd.com



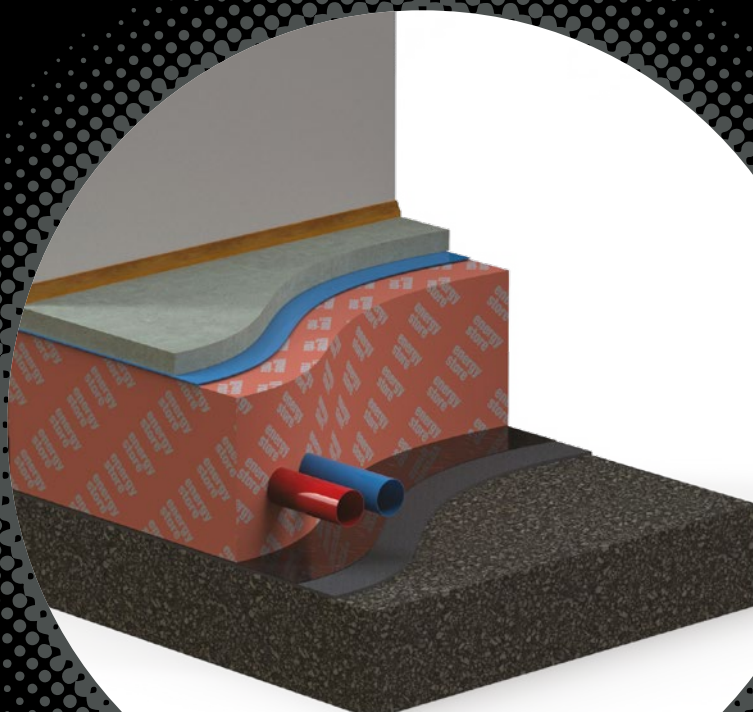
TLA

Insulated base layer on top of consolidated hardcore

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

- High strength poured insulation
- <0.5% drying shrinkage
- Suitable to apply underfloor heating (UFH) directly on top
- Ground bearing floors
- Significant reduction in CO₂ impact*

*CO₂ reduction when poured on hardcore layer and through reduction in concrete requirement - exact reduction dependant on application.



Recommended Grade
of energystore TLA®

TLA200

Indicative U-Values

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

Calculated in accordance with **BS EN 13370**

For further U-Value or Psi-Value calculations see the energystore guide to thermal performance. Get in touch with our technical team.

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TLA

A2-s1, d0 fire rated alternative to high strength insulation and void former

Ideal when you need a high strength insulation layer, energystore TLA® can be poured as an alternative to void former or high strength insulation.

Recommended Grade
of energystore TLA®

TLA200 or above

- High strength poured insulation
- <0.5% drying shrinkage
- 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® to meet your project objectives.

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

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INSTALLED BY INDEPENDENTLY APPROVED INSTALLERS

10-year insurance-backed guarantee
(UK and Ireland)

On-site verification of quality

Product delivered and
mixed in specialist vehicles

Batched to your requirements

Approved installers
throughout the UK & Ireland

* please contact energystore for the full list of approved installers





Technical Department

The energystore TLA® technical department are members of the Elmhurst Energy U-Value Competency Scheme. If you require a project-specific UValue calculation, please get in touch at tla@energystoreltd.com

Thermal Bridging Calculations

Ψ (psi) values are becoming increasingly important in meeting compliance with building regulations through SAP, SBEM or BER modelling. In modern buildings junction heat loss can account for up to 30% of total heat loss.

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.

Certified energystore CPD

energystore offer a range of certified CPD and site visits 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.

Please get in touch with the energystore technical team to arrange a free CPD (See details below).

READY TO
TRANSFORM
YOUR PROJECT?
GET IN TOUCH

Enquiries

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T&C's: We take every step to make sure that the information in this document is correct and accurate at the point of publication.

To ensure you are viewing the most recent and accurate information please visit **www.energystoreltd.com**

To request further information or certifications please contact one of our team through the website.



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