



**KORE**  
BUILDING TODAY FOR TOMORROW

# The Future of Insulated Concrete Forms

The **KORE** System is designed and manufactured by Airpacks Ltd in Co. Cavan. Airpacks Ltd was established in 1997 by Tommy Brady and today the Company supplies expanded polystyrene products across many different industries. The Company has over 40 years experience in manufacturing expanded polystyrene for the construction industry.





## THE FUTURE

Building today is about more than providing a comfortable living and working environment, it's about visualising our future requirements and providing the answers now.

The KORE ethos focuses on protecting our environment's future by making certain our buildings will significantly reduce the use of diminishing resources.

**KORE** currently surpasses today's regulations and is focusing on the future.

For more information  
please contact us at:

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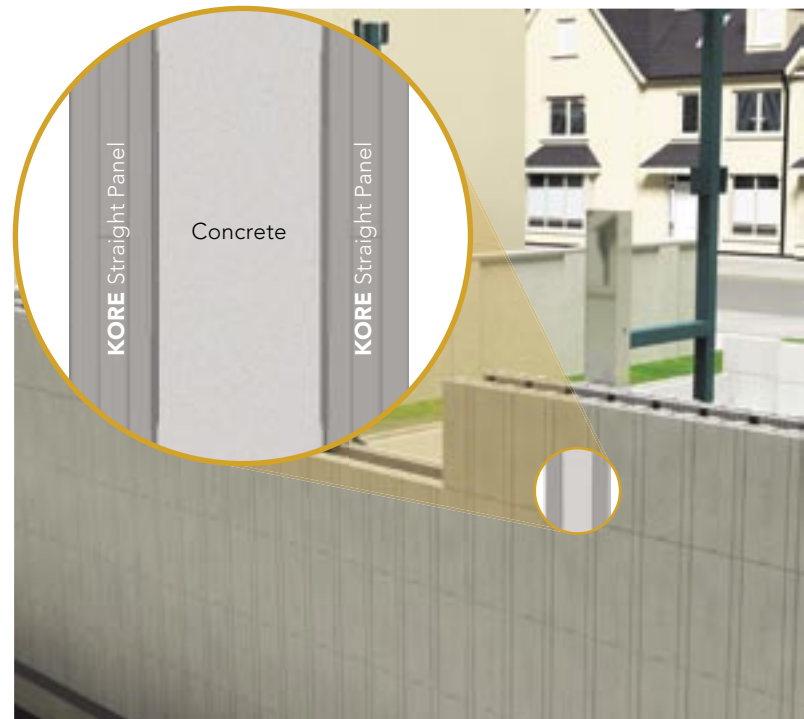
# KORE PHILOSOPHY



Join the revolution as **KORE** leads the way to a sustainable future. The **KORE** Insulated Concrete Formwork System is transforming modern construction and rapidly changing the way we build. At **KORE** we produce Expanded Polystyrene products that have a high technical performance exceeding the energy efficiency and structural requirements of our construction industry. We protect our products quality by the training and certification of installers using the **KORE** System and through Research and Development into new and innovative products. **KORE** ensures their customers experience the highest levels of service enabling them to benefit from the advanced construction methods and energy saving features, which are, incorporated into the **KORE** System for the life of the building.

## WHAT IS ICF?

Insulated Concrete Formwork is an advanced Modern Method of Construction. Insulated Concrete Formwork uses expanded polystyrene panels to form multi-storey wall structures for use in all sectors of the construction industry; residential, commercial, industrial and institutional. Once the panels are laid they form a rectangular space into which concrete is poured. The concrete ensures the structural strength of the wall while the **KORE** panels remain permanently in place as thermal insulation for the life of the building.



# BENEFITS

## DESIGN

### Component Design

The Unique flexibility of the **KORE** system components enables architects and designers to embrace modern and traditional styles of buildings without restrictions.

### Time Saving

The **KORE** system is quick and straightforward to use. A builder will experience significant time saving on site once the product is installed by trained installers.

### Cost Competitive

The design features built into the **KORE** System facilitate the production of cost competitive buildings.

### Immediate follow-on trades

The placement of services and finishes within the building is easily achieved giving rapid fixing of plumbing and electrical services. Plasterboard and exterior finishes are fixed to the **KORE** Inserts by screws, all screw points lie under the **KORE** Logo.

### Flawless Finish

Building with the **KORE** System will not mean compromising on either the internal or external finish. With the **KORE** System both can be flawlessly finished to any design specification.

## ENERGY

### Superior Thermal Performance

Your **KORE** building will achieve a u-value of 0.20W/m<sup>2</sup>K and that ultimately means that your building will have lower fuel consumption for the life of the building, thereby reducing your fuel bills.

### High Thermal Mass

Concrete acts as thermal mass, while your building is heated the concrete slowly absorbs some of this heat, upon cooling the concrete will begin to release the stored heat back into your building.

### Comfort

The very elements that ensure a **KORE** building is energy efficient also keeps the internal environment more comfortable as there are fewer temperature differentials throughout the building. This temperature stable environment ensures a more comfortable living environment throughout the property.

### Airtight Internal Environment

Infiltration is the leaking of outside air into the building and is a large contributor to heat loss in a building. Once **KORE** is installed and poured, a monolithic concrete wall is formed which eliminates air transfer.

# SUSTAIN

## Environmental Benefit

Buildings constructed with the **KORE** System significantly reduce our use of diminishing resources and protects the future of our environment.

## Environmental Legislation

Legislation stipulated by Local, National and International Authorities have called for a reduction in CO<sup>2</sup> emitted from buildings, which is easily attainable with **KORE**.

## Energy Labeling

Excellent thermal values will ensure your building receives an A energy label but also ensure your building retains its resale and rentable value into the future.

## Reduced Transport Pollutants

The unique design of the **KORE** insert, together with the **KORE** Bridge allows the panels to be assembled off site and folded for transport.

## Waste Reduction & Recycling

The **KORE** product and component parts are 100% recyclable and technically designed so that cut-offs can be reused, helping to reduce site waste significantly.

# PLUS

## Superior Sound Insulation

**KORE** walls have excellent sound absorption qualities as the **KORE** panel reduces impact sound while at the same time the concrete core reduces airborne sound.

## Hail, Rain or Snow Build

The **KORE** System can be constructed in all weathers and the concrete poured in the coolest of weathers. The **KORE** panels promote the rapid moist curing of concrete, producing a higher strength structure that will protect and withstand the elements.

## Dual Purpose Bracing System

With the **KORE** Strut a builder will not have the unnecessary cost of erecting a separate scaffolding system as the Strut is both a bracing and scaffold system in one.

## Fire Resistance

Concrete has in-built fire resistance, does not burn, produce smoke, or contribute to the fire load of a building.

## Unrivaled Strength

The Extra Heavy Density component properties of the **KORE** polystyrene panel creates a strong, durable mold into which 20-25 Newton concrete is poured. Once poured the concrete cures at its optimum curing temperature resulting in a wall structure with unrivaled strength.

## THE KORE PROCESS

The **KORE** customer relationship philosophy is about Building Together, partnering the skills and knowledge of both parties and building to the highest level of accuracy and quality.

The **KORE** process does not simply start and finish with the construction of external ICF walls; it's a little more concrete than that. We also supply Internal Concrete

Walls, Precast Chimneys, Precast Concrete Walls and Precast Concrete Stairs. In addition **KORE** supplies Insulation, Plasterboard and Fixings and if requested quotations for Roofing and External finishes.

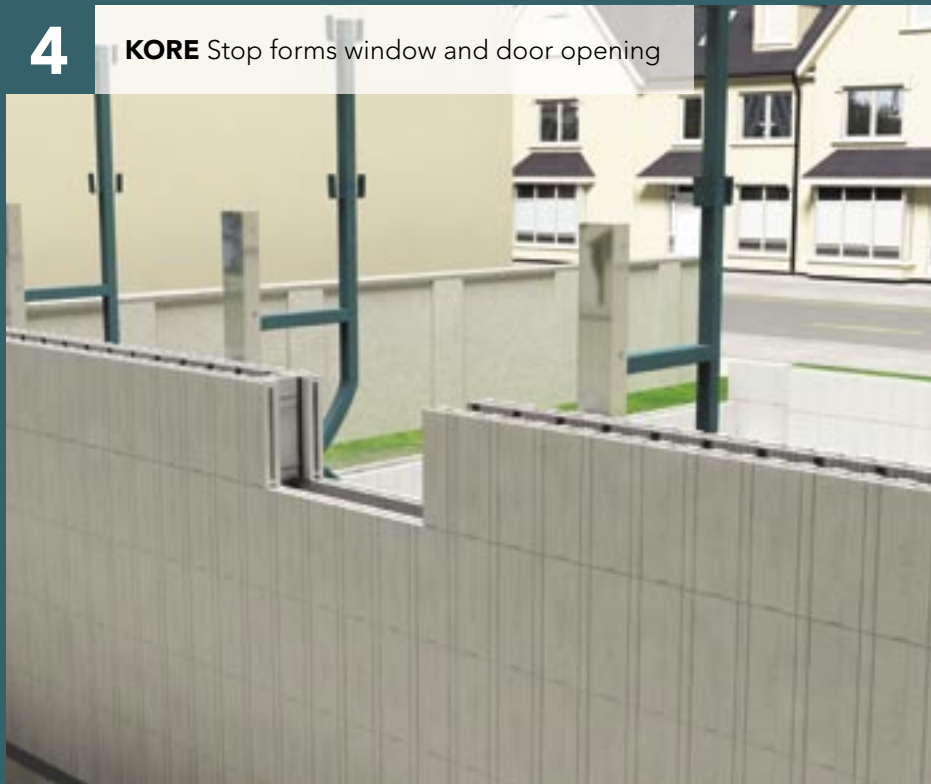
The client is responsible for the foundation structure, tiles and slates, windows and doors, plumbing and electrics, fascia and soffit.





3

Erect **KORE** Strut



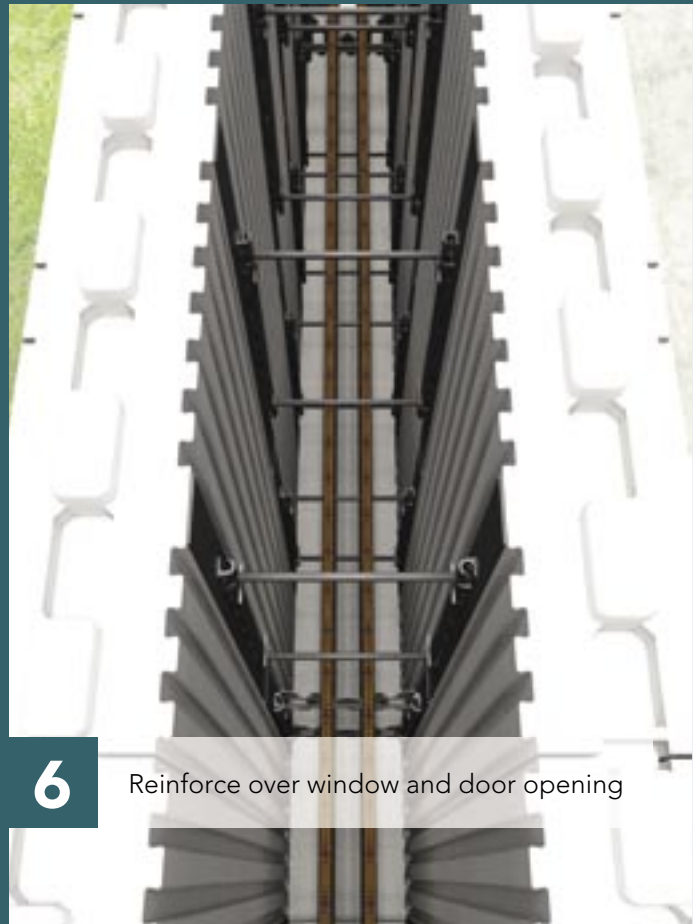
4

**KORE** Stop forms window and door opening



5

Final window detail prior to pour



6

Reinforce over window and door opening



Finished aligned wall prior to pour

7



8

Pour concrete



Adjust **KORE** Strut to ensure wall alignment

9

10

Install services



11

Fix plasterboard internally



12

External wall finish



## APPLICATIONS

## RESIDENTIAL



Whether building or buying a home today's buyer is actively aware of the need to live in a home that has low energy consumption, is protected from spiraling inflation and oil prices, retains its resale value over the long term, is low maintenance and comfortable for all members of the family throughout the family life cycle. The **KORE** System is suitable for application in all sectors of the residential market.

## KORE ADVANTAGE

- 1 Energy Rating Directive; Achieve A rated label
- 2 Qualify for Grant Aid; House of Tomorrow
- 3 Airborne and Impact Sound Absorption; high density living environment
- 4 Thermal Mass; provide excellent heat retention
- 5 Thermal Bridging and Thermal Looping eliminated
- 6 Concrete Build; No height restrictions for apartments

## COMMERCIAL



In the long term the products specified for a commercial building can affect a company's profitability. The **KORE** System is suitable for use in all commercial buildings including hotels, offices and retail outlets and the benefits for both business owners and employees are significant.

## KORE ADVANTAGE

- 1 Thermal Mass; manage daytime overheating and night cooling
- 2 Sealed, airtight building; decrease running costs
- 3 Healthy Building; reduced sick leave and illness
- 4 Reduce Operation Cost; Sustainable Competitive Advantage
- 5 Sound Absorption; Increase employee work output
- 6 Swimming Pools; reduce heating costs

# INDUSTRIAL



Building an Industrial Building is often one of the first steps a company will take on the road to success and expansion. Whether constructing a factory, warehouse or agricultural building, speed of build and durability are essential. The **KORE** System is the ideal solution for all industrial buildings.

## KORE ADVANTAGE

- 1 Reduce Operating Costs; Sustainable Competitive Advantage
- 2 Concrete Build; No height restrictions
- 3 Thermal Mass; Excellent cooling and ventilation properties
- 4 Building Finish Options: Blend into surrounding landscape
- 5 Highly Populated Areas: Comply easily with noise level restrictions

# INSTITUTIONAL



The Institutional Sector is responsible for society's most venerable people and our buildings need to be designed and built to meet this challenge. Hospitals and Nursing Homes are ranked the second most intensive energy users among commercial and institutional buildings, therefore reducing these running costs will enable monies to be otherwise allocated to better serve its occupants.

## KORE ADVANTAGE

- 1 Healthy Building; Prevent the spread of infection
- 2 Reduce Running Costs; run energy efficient building
- 3 Thermal Mass; Comfortable temperature stable environment
- 4 Local Authority; meet stringent energy demands
- 5 Concrete Build; No height restrictions
- 6 Sound Absorption; assist peaceful recovery

### TECHNICAL SUPPORT

At **KORE** we pride ourselves on offering a comprehensive technical support package. Our highly trained team will work directly with builders, architects and engineers on every project, ensuring clear concise information is available throughout the build process.

### TRAINING PRIORITY

At **KORE** we run a comprehensive installers training program and only persons that have successfully completed this program will have the authority to construct a **KORE** building. To guarantee the highest standards all **KORE** installers undergo regular quality inspections by both **KORE** personnel and other qualified industry professionals. To become a **KORE** Installer and to benefit from learning new skills simply apply on line today.

### SUPPLY & FIT

Where our clients are building their own homes **KORE** provide a full Supply and Fit Package. This ensures that only the very experienced of trades people will be involved during construction; it simplifies the project management process and provides peace of mind to all.

### TECHNICAL PRESENTATIONS

Full technical presentations can be arranged through our Business Development Team for all industry professionals considering a change to Insulated Concrete Formwork.

### ESTIMATING SERVICE

At **KORE** we offer our clients, free of charge, a quantity estimating service on our full range of products.



## BUILDING STANDARDS

Quality Control both in our manufacturing plant and on-site is a high priority to **KORE**. We manufacture in accordance with IS EN 13163: 2001 Factory made products of Expanded Polystyrene to ensure that the products arriving on your building site are to the highest quality standard attainable. We ensure excellence through installation by consistently assessing the work standard of our installers.

## BUILDING SERVICES

The **KORE** System is one of many aspects that make up the total building. We provide a building information service to help our clients make the best decisions about other aspects of their building to ensure compatibility with **KORE**. We will help you choose the correct external finish solution, give advice on the correct treatment of dpc and radon barrier, which fixings best suit the system, internal finish options and correct width of window cills required. Any question you have we already have the answer.

# CONTACT

## **KORE**

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