



## GROUND SLAB

#### IZODOM – POLISH TECHNOLOGY GLOBALLY RECOGNISED QUALITY



### IZODOM ADVANTAGES:

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- Innovation
- Energy efficiency
- Durability
- Fast construction
- Complete system

#### FOUNDATIONS / WALLS / FLOORS / ROOFS

Complete system for construction of passive and energy efficient buildings certified by the Passive House Institute in Darmstadt

For better building

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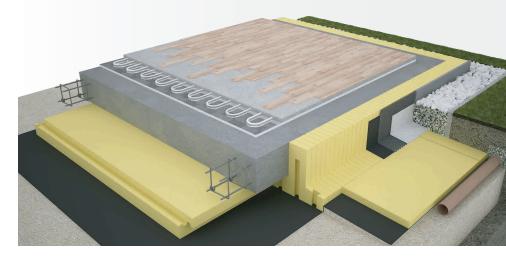
#### **DESCRIPTION**

Izodom ground slab is a perfect alternative to the traditional foundations for your house. It is reinforced concrete poured into a formwork made of the hardest waterproof insulation material. Neither the shape of the slab nor the thickness of the thermal insulation constitute any limitation. The innovative Izodom 2000 technology saves not only time but also money for both the contractor and the investor. Modern buildings erected with the use of our

products consume up to 90% less energy, which is confirmed by letters of reference obtained from customers from all over the world. We provide advice and assistance at every stage of construction. Our company acts with care for families and environment. We wish the energy-efficient buildings constructed in the Izodom 2000 technology to become a new standard in construction.

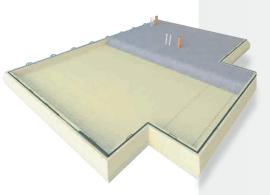
From the foundation to the roof - we are there to make a better life for you!

foundations with IZODOM  $U_0 = 0.10 \cdot 0.14 ~ [\mathrm{W/m^2K}]$ 



Izodom ground slab is used in the construction of traditional buildings, through wooden to modern structures.

#### ADVANTAGES OF THE GROUND SLAB



- Reduced scope and time of earthworks
- · High quality and dimensional stability
- Reduced construction time of foundations
- · High energy efficiency
- · Perfect thermal and damp protection
- **Stability** the ground slab is a monolithic structure carrying the weight of the building over a large area, which allows for the construction process to be performed even in difficult ground conditions
- Technology innovation
- Use of the **hardest EPS** available on the market





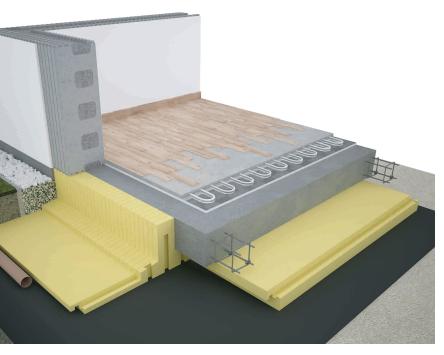












- Comfort
- Reduced energy bills
- Ease of execution
- No thermal bridges
- Safe foundation for your house

# The only comprehensively tested and certified warm foundation system for buildings

Essential characteristics for the intended use, for thermal insulation in construction	Declared performance, class or level	Test standard	Harmonised technical specification
Dimensional tolerance: thickness length width	T2 (± 2mm) L3 (± 0,6%) W2 (± 2mm)	EN 823 EN 822 EN 822	- PN-EN 13163:2013-05E
Squareness Flatness	S5 (± 5 mm/1m) P10 (± 10 mm)	EN 824 EN 825	
Flexural strength	BS ≥ 500 kPa	EN 12089	
Compressive stress at 10% deformation	CS (10) ≥ 300 kPa	EN 826	
Declared thermal conductivity coefficient $\lambda$	0,033 W(m <sup>2</sup> K)	EN 12667	PN-EN 13163:2015
Reaction-to-fire class	EUROCLASS E	EN 11925-2	PN-EN 13501-1+A1:2010
Compressive creep (rounded to 0,5%)	CC(0,5)1,0	LK03-1084/11	
Total thickness reduction (extrapolated to 50 years)	CC(50)2,0	LK03-1084/11	PN-EN 13163+A1:2015-03
Water absorption by total immersion	WL(T)2,5%	EN 12087	

For years we have been delivering **top quality construction products**. We undergo continuous development in order to meet the requirements of the ever-changing market. Our company has been granted numerous international and national awards, which are the culmination of our efforts. The most important ones include: distinction of the European Commission, UN and the Minister of the Environment, Godło Teraz Polska, Diamenty Polskiej innowacyjności, Diamenty Forbesa, ISO and certificate of the Passive House Institute in Darmstadt.











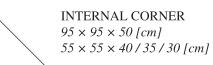


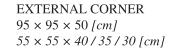
 $190 \times 90 \times 25$  [cm]

EXTERNAL CORNER – INTERNAL VIEW  $195 \times 55 \times 50$  [cm]  $195 \times 45 \times 40/35/30$  [cm]



























Izodom 2000 Polska ground slabs



#### **EXECUTION**

#### Construction stages of the Izodom 2000 Polska ground slab

Construction with the use of complete Izodom ground slab technology is a very simple process that saves valuable time. The main construction stages comprise:

## Stage 1. Preparation



The first stage consists in the removal of the layer of humus and native soil to the depth specified in the documentation. Then one should proceed to the placement of water and drain installations and other utilities. Once this stage has been completed, a filter layer of coarse gravel or key aggregate should be laid on an exposed load-bearing substrate and compacted properly, and then a layer of foil should be spread.

## Stage 2. Formwork erection



The formwork elements of the ground slab are **cut to size already in the production plant according to the custom design**. On the construction site they are laid in such a way as to obtain a given size and shape of the slabs. The kerbs and corners are connected using dovetail joints. Next, the **bottom elements are laid** – they are joined with kerbs using hook bolt locks. At the end, they are complemented with cut-to-size elements.















## Stage 3. Reinforcement



After installation of the slab, the reinforcement is installed in accordance with the documentation. This may be fibre or traditional mesh reinforcement; also, a combination of these two solutions can be applied.

# Stage 4. Concrete filling



The formwork is filled with concrete of the right grade and texture. Always follow strictly the design and concrete manufacturer's recommendations. This solution allows to obtain a slab without thermal bridges that meets the standards of passive houses.

# Stage 5. Finished foundation



As early as after only several days the foundation is ready, i.e. the underground structures are completed. Izodom slab is an element the exceptionally simple construction of which precludes the possibility of making mistakes. Its monolithic structure is much more stable than the currently designed foundation footings and walls, and the insulation provides a passive standard. We also invite you to participate in free trainings in the company headquarters.















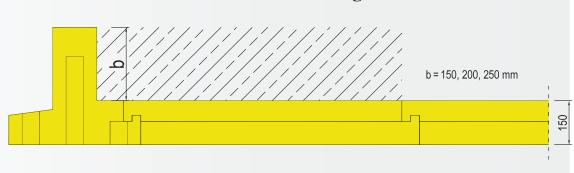


#### WE OFFER GROUND SLABS IN TWO THICKNESSES OF 250 AND 150 MM

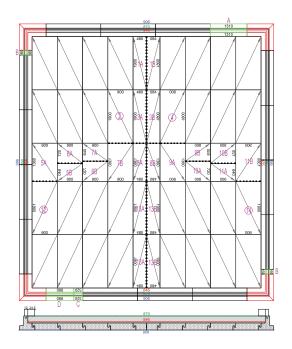


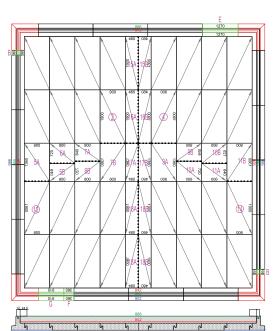


# The insulation can be adapted to the thickness of the reinforced concrete ground slab



When ordering the Izodom ground slab, a technical drawing of the insulation arrangement is provided together with numbered elements as cut in the production plant. This eliminates errors and cutting on the construction site. This way, we minimize waste on site.





FPL 86 56 FPL BST 31 28 FPL EA 8 8 FPL EI - -MD 1/10 - -























# IZODOM 2000 POLSKA IS THE ONLY MANUFACTURER ON THE MARKET OFFERING A COMPLETE TECHNOLOGY



**Roof slabs** 

 $U = 0.11 - 0.15 \text{ W/m}^2 \text{K}$ 

**Floors** 

 $U = 0.26 - 0.32 \text{ W/m}^2 \text{K}$ 

Wall elements

 $U = 0.10 - 0.20 \text{ W/m}^2 \text{K}$ 

**Ground slab** 

 $U = 0.10 - 0.14 \text{ W/m}^2 \text{K}$ 

#### **Benefits**

+ reliability

+ accuracy

+ durability

+ **no waste** generated

+ no thermal bridges

We have more than **19,000 reference buildings** around the world - from the Middle East, through Norway and Western Europe to Nepal and New Zealand.

### Thousands of investors have trusted us. Be one of them!

#### IZODOM 2000 POLSKA SP. Z O.O.

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