

AQUA-TECHNICAL DATA SHEET



'AQUA' HIGH HYDROPHOBIC INSULATION PLASTER

PRODUCT FAMILY: PLASTER

APPLICATION AREA: WET AREAS (BATHROOM, KITCHEN, BALCONY), POOL, WATER TANK, ROOF-GREEN ROOF-TERRACE, FOUNDATION, BASEMENT, UNDERGROUND GARAGE AND WAREHOUSE, ELEVATOR SHAFT / FLOOR-WALL, SHEAR WALL, PARAPET WALL

USAGE SURFACE: AERATED CONCRETE, BIMS BLOCK, BRICK, EXPOSED CONCRETE, DRYWALL, BOARDX, SHEET METAL, WOODEN (OSB, RAW MDF)

APPLICATION TECHNIQUE: MACHINE, PLASTER TROWEL



RIISING VALUE OF INSULATION 'İZORİYAL'

AQUA is a new generation composite HIGH HYDROPHOBIC THERMAL INSULATION PLASTER with perlite-based natural granular mineral content, harmless to human and nature, polymer additives, HYDROPHOBIC capability INCREASED, FIRE RESISTANT, SOUND ABSORBING, LIGHTWEIGHT.

PRODUCT SPESIFICATIONS

Package Rope	7 kg ±1 kg Craft
Reaction to Fire*	800 °C - A1
Bond Strength*	0,13 N/mm ² - FP:B
Capillary Water Aabsorption*	0,40 kg/(m ² . min ^{0,5}) - W1
Pressure Resistance*	0,56 N/mm ² - CSI
Water Vapor Permeability*	4,36 kg/m ² .s. Pa μ≤15 kg/m ² .s. Pa
Thermal Conductivity*	0,048±5 W/m ² .K - T1
Dry Unit Density*	220 ±50 kg/m ³
Sound Absorption*	8-10 db/1cm
Method of Application	Machine or By Hand
Consumption*	3 m ² /cm
Shelf-Life	12-18 Months (in dry environment)
Setting Time*	First Setting Between 6.5-8 Hours Last Setting Between 12-18 Hours
Shrinkage	Does not Shrink in Drying or Humid Environmen
Greenhouse Gas Effect	CO ₂ Carbon Emissions are Zero
Workability	Between 6-8 Hours

*Technical specifications are for information purposes.
Cannot be used instead of official documents

T.C. MINISTRY OF ENVIRONMENT, URBANIZATION AND CLIMATE CHANGE POZ NO: 04.484

BENEFITS

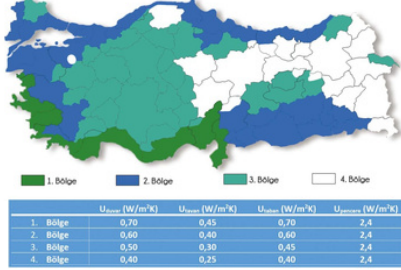
- PROVIDES THERMAL INSULATION, DOES NOT FORM A THERMAL BRIDGE
- **HIGLY** WATER REPELLENT-HYDROPHOBIC, RESISTANT TO ATMOSPHERIC CONDITIONS
- **UP TO 3 mm GAP DOES NOT ALLOW WATER TRANSMISSION.**
- BREATHABLE, DOES NOT FORM BACTERIA, PROTECTS FROM MOISTURE
- PROVIDES HEALTHY LIVING BY PREVENTING MOISTURE AND MOLD FORMATION
- A1 CLASS FIREPROOF PRODUCT, RESISTANT UP TO 800 °C
- T1 ENERGY CLASS
- IT IS A LIGHTWEIGHT MATERIAL WITH LOW DENSITY, IT IS AN IMPORTANT FACTOR IN EARTHQUAKE-RESISTANT BUILDINGS BY NOT IMPOSING A LOAD ON THE BUILDING
- ACOUSTIC PROPERTIES, ABSORBS SOUND
- HAS THE ABILITY TO REDUCE RADIATION IN THE ENVIRONMENT
- EASY TO APPLY, REPAIRABLE
- NO GREENHOUSE GAS EMISSION ENVIRONMENTALLY FRIENDLY
- CARCINOGEN FREE, NOT PETROCHEMICAL PRODUCT
- IN FACADE APPLICATIONS, IT CAN BE APPLIED WITHOUT APPLYING ROUGH OR THIN PLASTER TO THE SURFACES.
- SHORT LABOR AND TERMINATION TIMES, SHORTENS THE CONSTRUCTION PERIOD OF THE BUILDING, SAVES MATERIAL AND LABOR COSTS
- SIMILAR TO PLASTER AND SCREED APPLICATIONS, EASY TO APPLY
- NO DOWEL REQUIRED, PREVENTS PUNCTURING OF THE STRUCTURE AND LOSS OF STRENGTH
- SUSTAINABLE AND ECOLOGICAL MATERIAL, ENERGY FRIENDLY
- REDUCES CARBON EMISSIONS BY LOWERING ENERGY CONSUMPTION
- UP TO **50%** SAVINGS IN HEATING AND COOLING COSTS
- PROVIDES COMFORTABLE LIVING SPACE WITH 4-SEASON PROTECTION

APPLIED STRUCTURES

- ACCOMMODATION BUILDINGS (hotels, motels, hostels, etc.)
- HEALTH BUILDINGS (hospitals, health centers, etc.)
- WORSHIP BUILDINGS (mosques, churches, synagogues, etc.)
- COMMERCIAL BUILDINGS (business halls, shopping centers, markets, etc.)
- SOCIAL BUILDINGS (theaters, cinemas, etc.)
- EDUCATIONAL BUILDINGS (schools, libraries, kindergartens, etc.)
- SPORTS BUILDINGS (stadiums, indoor sports halls, etc.)
- INDUSTRIAL BUILDINGS (factories, workshops, etc.)
- WATER STRUCTURES (pools, water tanks, etc.)
- RESIDENCES (houses, apartments, etc.)
- PREFABRICATED BUILDINGS

AQUA-TECHNICAL DATA SHEET

U-VALUE TURKEY TS-825



EKB
ENERGY
IDENTITY
CERTIFICATE



T1 ENERGY CLASS
BEP-TR ID NO- L:0.061

OUR PRODUCTS ARE MANUFACTURED IN ACCORDANCE WITH TS-EN 998-1 STANDARD AND ARE IN T1 ENERGY CLASS. IN CALCULATIONS ACCORDING TO TS-825 STANDARD, IZOROYAL PRODUCTS ARE INCLUDED IN BEP-TR AND ENERGY IDENTITY CERTIFICATE IS OBTAINED.

SCREED APPLICATION - WITH MACHINE

Step 1: Equipment and Material Preparation

- Plastering machines suitable for light plaster mortars
- IZOROYAL 'AQUA THERMAL INSULATION PLASTER' (1 bag)

Step 2: Water Preparation

- 10-12 liters of water should be used for each bag.

Step 3: Preparing the Plaster

- Add the entire package to the machine all at once.
- Add 10-12 liters of water for each bag.
- Mixing time should be adjusted so that the plaster has a consistency that will flow easily on the floor. Allow the mixed plaster to rest for 5 minutes.

Step 4: Surface Preparation and Profile Installation

- The application surface must be clean, free of dust, clean and damp
- Profiles of the desired thickness are inserted

Step 5: Applying the Plaster

- The prepared plaster is applied to the surface by machine.
- Correction is made with floating rule

Step 6:

- The process is left to the Setting Time

SCREED APPLICATION - BY HAND

Step 1: Equipment and Material Preparation

- 100 liter plaster mixing tub
- 400-600 rpm wide blade mixer
- 10-12 liters of water should be used.
- IZOROYAL 'AQUA THERMAL INSULATION PLASTER' (1 bag)

Step 2: Water Preparation

- 10-12 liters of water should be used for each bag.

Step 3: Preparing the Plaster

- The entire package is poured into the plaster mixing tub in one go.
- Add 10-12 liters of water for each bag.
- Run the mixer up and down and in a circular direction for 1.5-3 minutes until the plaster reaches a homogeneous consistency. The mixing time should be adjusted so that the consistency will not flow and sag on the wall.
- Let the mixed mortar rest for 5 minutes.

Step 4: Surface Preparation and Profile Installation

- The application surface must be clean, free of dust, clean and damp
- Profiles of the desired thickness are inserted

Step 5: Applying the Plaster

- Pour the prepared mortar homogeneously on the surface
- Correction is made with floating rule

THINGS TO BE CONSIDERED DURING TRANSPORTATION-STOCKING AND APPLICATION

- Volume loss may occur due to breakage and crushing of the material by the machine. It may vary according to each machine type.
- Protect from direct sunlight during storage, transportation and application.
- Product packages should not be exposed to point load effects during transportation and storage.
- IZOROYAL PRODUCTS SHOULD NOT BE EXPOSED TO LONG-TERM EXPOSURE TO ATMOSPHERIC CIRCUMSTANCES AFTER APPLICATION OF THE PRODUCT AND SHOULD BE COATED WITH FINAL COATING PRODUCTS (PRIMER-WATER BASED PAINT-DECORATIVE PLASTER- EXTERIORATIVE PLASTER- FACADE COATINGS- FLOOR COATINGS, etc.).
- 1 BAG SHOULD BE USED AT ONE TIME.
- Shelf life is 18 months and should be stored in dry, suitable ambient conditions.
- Safety precautions should be taken during application and manufacturer's instructions should be followed.
- PREPARATION STAGES OF PRODUCTS ACCORDING TO THE SURFACE TO WHICH THE PRODUCTS ARE APPLIED AND THE CONSTRUCTION TECHNIQUE SHOULD BE CONSIDERED according to the application manual.
- It can be applied 3 cm thick at a time in plaster application on vertical surfaces. For more than 3 cm thickness applications, gradual application is recommended.
- In plaster applications on vertical sections, the m2 surface covered by the product is calculated by assuming that the surface to be used is flat.
- Product thickness calculation should be made according to the regions. Pay attention to the region and U table.
- According to the application technique, + 5-10% should be added to the quantity calculation in machine application.
- Waste account should be kept separately. It varies according to construction site conditions.
- Do not exceed the recommended amount of water. The material should not be used below the minimum temperature allowed for complete setting. Low temperatures may slow setting while high temperatures may accelerate it. The workability time varies depending on the temperature.
- The newly applied product must be protected against freezing.
- If all conditions are met, Product Quality is guaranteed with IZOROYAL assurance (20 years).

SURFACE PREPARATION BEFORE APPLICATION

*The surface to be applied must be free from dust, clean and damp.

*It should be checked that the surface to be applied is made correctly and firmly.

*Paint, primer, thick plaster wastes etc. layers on the surface should be sanded and removed from the surface.

*Off-center deviations, concrete mold errors or cracks on the existing wall surface should be corrected with repair plasters.

AERATED CONCRETE,
BIMS BLOCK
SURFACE



If there is an old surface, it should be cleaned and a dust-free, clean and damp surface should be provided. Application is made on aerated concrete-bims block surface with or without an lath.

BRICK
SURFACE



If there is an old surface, it should be cleaned and a dust-free clean surface should be provided. It is applied to the brick surface with or without an lath.

DRYWALL-BOARDX
BETOPAN SURFACE



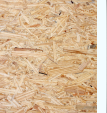
If there is an old surface, it should be cleaned and a dust-free clean surface should be provided. Mesh application with or without anode is applied to the drywall or Boardex surface. Before plaster mesh application, exposed concrete primer or watered repair plaster is applied to the surface with a roller.

CONCRETE
SURFACE



If there is an old surface, it should be cleaned and a dust-free, clean and damp surface should be provided. Before application, exposed concrete primer is applied to the surface with a roller.

WOODEN
SURFACE



If there is an old surface, it should be cleaned and a dust-free clean surface should be provided. Primer containing antipyrine and / or biocides should be used on the surface before application.

METALIC
SURFACE



If there is an old surface, it should be cleaned and if there is a rusty surface, antipyrine should be applied. Before application, exposed concrete primer or watered repair plaster is applied to the surface with a roller.

AQUA-TECHNICAL DATA SHEET



ROOF-TERRACE



POOL-WATER TANK



BASEMENT-WET AREAS

AQUA: WATER REPELLENCE (HYDROPHOBIC) FEATURE HAS BEEN SPECIFICALLY DEVELOPED AND INCREASED FOR SURFACES WITH STANDING WATER AND EXPOSED TO DENSE VERTICAL WATER.

'AQUA' UP TO 3mm OPENING DOES NOT ALLOW WATER TRANSMISSION, PREVENTS CORROSION.



LEGAL NOTES

Technical specifications are for information purposes. They cannot be used instead of official documents. The information provided on IZOROYAL products, and in particular recommendations on their application and end use, are provided under normal conditions and in accordance with IZOROYAL's instructions. This information is based on current knowledge and experience of the conditions under which the products are stored, processed and applied correctly. IZOROYAL is solely responsible for the quality of the product. However, it may vary as products are used in practice on different surfaces and in different application areas. For this reason, the information and instructions provided by IZOROYAL regarding commercial suitability and/or fitness for a particular purpose must be strictly adhered to. Otherwise, IZOROYAL shall not be liable for any possible damages and in case the product is used for other than its intended purpose or if the application recommendations are not followed. Users should test the suitability of the product for the specific applications and purposes for which they intend to use the product. IZOROYAL reserves the right to change product specifications. The property rights of third parties must be respected. All orders are subject to the current terms of sale and transportation. Users should always contact IZOROYAL to obtain the latest edition of the relevant product data sheets.

PRODUCT INFORMATION BASIS & LOCAL RESTRICTIONS

- All information in this product technical file is based on laboratory experiments and our best possible accuracy and scientific experience. The values obtained in applications may vary due to variables beyond our control.
- Due to local regulations, the performance of this product may vary from country to country. Please refer to local product data sheets for exact application areas.

ENVIRONMENTAL HEALTH AND OCCUPATIONAL SAFETY

Users should consult the material safety data sheet (MSDS) for the product for information and advice on the safe handling, storage and disposal of products. This form contains physical, ecological, toxicological and other safety-related information.



ENERGY
EFFICIENT



ECOLOGICAL
& NATURAL



HARMLESS
TO HEALTH



SUSTAINABLE