



NEW GENERATION
LIQUID INSULATING
COATING

barkkaft®

THE FUTURE OF CLIMATE
CHANGE and
THE INSULATION
WORLD

www.barkkaft.com



ALTAI
ENDÜSTRİYEL YAPI A.Ş.



WHO WE ARE

BARKKAFT has been operating in the field of insulation since the early 2000s. It continues to leverage its technical expertise today under the **BARKKAFT** Insulation Paints brand within **ALTAI YAPI ENDÜSTRİ A.Ş.**

Our products are developed using nanotechnology, polymer sciences, expanded micro-spheres, and aerogel-supported formulations. Thanks to their lightweight structure, they do not create additional load on the load-bearing system, designed to comply with current earthquake regulations, and offer environmentally friendly (low VOC value) solutions.

BARKKAFT approaches insulation as a technical solution that enhances building performance and energy efficiency.

ABOUT ALTAI YAPI ENDÜSTRİ A.Ş.

ALTAI YAPI ENDÜSTRİ A.Ş. has developed thermal insulation paints, multifunctional coatings, and conductive paints as a result of long-term **R&D** studies conducted by its partners specializing in nanotechnological materials.

These products were made ready for production in 2022 and mass production began under the **BARKKAFT** brand.

ALTAI YAPI ENDÜSTRİ A.Ş. continues to offer technical solutions for the construction sector with its **R&D** and innovation-focused approach.

A NEW GENERATION APPROACH IN INSULATION

The high greenhouse gas emissions, labor costs, and negative impacts on potential impacts on structural load of traditional insulation systems have highlighted the need for lighter and more efficient solutions.

Developed as a result of **R&D** efforts to meet this need, **BARKKAFT** offers a technical alternative in the field of spreadable insulation technologies.

Our products, developed with advanced technologies compliant with international standards, are currently used as viable solutions in **Turkey** and various other markets.

OUR GOALS

- Continuously developing products through **R&D**, in the insulation sector
- Providing sustainable and environmentally friendly solutions that support energy efficiency
- To become a lasting brand in global markets with high value-added products that meet world standards.

www.barkkraft.com

WHAT IS **barkraft**

BARKKAFT is a spreadable insulation technology developed using expanded, air-filled micro-spheres, high-performance polymer resins, and aerogel-supported nanostructures.

It is designed to help provide thermal, acoustic, water and fire insulation.

Thanks to the aerogel additive:

- It has low thermal conductivity
- It provides high insulation performance at a thin film thickness
- It is lighter compared to traditional insulation materials

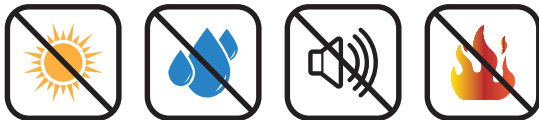
TECHNICAL AND FUNCTIONAL ADVANTAGES

- Rollable and sprayable application
- Fire resistance, flame-retardant structure
- Resistance to impacts and environmental effects
- High elasticity and crack bridging ability
- Corrosion-resistant structure
- Low thermal conductivity and high reflectivity
- Strong and homogeneous adhesion on surfaces with complex geometries
- Thanks to its liquid polymer-based structure, BARKKAFT protects surfaces not only from heat and cold, but also from moisture, condensation, rust, and corrosion.

MULTIPLE PROTECTION IN A SINGLE APPLICATION

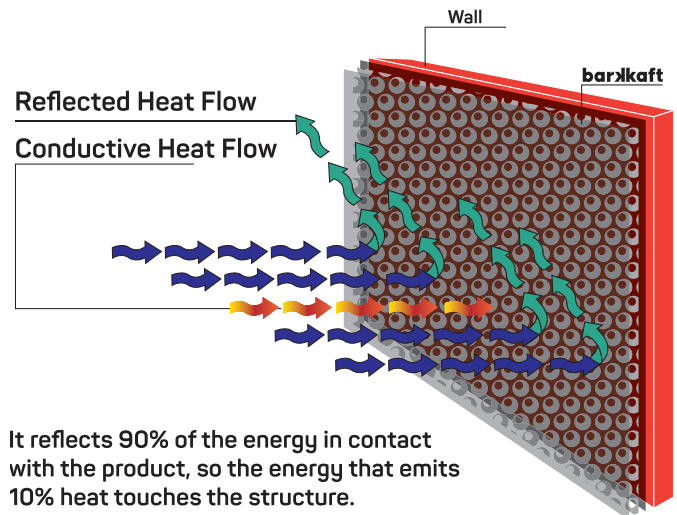
BARKKAF offers thermal, acoustic, water, and fire insulation in a single solution with its multi-layered application system.

Thanks to its reflective and radiant properties, it contributes to reducing thermal energy losses and increasing system efficiency in buildings, industrial equipment, and installations.



• FEATURES OF BARKKAFT

- **Ease of application:** Since it is airless spray-based, it can be easily applied with a roller, brush, or sprayer, saving time and money.
- **Application area:** Can be applied to interior and exterior surfaces.
- **Breathability:** Prevents heat transfer between hot and cold surfaces, allows vapor permeability and breathability and temperature changes. This prevents sweating, moisture, mold, and mildew formation, allowing the structure to breathe.
- **Sound insulation:** Prevents sound and vibration.
- **Fire safety:** Has flame-retardant properties.
- **Durability:** Resistant to impact thanks to its elastic structure.
- **Color and coating:** White in color, can be pigmented and painted.
- **Environmental resistance:** Resistant to wind and salt.
- **Application surfaces:** Can be used on all surfaces such as plastic, metal, concrete, brick, wood, etc.
- **Lightweight:** It is 20 times lighter than products such as EPS styrofoam and rock wool; it does not add load to the structure it is applied to.
- **Environmentally friendly:** It does not contain substances harmful to human health.
- **Energy efficiency:** It provides high energy savings.



It reflects 90% of the energy in contact with the product, so the energy that emits 10% heat touches the structure.

EXTERIOR WALL LIQUID THERMAL INSULATION COATING PAINT



BARKKAFT – 1 Exterior Wall Insulation:

It is a new generation nano-technology liquid thermal insulation coating paint consisting of a homogeneous mixture of an acrylic resin-based binder with expanded eco-friendly beads, aerogel additive, and polymeric structure. When applied to exterior walls, it prevents mold and corrosion with maximum adhesion. It reduces the effects of ultraviolet rays, prevents heat from penetrating the structure in summer, and stops cold air from entering the building in winter, providing high thermal insulation performance.

BARKKAFT – 1 Exterior Wall Insulation:

Provides high adhesion and flexibility to any surface. Thanks to its beads and aerogel content, it has low thermal conductivity. It protects the surface from the effects of heat and cold, offering performance as strong as traditional insulation materials. It is much easier to apply than other materials, can be applied quickly, and is economical. It is as durable as the plaster on the exterior wall. It does not peel, crack, or fade; it retains its properties much longer than normal paints.

PHYSICAL PROPERTIES

Nominal Thermal Conductivity Coefficient	0.018 W/mK
Expected Service Life	15 – 20 years
Water Permeability	TS EN 1062-3, 0.017 kg/m²h
Abrasion Resistance	TS EN ISO 5470-1, 843 mg
Color	White (can be colored with pigment)
Liquid Density	0.7 kg/dm³
Impact Resistance	TS EN ISO 6272-1, Class III, No cracking or tearing
Weight of One Layer Liquid Coating (0.5 mm)	0.3 kg/m²
Adhesive Bond	TS EN 1542, B-1.0 N/mm²
Light Reflection	90%
Light Diffusion (IR light)	95%
Fire Response	B.S1.DO

APPLICATION AREAS

- Interior and exterior walls of buildings
- Roofs and ceilings
- Balconies and porches
- Container structures (offices, homes, and others)
- Steel building structures
- Hangars and garages
- Building parking lots
- Historic buildings
- Prefabricated buildings
- Refrigerated vehicles
- Trains, wagons, ships, and aircraft
- Military vehicles
- Cold storage facilities
- Applicable to all surfaces

TECHNICAL FEATURES AND ADVANTAGES

- Reduces thermal energy transmission thanks to its high reflectivity; saves energy under suitable application conditions.
- Offers low thermal conductivity with its aerogel-supported nano structure and provides high insulation performance in thin film thickness.
- Can be applied with a roller, brush, or spray; reduces labor time and total cost thanks to quick application.
- Can be used safely on interior and exterior facades, building and industrial surfaces.
- Balances hot-cold transitions; helps reduce condensation, moisture, mold, and mildew formation.
- Increases space comfort by reducing vibration and noise with its sound insulation feature.
- Contributes to fire safety with its non-flammable structure.
- Resistant to impacts, surface movements, and micro-cracks with its high elasticity.
- White in color; can be colored with pigment

APPLICATION AND USE

If there are any defects or cracks in the plaster, repairs should be made and the drying time should be allowed. After opening the bucket lid, it should be mixed with a drill at medium speed. Water and other thinners should never be added to plaster insulation coating paints. Application can be done with a brush or roller on plaster facades. On non-breathable surfaces (sheet metal, pergola, glass, etc.), the airless machine spraying method should be used.

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

addition and decorative paint can be applied on top.

- Resistant to wind, salt, and harsh outdoor conditions; offers long-lasting performance in coastal and industrial areas.
- Demonstrates high adhesion performance on surfaces such as plastic, metal, concrete, brick, wood, and similar materials.
- It is approximately 20 times lighter than traditional insulation products such as EPS and rock wool; it does not add extra load to the structure and provides an advantage for earthquake zones.
- Its corrosion-resistant structure protects metal surfaces from rusting.
- It is environmentally friendly; it does not contain substances harmful to human health or nature.
- Its long-lasting structure reduces maintenance costs and makes energy efficiency permanent.
- It is a multifunctional solution that provides thermal, acoustic, water, and fire insulation in a single system.

The first coat of Barkkaft liquid insulation coating is applied 4–5 hours after the application of the insulated primer (drying time may vary depending on weather conditions). The second coat is applied after complete drying, depending on weather conditions. After the second coat has dried, the third coat is applied to complete the application. Color: White (can be colored with pigment). Water-based paint can be applied over it. Coverage: 20–25 m²/18 L bucket for 3 coats. (May vary depending on the surface, weather conditions, and different usage conditions.)

INTERIOR WALL LIQUID THERMAL INSULATION COATING PAINT



BARKKAFT -2- Interior Wall Insulation:

It is a new generation nano-technology liquid thermal insulation coating paint with a water-based elastic structure, consisting of a homogeneous mixture of micron-sized expanded spheres and a binder.

The interior insulation paint can be applied to ceilings, walls, tiles, and laminate flooring, and its structure, which is completely harmless to human health, allows it to be applied to any surface on interior walls.

BARKKAFT -2- Interior Insulation provides high adhesion and flexibility to any surface. Thanks to the spheres in its content, it offers low thermal conductivity and can be applied economically in a short time. While traditional insulation materials are difficult to apply to the interior of the building afterwards and are often harmful to health, Barkkaft interior insulation paint is easy to apply and provides superior insulation performance. It can be applied much more easily and economically than other materials in a short time.

PHYSICAL PROPERTIES

Nominal Thermal Conductivity Coefficient	0.018 W/mK
Expected Service Life	15 – 20 years
Water Permeability	TS EN 1062-3, 0.017 kg/m ² h
Abrasion Resistance	TS EN ISO 5470-1, 843 mg
Color	White (can be colored with pigment)
Liquid Density	0.7 kg/dm ³
Impact Resistance	TS EN ISO 6272-1, Class III, No cracking or tearing
Weight of One Layer Liquid Coating (0.5 mm)	0.3 kg/m ²
Adhesive Bond	TS EN 1542, B-1.0 N/mm ²
Light Reflection	90%
Light Diffusion (IR light)	95%
Fire Response	B.S1.DO

APPLICATION AREAS

- On the interior walls and ceilings of buildings
- On balconies and verandas
- In container-based structures (offices, homes, and others)
- In steel building structures
- In hangars and garages
- In building parking lots
- In historical buildings
- In prefabricated structures
- In refrigerated vehicles
- In cold storage facilities.

TECHNICAL FEATURES AND ADVANTAGES

- Energy saving: Thanks to its excellent reflective properties, it is very effective in preventing energy transmission, thus saving energy.
- Ease of application: Since it is brush-on, it can be easily applied with a roller, brush, or spray; saving time and money.
- Area of use: Can be applied to interior and exterior surfaces.
- Breathability: By preventing the passage of hot and cold, it becomes sensitive to humidity and temperature changes. Thus, it prevents condensation, dampness, mold, and mildew formation, allowing the structure to breathe.
- Sound insulation: Prevents sound and vibration.
- Fire safety: Has flame-retardant properties.

APPLICATION AND USE

If there are any defects or cracks in the plaster, repairs should be made and the drying time should be allowed. After opening the bucket lid, it should be mixed with a drill at medium speed. Water and other thinners should never be added to plaster insulation coating paints. Application can be done with a brush or roller on plaster facades. On non-breathable surfaces (sheet metal, pergola, glass, etc.), the airless machine spraying method should be used.

- Durability: Thanks to its elastic structure, it is resistant to impacts.
- Color and finish: Its color is white, but it can be colored with pigment and painted over.
- Environmental resistance: It is not affected by wind and salt.
- Application surfaces: Can be used on all surfaces such as plastic, metal, concrete, brick, wood, etc.
- Lightweight: It is very lightweight and does not impose heavy loads (seismic loads) on the structure to which it is applied.
- Environmentally friendly: It does not contain substances harmful to human health.
- Energy efficiency: It provides high energy savings.

The first coat of Barkkraft liquid insulation coating is applied 4–5 hours after the application of the insulated primer (drying time may vary depending on weather conditions). The second coat is applied after complete drying, depending on weather conditions. After the second coat has dried, the third coat is applied to complete the application. Color: White (can be colored with pigment). Water-based paint can be applied over it. Coverage: 20–25 m²/18 L bucket for 3 coats. (May vary depending on the surface, weather conditions, and different usage conditions.)

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

ROOF LIQUID THERMAL INSULATION COATING PAINT



BARKKAFT-3 – A new generation nano-technology liquid thermal insulation coating paint with a water-based elastic structure, consisting of a homogeneous mixture of micron-sized expanded spheres and a binder within the roof structure.

Developed for roof and ceiling applications, this product has a higher water repellency than our other products and performs its function of preventing water penetration perfectly. Although the product is a water-repellent insulation material, it should not be applied in areas that retain water or inside pools. The area to be applied must be sloped.

It provides excellent results on all concrete and tile-type surfaces. Like other Barkkaft products, when applied, it reflects sunlight in summer, preventing unnecessary heating, and in winter, it prevents cold air

from penetrating the building, providing superior thermal insulation performance.

Awnings, pergolas, ceilings, and roofs are the areas in buildings where heat loss is most prevalent. Barkkaft-3 provides water, sound, and thermal insulation all at once. Furthermore, like other Barkkaft products, this product also has flame retardant properties.

It is durable, flexible, does not crack, breathes, and is easy to use. It performs its function flawlessly in all weather conditions, solving problems in roofs and ceilings at their root. While offering performance as strong as all traditional insulation materials, it is much easier and quicker to apply economically compared to other insulation materials.

PHYSICAL PROPERTIES

Nominal Thermal Conductivity Coefficient	0.018 W/mK
Expected Service Life	10–15 years
Water Permeability	TS EN 1062-3, 0.017 kg/m ² h
Abrasion Resistance	TS EN ISO 5470-1, 843 mg
Color	White (can be colored with pigment)
Liquid Density	0.7 kg/dm ³
Impact Resistance	TS EN ISO 6272-1, Class III, No cracking or tearing
Weight of One Layer Liquid Coating (0.5 mm)	0.3 kg/m ²
Adhesive Bond	TS EN 1542, B-1.0 N/mm ²
Light Reflection	90%
Light Diffusion (IR light)	95%
Fire Response	B.S1.D0 (heat-resistant surfaces)

APPLICATION AREAS

- On the roofs and ceilings of buildings (sheet metal, sandwich panel, sandblasted membrane, etc.)
- On balconies and verandas
- In container structures (offices, houses, and others)
- In steel building structures
- In hangars and garages
- In building parking lots
- In historical buildings
- In prefabricated structures
- In refrigerated vehicles
- In trains, wagons, ships, and airplanes
- In military vehicles
- In cold storage facilities
- Can be applied to the roof, ceiling, awning, and pergola surfaces of all areas of use

TECHNICAL FEATURES AND ADVANTAGES

- Can be applied to roofs, ceilings, awnings, pergolas, and trapezoidal sheet metal surfaces.
- Excellent reflective properties prevent energy transfer, saving energy.
- Easy application: offers quick and economical application with roller, brush, and spray.
- Breathable: prevents heat and cold transfer, preventing moisture, mold, and mildew formation.
- Provides sound insulation and prevents vibration.
- Its elastic structure makes it resistant to impacts.
- It is white in color; it can be colored with pigment and painted over.
- Unaffected by wind and salt.
- Provides excellent results on roofs with its water-repellent properties.
- Can be applied to all surfaces such as plastic, metal, concrete, brick, wood, etc.
- Very lightweight, does not put heavy load (earthquake load) on the structure to which it is applied.
- Environmentally friendly, does not contain substances harmful to human health.
- Provides high performance in terms of energy efficiency.

APPLICATION AND USE

If there are any defects or cracks in the plaster, repairs should be made and the drying time should be allowed.

After opening the bucket lid, it should be mixed with a drill at medium speed.

Water and other thinners should never be added to plaster insulation coating paints.

Application can be done with a brush or roller on plaster facades.

On non-breathable surfaces (sheet metal, pergola, glass, etc.), the airless machine spraying method should be used.

The first coat of Barkkraft liquid insulation coating is applied 4–5 hours after the application of the insulated primer (drying time may vary depending on weather conditions). The second coat is applied after complete drying, depending on weather conditions. After the second coat has dried, the third coat is applied to complete the application.

Color: White (can be colored with pigment). Water-based paint can be applied over it.

Coverage: 20–25 m²/18 L bucket for 3 coats. (May vary depending on the surface, weather conditions, and different usage conditions.)

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

PERGOLA LIQUID INSULATION COATING PAINT



BARKKAFT Thermal Insulation Paint provides up to 60% thermal insulation on pergola awning surfaces. Developed for users and commercial businesses seeking to enhance outdoor comfort, Barkkaft Thermal Insulation Paint stands out with its high-performance thermal insulation for pergola canopy systems. This professional coating, specially formulated against sunlight, provides up to 60% heat reflection on canopy surfaces, creating a noticeable coolness in the space below.

Additives in Barkkaft's specially developed formula:

- Nano-ceramic, expanded microbeads, and aerogel additives
- Thermal reflective pigments
- IR (infrared) reflective additives

Thanks to its special components, the solar energy reaching the surface is broken down and reflected back. This reduces the temperature on the awning surface by up to 60%, significantly lowering the ambient temperature caused by the awning.

PHYSICAL PROPERTIES

Nominal Thermal Conductivity Coefficient	0.018 W/mK
Expected Service Life	10–15 years
Water Permeability	TS EN 1062-3, 0.017 kg/m²h
Abrasion Resistance	TS EN ISO 5470-1, 843 mg
Color	White (can be colored with pigment)
Liquid Density	0.7 kg/dm³
Impact Resistance	TS EN ISO 6272-1, Class III, No cracking or tearing
Weight of One Layer Liquid Coating (0.5 mm)	0.3 kg/m²
Adhesive Bond	TS EN 1542, B-1.0 N/mm²
Light Reflection	90%
Light Diffusion (IR light)	95%

APPLICATION AREAS

- Cafe and restaurant pergolas
- Hotel poolside shade systems
- Residential retractable awning systems
- Sunlit terrace and balcony coverings
- Open parking lot shade systems

TECHNICAL FEATURES AND ADVANTAGES

- Metal constructions
- Fabric-based awning and pergola surfaces (with appropriate primer)
- Provides excellent adhesion and high insulation performance to different substrates such as PVC or composite panels.
- Energy Efficiency: Minimizes temperature transfer, reducing the need for outdoor cooling.
- UV Resistance: Protects awning fabric and surface coating against UV-induced wear and tear.
- Aesthetic Harmony: Integrates into the design with different color options and matte-glossy surface alternatives.
- Easy Application: Can be applied in three coats with a roller or airless spray, or primer + two coats.
- Barkkraft Pergola Insulation Paint offers both comfort and performance on outdoor surfaces. With its advanced formulation, it not only creates a cool environment in pergola awning applications but also extends the life of structural elements and provides exterior protection. With Barkkraft, cool, sustainable, and aesthetically pleasing outdoor spaces are now possible in the summer months.

APPLICATION AND USE

If there are any defects or cracks in the plaster, repairs should be made and the drying time should be allowed.

After opening the bucket lid, it should be mixed with a drill at medium speed.

Water and other thinners should never be added to plaster insulation coating paints.

Application can be done with a brush or roller on plaster facades.

On non-breathable surfaces (sheet metal, pergola, glass, etc.), the airless machine spraying method should be used.

The first coat of Barkkraft liquid insulation coating is applied 4–5 hours after the application of the insulated primer (drying time may vary depending on weather conditions). The second coat is applied after complete drying, depending on weather conditions. After the second coat has dried, the third coat is applied to complete the application.

Color: White (can be colored with pigment).

Water-based paint can be applied over it.

Coverage: 20–25 m²/18 L bucket for 3 coats. (May vary depending on the surface, weather conditions, and different usage conditions.)

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

INDUSTRIAL LIQUID INSULATION COATING PAINT



BARKKAFT -4- Industrial Insulation: This is a new generation nanotechnology, aerogel-modified liquid insulation coating paint consisting of expanded, completely eco-friendly micro-spheres for coverage purposes; a homogeneous mixture of polymer resins, stabilizers, and a thixotropic structure with an acrylic resin-based binder. Thanks to its flame-retardant properties, the product prevents damage to industrial facilities and equipment and prevents heat loss. It applies perfectly to all metal components. It provides high energy savings by reducing the external surface temperature. It exhibits excellent adhesion to steel, galvanized sheet metal, wood, concrete,

iron, tanks, and pipelines. It reduces high energy production costs. As with other Barkkaft products, it offers heat, water, and sound insulation, while this series has been developed with special raw materials that have high flame-retardant properties.

It can be applied for heat insulation purposes in steam pipes, valve lines, high-temperature furnaces, and other equipment in industrial facilities. The continuous operating temperature range is -40°C / $+550^{\circ}\text{C}$ ($+600^{\circ}\text{C}$ in peak mode). Barkkaft industrial applications are realized with a combination of insulated fiber and Barkkaft.

PHYSICAL PROPERTIES

Nominal Thermal Conductivity Coefficient	0.018 W/mK
Expected Service Life	3-10 years (depending on the heat exposure)
Water Permeability	TS EN 1062-3, 0.017 kg/m²h
Abrasion Resistance	TS EN ISO 5470-1, 843 mg
Color	White (can be colored with pigment)
Liquid Density	0.7 kg/dm³
Impact Resistance	TS EN ISO 6272-1, Class III, No cracking or tearing
Weight of One Layer Liquid Coating (0.5 mm)	0.3 kg/m²
Adhesive Bond	TS EN 1542, B-1.0 N/mm²
Light Reflection	90%
Light Diffusion (IR light)	95%
Fire Response	B.S1.D0

APPLICATION AREAS

- Industrial areas
- Grain and feed silos
- Oil pipelines
- Industrial valves and elbows
- Container structures (office, house and others)
- Steel building structures
- Chicken and animal farms
- Hangars and garages
- Caravans
- Yachts and boats
- Refrigerated vehicles
- Trains, wagons, ships and airplanes
- Military vehicles
- Applicable to all surfaces

TECHNICAL FEATURES AND ADVANTAGES

- Suitable for industrial areas.
- Excellent reflective properties prevent energy transfer, saving energy.
- Easy application: quick and economical application with roller, brush, and spray.
- Breathable: prevents heat and cold transfer, preventing moisture, mold, and mildew formation.
- Provides sound insulation and prevents vibration.
- Flame retardant.
- Impact resistant thanks to its elastic structure.
- White color; can be colored with pigment and painted over.
- Unaffected by wind and salt.
- Can be applied to all surfaces such as plastic, metal, concrete, brick, wood, etc.
- Very lightweight, does not put heavy load (earthquake load) on the structure to which it is applied.
- Environmentally friendly, does not contain substances harmful to human health.
- Provides high performance in terms of energy efficiency.

APPLICATION AND USE

If there are any defects or cracks in the plaster, repairs should be made and the drying time should be allowed.

After opening the bucket lid, it should be mixed with a drill at medium speed.

Water and other thinners should never be added to plaster insulation coating paints.

Application can be done with a brush or roller on plaster facades.

On non-breathable surfaces (sheet metal, pergola, glass, etc.), the airless machine spraying method should be used.

The first coat of Barkkaft liquid insulation coating is applied 4–5 hours after the application of the insulated primer (drying time may vary depending on weather conditions). The second coat is applied after complete drying, depending on weather conditions. After the second coat has dried, the third coat is applied to complete the application.

Color: White (can be colored with pigment). Water-based paint can be applied over it.

Coverage: 20–25 m²/18 L bucket for 3 coats. (May vary depending on the surface, weather conditions, and different usage conditions.)

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

ARMOR FLOOR PAINT



Industrial-Grade Protection: Add High Performance to Your Floors!

Our new generation waterproof floor paint offers superior durability and comfort for both indoor and outdoor spaces. Thanks to its advanced formula, it not only protects your floors but also saves energy.

Waterproof Structure:

When applied to the surface, it forms a closed-pore layer. It provides excellent resistance to water, oil, and chemical spills. Prevents damage caused by moisture and humidity.

Heavy Load Resistance:

Offers high impact and wear resistance against heavy loads such as forklifts, pallet trucks, and vehicle traffic. Your floor maintains its original performance for many years.

Easy Application

Can be applied with a roller, brush, or airless spray. Thanks to its fast drying feature, it is ready for use in a short time.

PRODUCT FEATURES

- High adhesion strength
- Fast drying
- Easy application
- Resistant to yellowing
- Impact resistant
- High coverage
- UV resistance

APPLICATION

Surface cleaning is crucial before application. Absolutely do not apply to damp surfaces. Remove oil and dirt from the surface by sweeping or using an air blower. Do not wash with water; because moisture absorbed by the concrete will dry even in sunny weather after days, negatively affecting the adhesion of the product.

- After opening the 18 L bucket of floor paint, mix it with a drill at medium speed.
- For brush or roller applications, it is recommended to apply two coats without thinning, with a waiting time of 15-60 minutes. (If necessary, it can be thinned with 5% cellulosic thinner.)
- For a brighter and more durable floor, apply two coats of transparent liquid glass varnish containing 10 kg of component A and 5 kg of component B over the floor paint.
- The surface can be walked on 24 hours after the entire application is completed; however, vehicle traffic and complete drying should be allowed for 5 days.

ARMOR FLOOR PAINT PHYSICAL PROPERTIES

COLOR: White and gray (can be tinted)

CONSUMPTION: 60 m²/18 L in two coats. (May vary depending on the floor, weather conditions and usage)

PACKAGING: Served in 18 L buckets. • Shelf Life: In unopened and undamaged packaging, it has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, between 5°C–25°C.



INTUMESCENT FIRE-RESISTANT PAINT



Intumescent paint is a modern, eco-friendly, high-performance coating solution that provides extra protection for the fire safety of buildings and structural elements.

It is a special coating that swells on the surface when exposed to high temperatures during a fire, forming a foamy carbon layer. This layer insulates the underlying material (especially steel, wood, concrete) from heat, ensuring that structural integrity is maintained.

Working Principle

Under normal conditions, it acts as a decorative and protective coating. It activates at temperatures above 200°C. The carbon source and foaming agents in the paint undergo a thermal reaction, forming a thick, carbonized, expanded layer. This layer slows down heat transfer, protects the surface, and increases fire resistance by 30–120 minutes, depending on the application thickness.

Easy Application

Can be applied with a roller, brush, or airless spray. Thanks to its fast drying feature, it is ready for use in a short time.



TECHNICAL SPECIFICATIONS AND ADVANTAGES

- Color: White (can be tinted)
- Density: 1.20 – 1.35 g/cm³
- Solid Content: 65% – 75%
- Application Thickness: 0.5 – 2.0 mm dry film thickness according to project requirements
- Drying Time: 1–2 hours don't touch, 24 hours for complete drying
- Fire Resistance: 30 – 120 minutes (in tested systems)
- Application Method: Airless spray, brush or roller
- Swelling Rate: 25 – 40 times
- Binder System: Contains water-based silicone/acrylic resin
- Environmentally Friendly: Low VOC, solvent-free, suitable for human and environmental

APPLICATION AREAS

- Steel structures: Factories, warehouses, shopping malls, airports
- Wooden surfaces: Doors, ceilings, interior decorative coverings
- Concrete and plastered surfaces: Tunnels, parking lots, high-rise buildings
- Industrial facilities: Rack systems, pipelines, machine guards
- Residential and commercial areas: Hotels, offices, public buildings

APPLICATION

- The surface must be clean, dry, and free of oil/dirt.
- If necessary, a corrosion-inhibiting primer should be applied.
- Intumescent paint should be applied in coats (maximum 500 µm dry film per coat).
- For final aesthetic appearance and UV resistance, it is recommended to apply a suitable topcoat.

COLOR: White (can be tinted)

COVERAGE: Coverage is 40 m²/18 L in three coats. (May vary depending on the surface, weather conditions and usage differences).

PACKAGING: Served in 18 L buckets.

SHELF LIFE: In unopened and undamaged packaging, the shelf life is 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, between 5°C–25°C.

INTUMESCENT FIRE-RESISTANT TRANSPARENT VARNISH



Barkkaft Transparent Intumescent Varnish is a professional fire-retardant coating that provides high fire protection without altering the natural appearance of wood surfaces. Thanks to its advanced intumescent structure, it swells in the event of a fire, forming a protective carbon foam layer, insulating the surface and delaying the ignition time of the wood. Working Principle

Under normal conditions, it acts as a decorative and protective coating. It activates at temperatures above 200 °C. The carbon source and swelling agents in the paint undergo a thermal reaction, forming a thick carbonized swelling layer. This layer slows down heat transfer, protects the surface, and increases fire resistance by 30–120 minutes. Easy Application

It can be applied with a roller, brush, or airless spray. Thanks to its fast drying feature, it is ready for use in a short time.

TECHNICAL SPECIFICATIONS AND ADVANTAGES

- Color: Transparent
- Density: 1.20 – 1.35 g/cm³
- Solid Content: 65% – 75%
- Application Thickness: 0.5 – 2.0 mm dry film thickness according to project requirements
- Drying Time: 1–2 hours don't touch, 24 hours for complete drying
- Fire Resistance: 30 – 120 minutes (in tested systems)
- Application Method: Airless spray, brush or roller
- Swelling Rate: 25 – 40 times
- Binder System: Contains water-based silicone/acrylic resin
- Environmentally Friendly: Low VOC, solvent-free, suitable for human and environmental

APPLICATION AREAS

- Wooden doors and windows
- Wooden facade cladding
- Parquet flooring, ceilings and interior wood decorations
- Wooden furniture and panels
- Historic buildings and restoration projects (provides fire protection without compromising aesthetics)

APPLICATION

- The surface must be clean, dry, and free of oil/dirt.
- If necessary, a corrosion-inhibiting primer should be applied.
- Intumescent paint should be applied in coats (maximum 500 µm dry film per coat).
- For final aesthetic appearance and UV resistance, it is recommended to apply a suitable topcoat.

COLOR: White (can be tinted)

COVERAGE: Coverage is 40 m²/18 L in three coats. (May vary depending on the surface, weather conditions and usage differences).

PACKAGING: Served in 18 L buckets.

SHELF LIFE: In unopened and undamaged packaging, the shelf life is 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, between 5°C–25°C.

INSULATED PRIMER



Barkkaft Insulated Primer is a new generation nano-technology liquid thermal insulation primer with a water-based elastic structure, formed by homogeneously mixing expanded perlite with a binder.

It eliminates small holes, cracks, scratches, and imperfections on the surface to be painted; it contributes to the longevity of the insulation paint by ensuring better adhesion to the surface. Furthermore, applying insulation paint to a primerless surface results in significantly higher paint consumption.

Barkkaft Insulated Primer performs a different function compared to regular primers due to its insulation properties and is unique in terms of its value.

TECHNICAL FEATURES AND ADVANTAGES

- Expanded raw materials are used.
- Facilitates energy saving with insulation paint.
- Easy application: Applied quickly and economically with roller, brush, or spray.
- Can be applied to all surfaces.
- Has flame retardant properties.
- Low thermal conductivity (Lambda value: 0.021 W/mK)
- White color.
- Unaffected by wind and salt.
- Adheres to plaster in buildings, providing performance for the life of the plaster (15-20 years).
- Can be applied to all surfaces such as plastic, metal, concrete, brick, wood, etc.
- Environmentally friendly, does not contain substances harmful to human health.
- Helps to achieve high efficiency in terms of energy efficiency.

APPLICATION AREAS

- On the interior and exterior facades of buildings
- On roofs and ceilings
- On balconies and verandas
- In prefabricated structures
- In cold storage facilities
- Can be applied to all surfaces

BARKKRAFT INSULATING PRIMER APPLICATION AND CONSUMPTION:

If there are defects or chipping in the plaster, repairs should be made and drying time should be observed.

After opening the bucket lid, it should be mixed with a drill at medium speed.

Water and other thinning liquids should absolutely not be added to the insulating primer.

Application can be done with a brush or roller on plaster surfaces.

On non-breathable surfaces (sheet metal, pergola, glass, etc.), the spray method with an airless machine should be used.

Color: White. Water-based paint can be applied over it.

PACKAGING: Served in 18 L buckets.

SHELF LIFE: Unopened and undamaged packaging has a shelf life of 12 months from the date of manufacture.

STORAGE CONDITIONS: Should be stored in a dry and cool environment, at temperatures above 0°C.

NEW GENERATION LIQUID INSULATING COATING

OUR CERTIFICATES...

	TÜRK STANDARTLARI ENSTİTÜSÜ BİNELİ Y. KALIBRASYON MERKEZİ BAŞKANLIĞI YAPILMAZELİFİNGİ YANUS Y. ANKİTİ LABORATUVAR MERDİİĞİ			
TESTİNG CENTER	HEADSHIP OF TEST AND CALIBRATION CENTER CONSTRUCTION MATERIALS FIELD AND ACOUSTICS LABORATORY			AB-0001-1
Tel.: 0312 282 00 00	Faks:	E-mail: yalib@tse.gov.tr	26781	
MUAYENE VE DENEY RAPORU				08.24
TEST YETİŞTİRİ				
Deneyi Talyap Eden/Firma:	ALTAI YATKINERİN ANONİM ŞİRKETİ			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>	EVİÇİ ÇAMBAŞI MİL. 90751 SK. NO:40 KAT:YAKINIKONYA			
İletişim No	264595			
Deneyi Talyap Tarih / No :	7.06.2024 / 2024-16243			
<i>(Deneyi Talyap Tarih / No)</i>				
Namunamıza Tarih:	21.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>	21.06.2024			
Namunamıza Kaldır Tarih:	20.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				
Namunamıza Yaptır Tarih:	01.07.2024 / 21.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				
Deneyi Yaptır Tarih:	25.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				
Deneyi Yaptır Tarih:	25.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				
Deneyi Yaptır Tarih:	25.06.2024			
<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				
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<i>(Çin, Güney Kore, Japonya, ABD, Almanya, İngiltere, Rusya, Türkiye, vb.)</i>				

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OUR CERTIFICATES...



T.C.
KOCAELİ UNIVERSITY
ENGINEERING FACULTY
DEPARTMENT OF CIVIL ENGINEERING

20/06/2023

HOT-PLATE THERMAL CONDUCTIVITY TEST ON BARKKAFT INSULATION PAINT MATERIAL SENT BY ALTAY YAPI ENDÜSTRİ A.Ş. AND REPORTING THE RESULTS

1. PURPOSE OF THE REPORT

The purpose of this report is to document the thermal conductivity analysis of the BARKKAFT insulation paint material, which was previously tested and reported within the scope of the letter provided by ALTAY YAPI ENDÜSTRİ A.Ş. company, as assigned to me according to the letter with reference number 09.06.2023-E.425293.

2. THE CONDUCTED WORK

BARKKAFT insulation paint material sent to me by ALTAY YAPI ENDÜSTRİ A.Ş. was applied to a known thermal conductivity plate and tested using a hot-plate thermal conductivity device according to EN 12664. The test results were obtained through a computer connected to the device. After conducting two separate thermal conductivity tests, one with the paint and one without the paint, the thermal conductivity coefficient (λ) of the paint was determined by calculating the difference between the two results.

3. TEST RESULTS

The test results of the conducted experiments are presented in Table 1, Table 2, and Table 3.

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Table 3. Test screen data for the plate and the applied Barkkaff insulation paint.

T1	T2	T3	T4	T5
20.3	20.3	20.1	20.2	20.4
T6	T7	T8	T9	T10
20.6	20.3	20.4	20.1	20.2
WET	COOL	DIFFERENCE		
20	30.3	10	20.12	9.98
Power	Thickness	Area	$R_{(m^2K/W)}$	$\lambda (W/mK)$
1.57	0.052	0.11	0.582	0.074
				1.430

T_2 and T_9 when cannot be displayed on the test screen. They have been calculated externally and provided here.

By taking the thermal resistance differences from the data in Table 2 and 3, the R-value of the insulation paint has been determined using the Formula $R = Q/\lambda$, where λ (lambda) represents the thermal conductivity. Through calculations, the thermal conductivity coefficient (λ) of Barkkaff insulation paint has been determined as 0.018 W/m.K.

Assoc. Prof. Dr. Selim Tuncel YILMAZ



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