



ISO 27001

Building Safety
Management System



ISO 9001

Quality Management
System



ISO 14001

Environment Management
System



ISO 50001

Energy Management
System



ISO 18001

Occupational Health and Safety
Management System



EPD®
THE INTERNATIONAL EPD® SYSTEM

CE

ODE®
INSULATES THE FUTURE

A: Piyale Paşa Bulvarı, Ortadoğu Plaza Kat 12 34384,
Okmeydanı, Şişli, İstanbul / Turkey

T: +90 212 210 49 06 **F:** +90 212 210 49 07



facebook/ODEYalitim



twitter.com/ODE_YALITIM



linkedin.com/company/odeyalitimofficial



instagram.com/odeyalitim



ode.com.tr

R-FLEX DIAMOND

ODE®
INSULATES THE FUTURE



DESCRIPTION

Elastomeric rubber foam is the most popular product which is used for insulating warm and chilled water pipes and cooling systems.

R-FLEX DIAMOND; is the elastomeric rubber foam which **provides maximum protection** in HVAC insulation, thanks to **its low thermal conductivity, high water vapor diffusion resistance $\mu \geq 11.000$, and ideal fire resistance.**

R-FLEX DIAMOND; extends the economic life of the HVAC system by protecting it, while **raising energy efficiency** with a thermal conductivity of **0.032 W/ (m. K) (-20 °C).**

POWERFUL PROTECTION AGAINST THE CONDENSATION AND CORROSION RISK

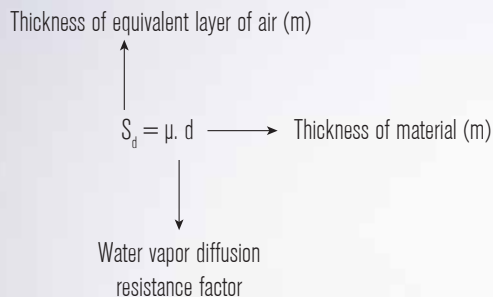
WATER VAPOR DIFFUSION RESISTANCE

The ratio of the resistance of materials to the passage of water vapor to the water vapour diffusion resistance of air is called the water vapour diffusion resistance factor and is indicated with μ . For **R-FLEX DIAMOND**, $\mu \geq 11.000$.

The use of materials with high water vapor diffusion resistance is important as it prevents condensation inside the thermal insulation material on cold lines.

The resistance of a material to water vapor diffusion is directly proportional to the μ value and the thickness (d) of the material.

As the μ value rises, the energy efficiency that is achieved in the HVAC system rises proportionally.



THERMAL CONDUCTIVITY (λ)

Thermal conductivity is the most decisive property in the selection of thermal insulation materials. Materials with low thermal conductivity (λ) have high thermal insulation performance.

R-Flex DIAMOND has a thermal conductivity of **0.032 W/ (m. K) (-20 °C).**

FIRE RESISTANCE

R-Flex DIAMOND is B class according to the EN 13501-1 fire classification, s3 according to additional classification on smoke emission, and d0 in terms of production of flaming droplets.

R-FLEX DIAMOND is classified as **B-s3, d0** in terms of reaction to fire.

TECHNICAL SPECIFICATIONS

R-FLEX DIAMOND	
Thermal Conductivity (λ) (W/m.K) (-20°C)	0,032
Water Vapor Diffusion Resistance Factor (μ)	≥ 11.000
Fire Classification (EN 13501-1)	B-s3-d0

BENEFITS

- » Provides maximum condensation control thanks to high water vapor resistance factor, $\mu \geq 11.000$. Protects the HVAC system from corrosion.
- » Extends the working life of the mechanical installation.
- » Provides high performance insulation and creates comfortable spaces thanks to its low thermal conductivity.
- » Raises energy efficiency.
- » The R-FLEX DIAMOND is also ideal for insulating large diameter pipes, and for ventilation ducts with rectangular and circular cross-sections.
- » Can be produced in various thicknesses and widths.
- » Easily applied.
- » Durable.
- » With its EPD (Environmental Product Declaration) Document it furnishes additional scores between 2-18 for projects seeking green building certification such as LEED, BREEAM, DGNB, etc.