## ISCOPIE Integrated Insulation Systems

## Air Duct Applications with Insulation



The recent energy crisis, as well as the environment protection need and resources saving, turn the insulation of heating, cooling and DHW supply systems, into a necessary condition in every application field. Additionally, pipe insulation can bring significant economic benefits as the use of suitable coating on hot/cold pipes and tanks/vessels can eliminate over 80% of heat loss.

**ISOPIPE S.A.** was founded in 1997, specializes in production of synthetic expanded elastomeric insulating material with closed cell structure, under the trade name **ISOPIPE**.

EN ISO 14001:2015

EPD®

THE INTERNATIONAL EPD® SYSTEM

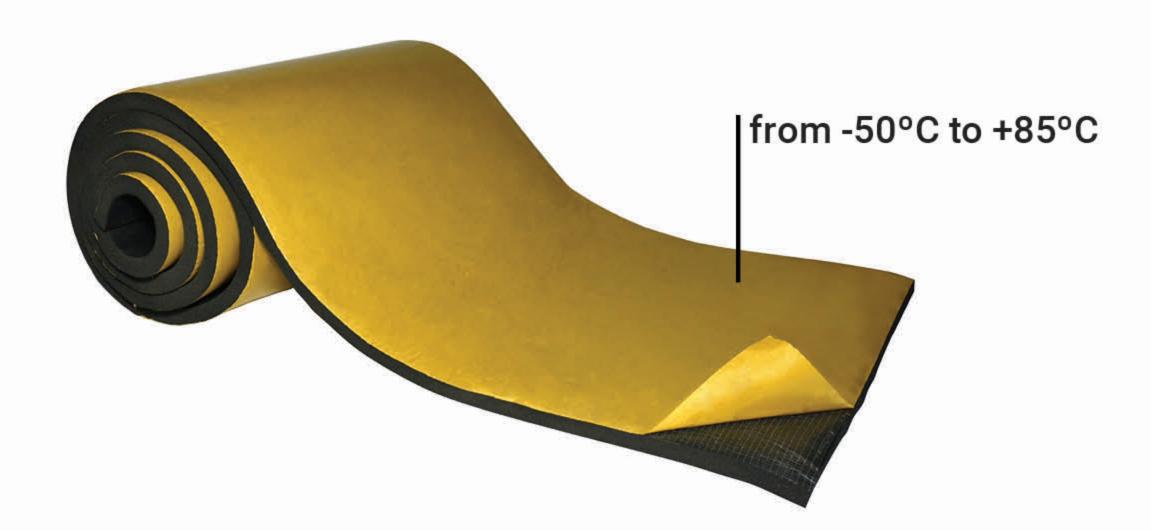
ISOPIPE products are **ISO 14001** certified and Environmental Product Declaration **(EPD)**, which is the most comprehensive assessment of a product's environmental impact throughout its life circle.

The Environmental Product Declaration (EPD) combined with Life Circle Analysis Study, can help reduce carbon emissions by comparing different materials and products in order to select the most sustainable solution. **ISOPIPE TC** is a flexible, elastomeric, **NBR foam** insulation with a significantly high percentage of 98.5% closed cells, providing excellent thermal performance and condensate resistance.



ISOPIPE TC products are manufactured with respect for environment and public health, certified for Antimicrobial and Antifungal Protection, according to ASTM E2180 and ASTM G21 certifications.

For air ducts applications, large diameter piping or broad surfaces, where insulation is required to prevent heat or cold losses and condensation of water vapor on their cold sides (especially during summer operation), we use a sheet roll of closed-cell elastomeric material (synthetic rubber), called **ISOROLLS TC - ISODUCT**, which is certified according to EN 14706 and EN 14707 for temperature resistance **from -50°C to +85°C**, an average density of 60kgr/m³, with a deviation of ±10kgr/m³ and offers a noise reduction of 30dB according with DIN 4109. The production plant maintains a certified quality assurance according to ISO 9001:2015.



In the air ducts, insulation can have an embedded sticker, preinstalled on the insulator, with a minimum adhesive force of 18N/25mm which withstands their operating temperature, or alternatively a special adhesive resistant glue. The joints will be welded with glue and covered with adhesive tape 3mm thick and 5cm wide. Self-adhesive **ISOROLLS** feature an adhesive grid and an easy-peel silicone paper.





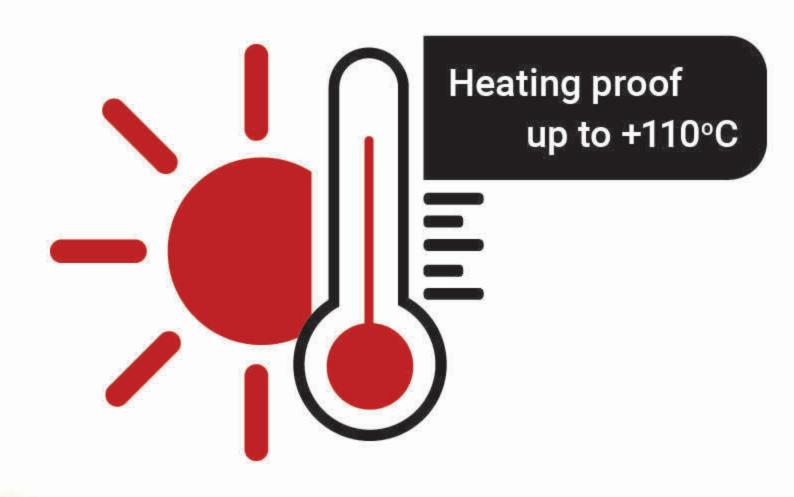
To protect from solar radiation, perform longer and easy cleaning, the following coatings are available:

ISOROLLS TC SOLAR with special polymer film of silver, black or white color, resistance of at least three (3) years to the solar radiation of Mediterranean climate zone, protective film resistance from -40°C to +80°C according to ISO 306, tensile strength >0.10 MPa according to ASTM D 882 and longitudinal break limit >200% according to ISO 1798, certified according to requirements of EN14304 standard.

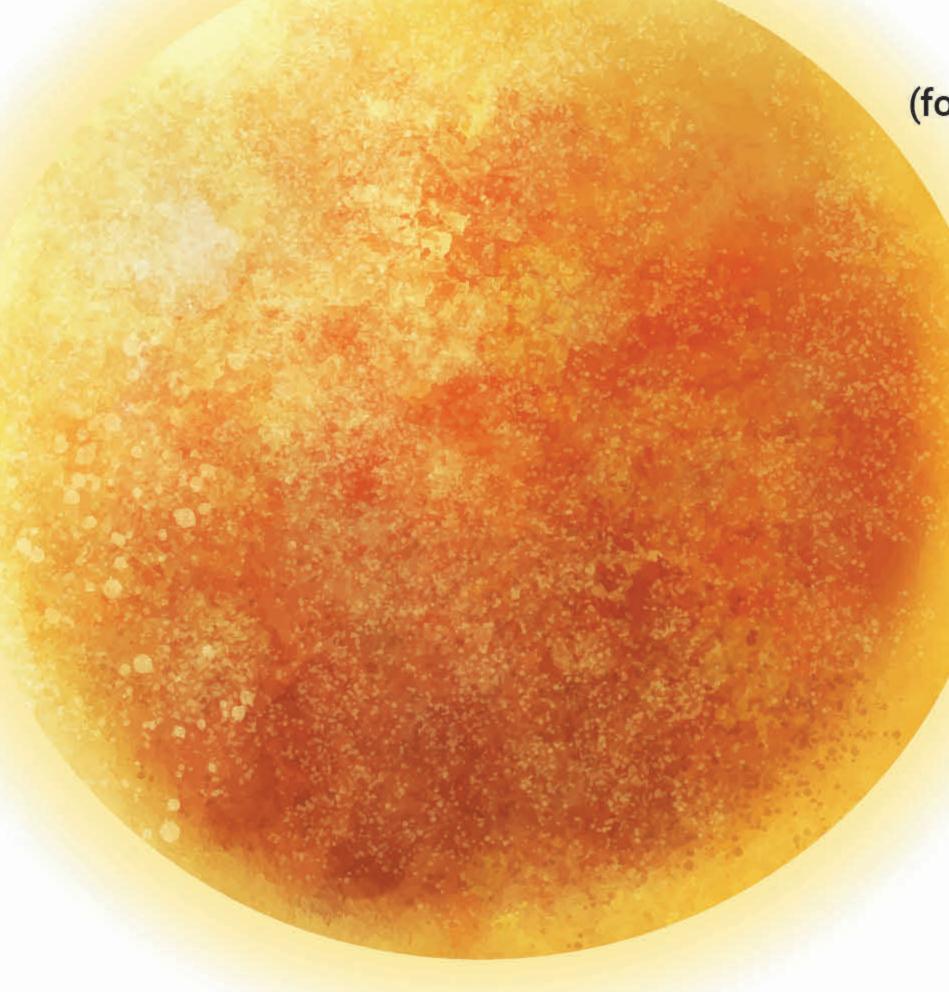
**ISODUCT TC** flexible elastomeric foam insulation with high percentage of closed cells (NBR based) in 1.5 meter wide rolls. Ideal choice for insulation of air ducts and large diameter pipes. High resistance to oils and lubricants, long life circle, also available with a sticker and thicknesses from 10 to 32mm, provides heating proof up to +110°C.



ISOROLLS TC UV PLUS with three layer protective film, of polyester, aluminum and polyethylene, total thickness of 99 µm, with resistance of at least five (5) years to solar radiation of Mediterranean climate zone, from -40°C to +100°C and longitudinal tensile strength of 75N and 78N transverse, according to DIN 55531, also certified according to requirements of the EN14304 standard.



**ISOROLLS TC HD** with three-layer protective sheet, made of burn proof PVC, an aluminum layer with special UV protection, total thickness 230µm, solar radiation resistance of at least seven (7) years to Mediterranean climate zone, film resistance from -25°C to +75°C, compliance in fire Class 0, Class 1 according to BS 476 Part 6 & Part 7 and Class 1 or A according to ASME E84, with permeability up to 0.028gr/m<sup>2</sup>/24h, weight 340gr/m<sup>2</sup> and cover perforation over 23N.



ISOROLLS TC HP - ISODUCT TC HP (for indoor use) with four-layer protective sheet, made of special paper with reinforced resistance to water vapor diffusion, acrylic glue, protective fiberglass 5mm x 5mm and aluminum with total thickness of 60 µm, protective film resistance from -35°C to +120°C according to ASTM C 1263, tensile strength 50N/25mm and 20% longitudinal break limit according to ASTM D3759. **ISODUCT HP** is also available with polyolefin (PO) paper for hygienic protection.

The combination of ISOPIPE flexible insulation materials, with different types of internal piping, enables a specialized solution even in most demanding applications. ISOSYSTEM is one more innovative product with comparative advantage of the factory diagonal cut in the insulation sheet, which offers easy and comfortable installation in special scale applications. It is also available with a sticker ISOSYSTEM TC & ISOSYSTEM HT-HF, as well as with SOLAR and UV PLUS coating.



**ISOPIPE S.A.** during its successful presence in Greece but also in 40 countries abroad, stands out in the field of integrated synthetic rubber insulation systems for air conditioning, heating, water supply, ventilation & cooling. The only one which has a production plant in Greece with distinctions from official chambers, worldwide prestige and a broad range of innovative products for installations of high demands.

