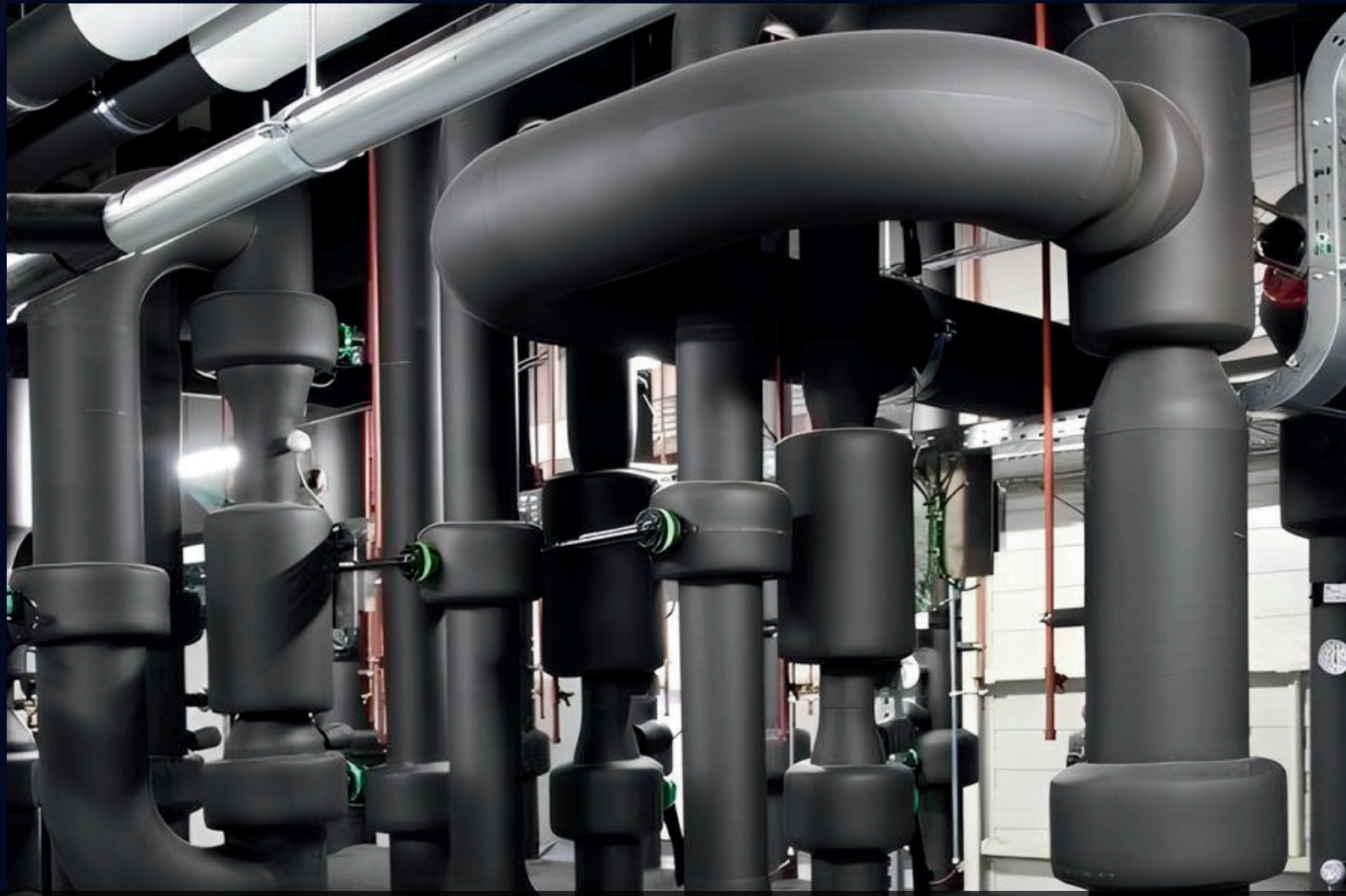


Incoflex.

THERMAL EFFICIENCY & RELIABILITY
HVAC & R APPLICATIONS

NBR



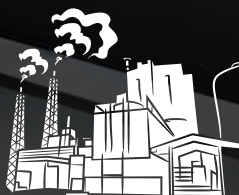
Incoflex NBR
Reliable Mechanical Insulation for Sustainable Energy Savings



Health Care



Residential



Industrial



Commercial



Green Buildings



Oil & Gas

Incoflex.

ELASTOMERIC THERMAL INSULATION
DESIGNED ACCORDING TO ASTM C534

NBR

Index

Introduction	03
Sustainability & Benefits	04
Fire & Life Safety Code Compliances	05
ASHRAE 90.1 Compliance	05
Product Range: Incoflex NBR AP	06
Product Range: Incoflex NBR Aluglass & NCLAD	07
Tube Size Chart	08
Sheet Size Chart and IncoSOFT	09
Complementary Accessories	10
Standard Specification: Technical Data	11
Footprint & Contact Details	12

Incoflex.

ELASTOMERIC THERMAL INSULATION
DESIGNED ACCORDING TO ASTM C534

NBR

Closed-Cell Elastomeric Thermal Insulation foam

Incoflex NBR is a high-performance, mechanical insulation solution made from closed-cell foam NBR (Nitrile Butadiene Rubber) technology, with more than 90% closed-cell content. This advanced structure significantly reduces heat transfer, enhances energy efficiency, and provides exceptional resistance to moisture and environmental stress. Whether used in industrial, commercial, or residential settings, Incoflex NBR helps maintain optimal temperatures, prevent condensation, energy loss, and ensure long-lasting durability. Its flexibility and robust performance make it the ideal choice for projects requiring reliable, cost-effective, and sustainable insulation.

Versatile and Durable

Incoflex NBR is a versatile, durable insulation solution for the building and construction industry, meeting strict fire and safety standards. Available as tubes or sheets with optional facer and self-adhesive, it supports various pipe types, diameters, and thicknesses for HVAC, refrigeration, plumbing, and industrial uses. With over 90% closed-cell content, it offers excellent moisture resistance, corrosion protection, and thermal efficiency. Flexible for easy installation and resistant to oils, chemicals, UV rays, and harsh environments, Incoflex NBR ensures long-lasting, reliable performance. Its energy efficiency, durability, and low maintenance make it a cost-effective choice for diverse applications.





Sustainable Insulation Solution

Incoflex NBR combines high performance with environmental responsibility by reducing energy consumption and supporting global sustainability goals. Its exceptional thermal efficiency helps lower carbon emissions and aligns with green building certifications such as LEED, BREEAM, EDGE and similar. Designed for durability and long-term use, it minimizes waste by reducing the need for frequent replacements.

Features and Benefits

Superior Condensation Control

Incoflex NBR's closed-cell structure acts as an integrated vapor barrier, effectively blocking moisture penetration and preventing condensation-related issues.

Efficient Thermal Insulation

With low thermal conductivity, Incoflex NBR minimizes heat flow, reducing energy loss and improving system efficiency.

Durable & Flexible

Resistant to cracking, UV degradation, and mechanical stress, it offers long-lasting performance in both indoor and outdoor environments.

Excellent Fire Reaction

Formulated to meet international fire safety standards, Incoflex NBR contributes to safe HVAC installations in Building and Construction field

Easy Handling & Installation

Lightweight and highly flexible, it is easy to cut, shape, and install across complex duct and piping configurations.

Prevents Corrosion Under Insulation - CUI

Specially formulated with no corrosive additives and a built-in vapor barrier, Incoflex NBR provides long-term protection against CUI.

Fire and Life Safety Code Compliance for HVAC&R systems and Building and Construction.

The fire and life safety codes require that thermal insulation used for pipes and ducts meet specific flame spread, smoke production, and fire reaction standards. Compliance with standards such as NFPA 101, NFPA 90A, NFPA 90B, IBC, ASTM E84, BS 476, UL 94 and UL 723 ensures that insulation does not compromise the safety of building occupants and that fire safety systems operate effectively in the event of a fire.

Incoflex NBR Thermal Insulation is typically tested for Flame Spread Index (FSI) and Smoke Developed Index (SDI) in compliance with ASTM E84 (Standard Test Method for Surface Burning Characteristics of Building Materials) to fulfill the Fire and Life Safety Codes.

Incoflex NBR complies with European fire safety standards, achieving BS1D0 classification under EN 13501-1 and Class 0 as per BS 476 part 6 and 7, ensuring excellent fire reaction, low smoke production, and minimal flame spread for safe use in building and construction applications.

ASHRAE 90.1, the Energy Standard for Buildings.

Incoflex NBR complies with **ASHRAE 90.1**, by providing effective thermal insulation that reduces heat loss and gain in cooling and heating systems, pipes, and ducts. Its closed-cell structure enhances thermal resistance (R-value), minimizing energy consumption and maintaining consistent performance in both high and low temperatures. In addition, its moisture resistance ensures that the insulation's effectiveness is preserved over time, preventing degradation and further contributing to energy efficiency.



Enhance Indoor Air Quality with Incoflex NBR Insulation

Incoflex NBR insulation enhances indoor air quality by creating a clean, closed-cell barrier that resists moisture, preventing condensation and the growth of mold or mildew. Its fiber-free composition ensures no airborne particles are released during or after installation, making it a safe choice for environments where air purity is critical. By maintaining surface integrity and minimizing microbial risks, Incoflex NBR contributes to healthier, more comfortable indoor spaces in commercial, residential, and industrial settings.

Incoflex NBR AP - in the form of tubes and sheets

Preformed Tube Sections

Incoflex NBR AP tubes are specifically designed to fit residential, commercial, and industrial pipe installations, including refrigeration, plumbing, chilled water systems, domestic and industrial gas lines, and similar applications. The tubes provide effective thermal insulation, ensuring energy efficiency and protection against heat loss or gain in these systems. They are easy to install and offer long-lasting performance across various environments, helping maintain system integrity and reduce energy consumption.

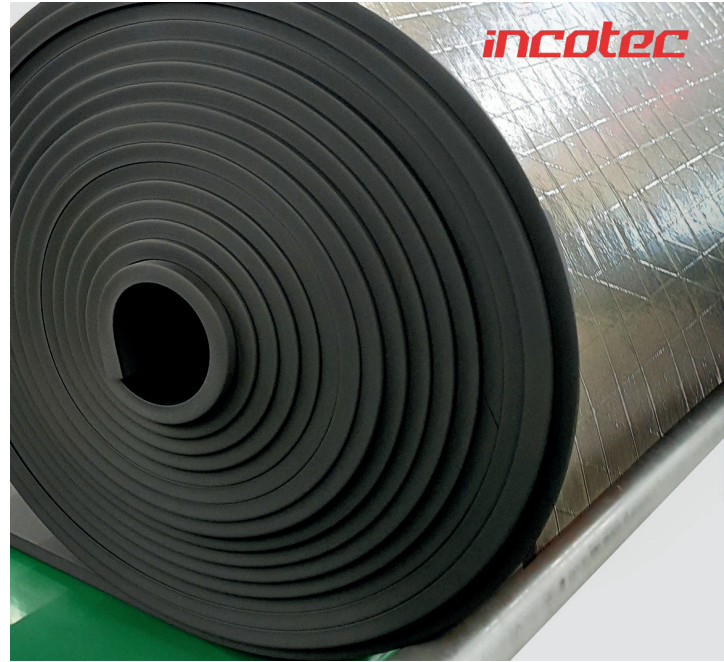
Preformed Sheets and Rolls

Incoflex NBR AP sheets and rolls are designed for insulation of flat surfaces such as air ducts, tanks, vessels, and other similar applications. They are also suitable for pipes with outer diameters larger than 5-1/2" (141.00mm), as well as for circular air ducts, spherical and cylindrical tanks and vessels, heat exchangers, energy recovery units, and other similar systems. These flexible and durable sheets and rolls provide excellent thermal insulation, energy efficiency, and long-lasting performance in diverse industrial, commercial, and residential applications.



Incoflex NBR Aluglass foil-facer

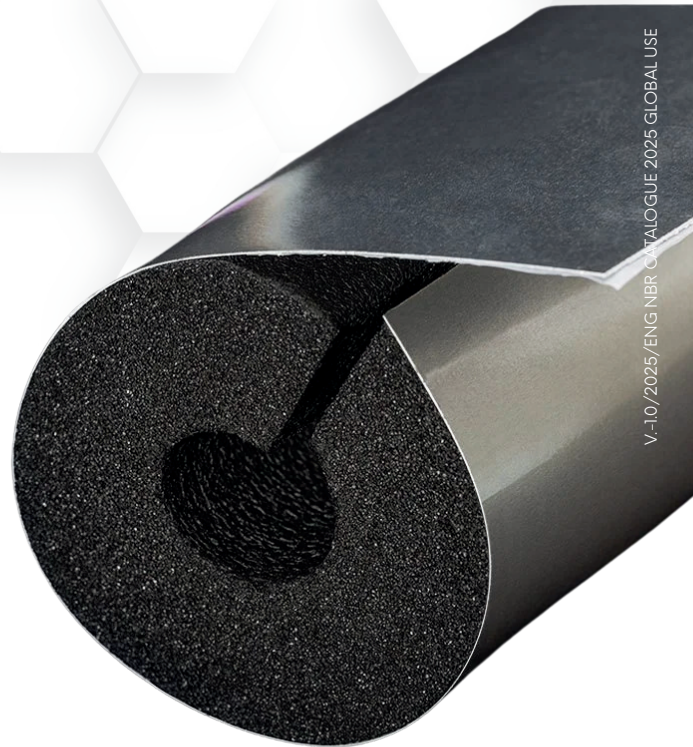
Incoflex NBR Aluglass combines the high-performance thermal insulation properties of Incoflex NBR AP with an additional layer of Aluglass foil-facing, which is factory applied to tubes, sheets, and rolls. This foil-facing enhances the material's durability and resistance to environmental factors, including UV rays, moisture, and chemical exposure. The reflective surface of the Aluglass foil helps to improve thermal performance by reducing heat loss and gain, while also providing a protective barrier against abrasion and physical damage. This product is ideal for applications in HVAC systems, refrigeration, and industrial processes, where both insulation and enhanced protection are essential for long-lasting performance.



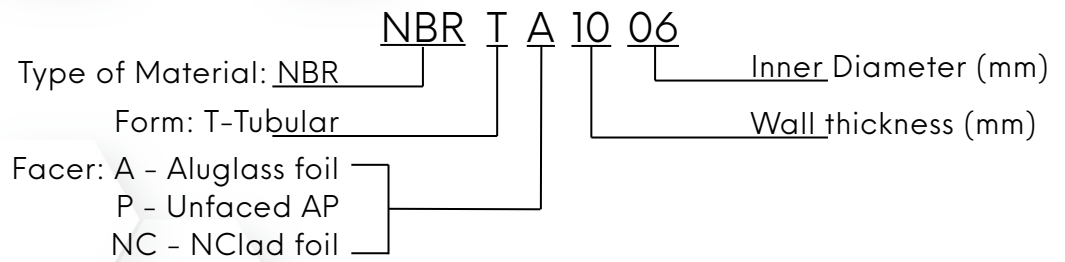
Note: Aluglass foil-faced material is not suitable for outdoor applications without additional site-applied jacketing, metal cladding or UV & weather resistant coating.

Preformed tubes and sheets with factory applied Clad Foil Facer

Incoflex NBR Clad facer for all Outdoor Applications is designed for outdoor applications, offering superior thermal insulation, moisture resistance, and durability without the need for additional site-applied jacketing or cladding. This version includes a factory-applied weather-resistant PVC-based layer, topped with aluminum foil for enhanced protection and an improved aesthetic appearance. It is engineered to withstand UV rays, temperature fluctuations, and harsh weather conditions, making it perfect for exposed pipes, ducts, and equipment in outdoor environments. Incoflex NBR Clad provides a reliable, cost-effective insulation solution for HVAC systems, refrigeration, and industrial processes, ensuring long-term performance and protection in challenging outdoor conditions.



TUBE SIZE CHART



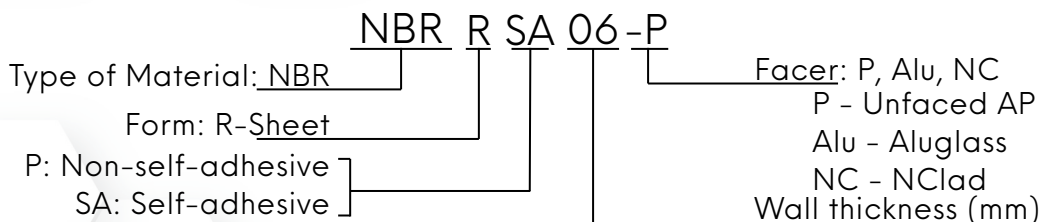
Internal Diameter		Wall thickness (mm / inch)													
		10mm		13mm		19mm		25mm		32mm		38mm		50mm	
mm	Inch	3/8"	Pcs/CTN	1/2"	Pcs/CTN	3/4"	Pcs/CTN	1"	Pcs/CTN	1-1/4"	Pcs/CTN	1-1/2"	Pcs/CTN	2"	Pcs/CTN
6	1/4	NBRT1006	169	NBRT1306	120	NBRT1906	54	NBRT2506	30	NBRT3206	*	NBRT3806	*	NBRT5006	*
10	3/8	NBRT1010	132	NBRT1310	90	NBRT1910	49	NBRT2510	30	NBRT3210	18	NBRT3810	10	NBRT5010	*
13	1/2	NBRT1013	100	NBRT1313	78	NBRT1913	42	NBRT2513	28	NBRT3213	16	NBRT3813	10	NBRT5013	6
16	5/8	NBRT1016	96	NBRT1316	68	NBRT1916	39	NBRT2516	25	NBRT3216	16	NBRT3816	9	NBRT5016	6
19	3/4	NBRT1019	81	NBRT1319	62	NBRT1919	34	NBRT2519	23	NBRT3219	16	NBRT3819	9	NBRT5019	6
22	7/8	NBRT1022	68	NBRT1322	53	NBRT1922	30	NBRT2522	20	NBRT3222	12	NBRT3822	9	NBRT5022	6
25	1	NBRT1025	56	NBRT1325	42	NBRT1925	25	NBRT2525	20	NBRT3225	12	NBRT3825	8	NBRT5025	6
28	1-1/8	NBRT1028	54	NBRT1328	42	NBRT1928	25	NBRT2528	18	NBRT3228	10	NBRT3828	8	NBRT5028	5
32	1-1/4	NBRT1032	42	NBRT1332	33	NBRT1932	22	NBRT2532	16	NBRT3232	10	NBRT3832	8	NBRT5032	5
35	1-3/8	NBRT1035	36	NBRT1335	33	NBRT1935	20	NBRT2535	15	NBRT3235	10	NBRT3835	8	NBRT5035	5
38	1-1/2	NBRT1038	36	NBRT1338	28	NBRT1938	18	NBRT2538	12	NBRT3238	9	NBRT3838	8	NBRT5038	4
42	1-5/8	NBRT1042	35	NBRT1342	28	NBRT1942	18	NBRT2542	12	NBRT3242	9	NBRT3842	6	NBRT5042	4
48	1-7/8	NBRT1048	30	NBRT1348	24	NBRT1948	15	NBRT2548	12	NBRT3248	8	NBRT3848	6	NBRT5048	4
51	2	NBRT1051	30	NBRT1351	22	NBRT1951	15	NBRT2551	11	NBRT3251	8	NBRT3851	6	NBRT5051	4
54	2-1/8	NBRT1054	30	NBRT1354	22	NBRT1954	14	NBRT2554	10	NBRT3254	7	NBRT3854	6	NBRT5054	4
60	2-3/8	NBRT1060	30	NBRT1360	22	NBRT1960	14	NBRT2560	10	NBRT3260	6	NBRT3860	6	NBRT5060	4
64	2-1/2			NBRT1364	20	NBRT1964	12	NBRT2564	9	NBRT3264	6	NBRT3864	4	NBRT5064	4
67	2-5/8			NBRT1367	20	NBRT1967	12	NBRT2567	8	NBRT3267	6	NBRT3867	4	NBRT5067	4
76	3			NBRT1376	16	NBRT1976	12	NBRT2576	8	NBRT3276	6	NBRT3876	4	NBRT5076	3
89	3-1/2			NBRT1389	14	NBRT1989	12	NBRT2589	6	NBRT3289	5	NBRT3889	4	NBRT5089	3
108	4-1/4			NBRT13108	*	NBRT19108	8	NBRT25108	6	NBRT32108	4	NBRT38108	3	NBRT50108	3
114	4-1/2			NBRT13114	*	NBRT19114	6	NBRT25114	5	NBRT32114	4	NBRT38114	3	NBRT50114	2
140	5-1/2					NBRT19140	6	NBRT25140	4	NBRT32140	4	NBRT38140	2	NBRT50140	2
165	6-1/2							NBRT25165	3	NBRT32165	2	NBRT38165	2	NBRT50165	2
168	6-5/8							NBRT25168	3	NBRT32168	2	NBRT38168	2	NBRT50168	2

Available in 1.83 and 2.00m lengths, Coils of different lengths also available

Tolerances as per ASTM C534

Other sizes may be available upon request, contact our sales representative of technical department for further confirmation

SHEET SIZE CHART



THK	THK	Width	Length	Facing					
mm	inch	m	m	Plain (P)	Plain SA	Aluglass (Alu)	Aluglass SA	NClad (NC)	Nclad SA
6	1/4	1.2	50	NBRRP06-P	NBRRSA06-P	NBRRP06-Alu	NBRRSA06-Alu	NBRRP06-NC	NBRRSA06-NC
10	3/8	1.2	30	NBRRP10-P	NBRRSA10-P	NBRRP10-Alu	NBRRSA10-Alu	NBRRP10-NC	NBRRSA10-NC
13	1/2	1.2	20	NBRRP13-P	NBRRSA13-P	NBRRP13-Alu	NBRRSA13-Alu	NBRRP13-NC	NBRRSA13-NC
16	5/8	1.2	20	NBRRP16-P	NBRRSA16-P	NBRRP16-Alu	NBRRSA16-Alu	NBRRP16-NC	NBRRSA16-NC
19	3/4	1.2	15	NBRRP19-P	NBRRSA19-P	NBRRP19-Alu	NBRRSA19-Alu	NBRRP19-NC	NBRRSA19-NC
25	1	1.2	8	NBRRP25-P	NBRRSA25-P	NBRRP25-Alu	NBRRSA25-Alu	NBRRP25-NC	NBRRSA25-NC
32	11/4	1.2	6	NBRRP32-P	NBRRSA32-P	NBRRP32-Alu	NBRRSA32-Alu	NBRRP32-NC	NBRRSA32-NC
38	11/2	1.2	4	NBRRP38-P	NBRRSA38-P	NBRRP38-Alu	NBRRSA38-Alu	NBRRP38-NC	NBRRSA38-NC
50	2	1.2	4	NBRRP50-P	NBRRSA50-P	NBRRP50-Alu	NBRRSA50-Alu	NBRRP50-NC	NBRRSA50-NC

1.4m width available

INCOSOFT - THERMAL CALCULATION SOFTWARE

IncoSOFT is a specialized engineering tool developed by Incotec Group to determine the optimal insulation thickness for cooling systems. It is designed to ensure efficient thermal performance and energy savings by evaluating:

- Condensation prevention on external surfaces
- Reduction of heat loss or gain
- Stabilization of flow medium temperature
- Precise calculation of energy and electricity consumption

- Estimation of carbon emissions and energy savings.

Built in compliance with ISO 12241, IncoSOFT delivers accurate, standards-based calculations using Incoflex thermal insulation and other thermal insulation materials. It's an essential tool for HVAC designers and engineers focused on performance, compliance, and sustainability.

IncoSOFT.

ISO 12241 Based insulation Thickness Selection Software

WE KNOW HOW!

Incoflex. NBR COMPLEMENTARY ACCESSORIES

A comprehensive range of accessories providing solutions for a successful installation

Adhesive

Incoflex Adhesive is an effective option for installing Incoflex NBR thermal insulation. It is specially designed to securely bond this material, providing a durable, moisture-resistant seal. Additionally, its use helps ensure compliance with the system's warranty.

Key features include its low emission of volatile organic compounds (VOCs), which maintains air quality, and the fact that it emits no odor once dried.

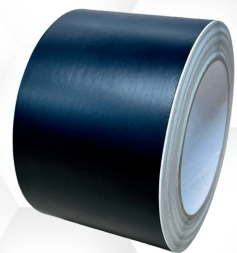


Tapes

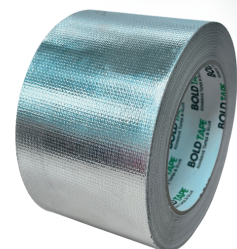
Incoflex NBR Foam Tape specially designed for unfaced thermal insulation foam, ideally to cover butt-joints between two tubes or two ducts. Single side NBR Foam gasket tape has a moderately strong hot melt adhesive, and carried on brown siliconized release paper.



Incoflex PVC Tape specially designed for unfaced thermal insulation foam, ideally to cover butt-joints between two tubes or two ducts. PVC film as backing, combined with a high performance solvent acrylic adhesive, protected by an easy release white PE coated release paper. It is widely used for cost-saving



Incoflex Aluglass Tape specially designed for aluglass foil-faced NBR thermal insulation foam, ideally to cover butt-joints between two tubes or two ducts. A mechanically strong glass cloth tape with an aluminum top layer, featuring a high-strength solvent acrylic adhesive and a white liner.



Incoflex. NBR STANDARD SPECIFICATION

PROPERTY	VALUE / RESULT	STANDARD TEST METHOD
Density ¹	2.5 to 5.0 lb/ft ³ (40 to 80 Kg/m ³)	ASTM C534
Service Temperature (foam only)	from -58°F to 230°F (-50°C to 110°C)	ASTM C534 / ASTM C411
Thermal Conductivity at mean temperature BTU·in/h·ft ² ·°F (W/mK)	50°F (10°C) 0.22 (0.032) 75°F (23°C) 0.23 (0.033) 95°F (35°C) 0.24 (0.035) 113°F (45°C) 0.26 (0.037)	ASTM C518 / ASTM C177
Water Vapour Transmission	≤ 0.00095 g/m ² .h	ASTM E96
Water Vapour Permeance	≤ 0.63 x 10 ⁻¹¹ g/Pa.s.m ²	ASTM E96
Water Vapour Permeability	0.05 perm-inch (0.725 x 10 ⁻¹³ Kg/s.m.Pa)	ASTM E96
Vapour Diffusion Resistance Factor (μ)	> 17,000	BS EN 12086
Water Absorption (Liquid phase)	< 0.1% (by volume)	ASTM C209
Resistance To Fungi	No Growth	ASTM G21
Resistance To Bacteria	No Growth	ASTM G22
CFC & HCFC Free	Comply	USEPA 8260 B
VOC Level (Green Star Rating)	Low VOC Emitting	ASTM D5116
FIRE AND SMOKE PERFORMANCE		
Surface Burning Characteristics	Class A (FSI<25 and SDI<50)	ASTM E84
Surface Spread of Flame	Class 0	BS 476 part 6 and 7
Classification of Reaction to Fire	B-s1,d0	EN 13501-1
Fire Test on Building Materials	0, 0, 0, 1	AS/NZS 1530.3
Fire Hazard Properties	Group 2	ISO 5660 / AS 5637.1 & AS/NZS 3837
VOC Emissions	TVOC's ≤ 0.5 mg/m ² /h Formaldehyde: ≤ 0.05 ppm Individual VOCs: ≤ 0.05 ppm for specific VOCs	CDPH V1.2 LEED V1.4 GREENGUARD

¹ According to ASTM C534, density is not a performance property, and should be considered as a reference only.

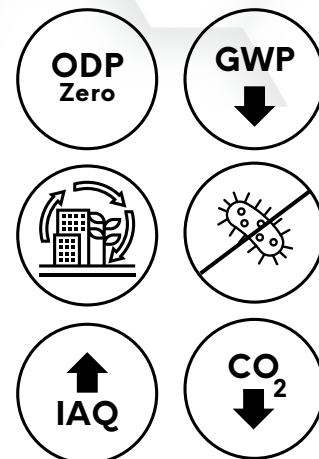
Storage Instruction

Storage in dry, clean room
(Below 40°C and RH 50~70%)
Do not expose to direct sunlight
Avoid dusty environments

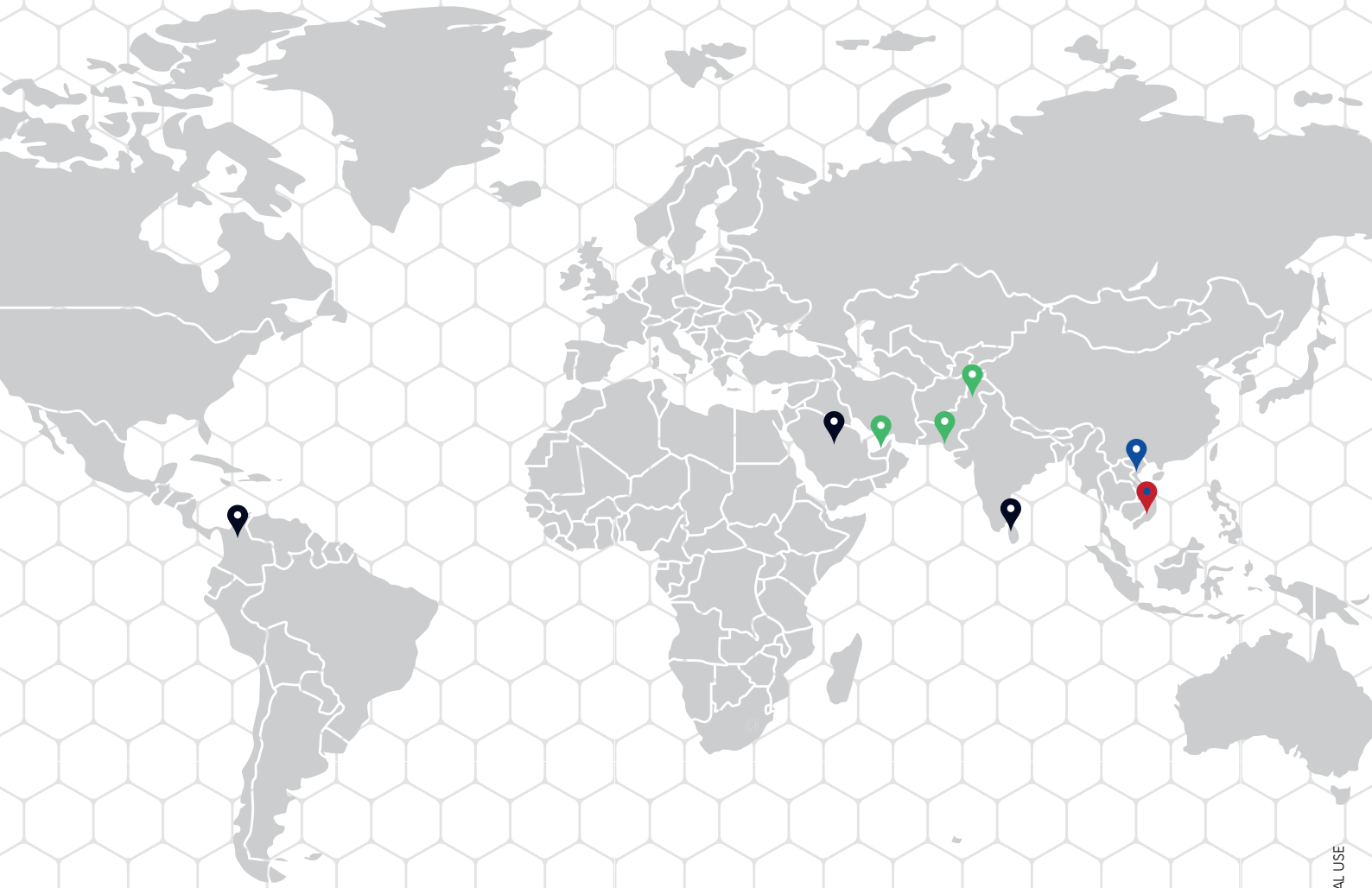
Warranty of Incoflex NBR

Upto 10 Years following instalation instructions

Please consult the individual Technical Data Sheet for each product model for further information. If you have any questions regarding the products, technical specifications, or require further details, please contact our technical support team at technical@incotecgroup.com or enquiry@incotecgroup.com



Let's chat!



Factory and Sales Office



Factory



Warehouse and Sales Office



Sales Office

INCOTEC INDUSTRIES LLC

15 Lam Son, Ward 5, Phu Nhuan Dist.
Ho Chi Minh City, Vietnam
+ 84 909 071 835
enquiry@incotecgroup.com
www.incotecgroup.com

V-10/2025/ENG NBR CATALOGUE 2025 GLOBAL USE

incotec

Manufacturer of HVAC/R Solutions

**WE
KNOW
HOW!**