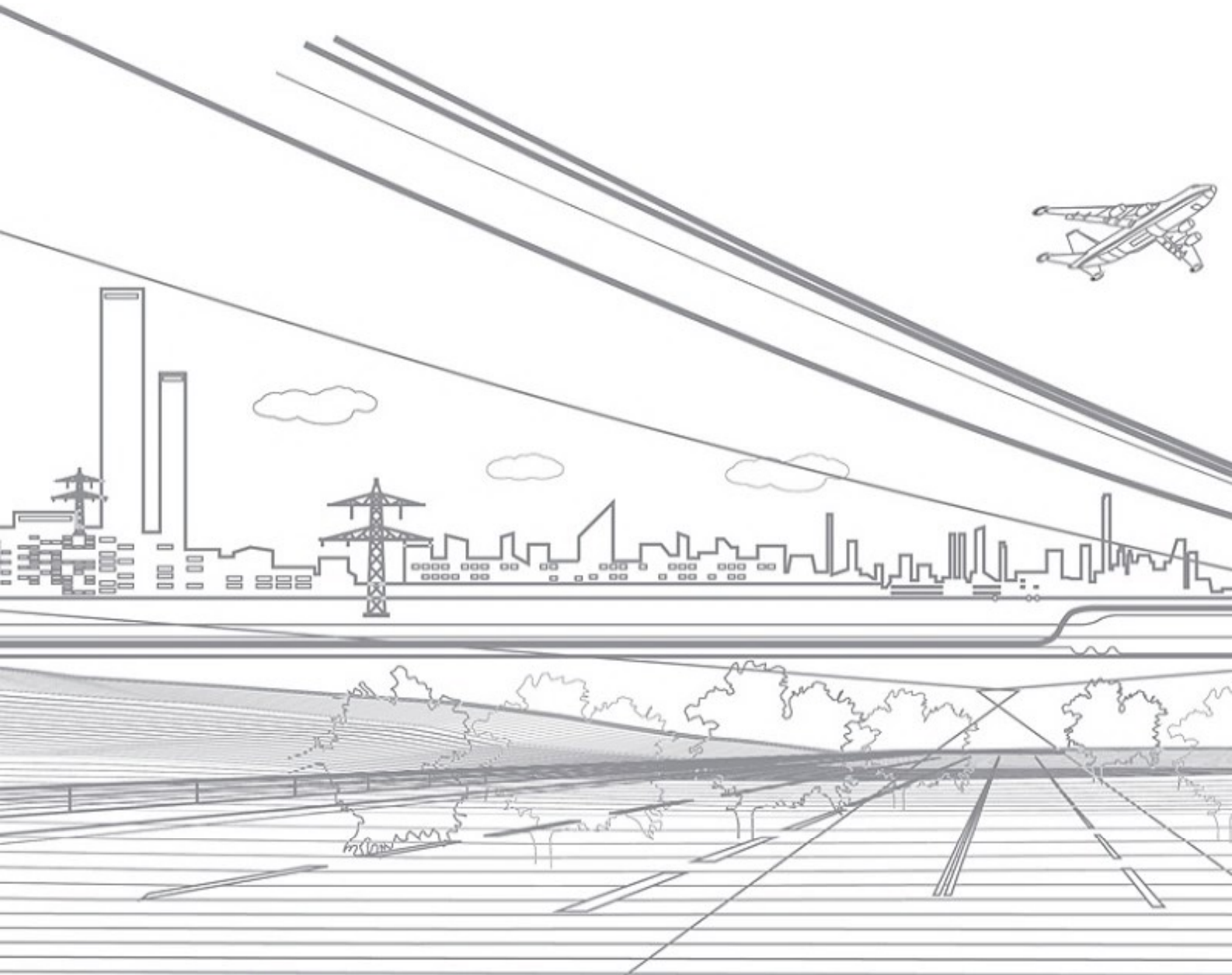
Black Technology New Materials

Air++ POLYUREA MATERIAL

Air++ 爱尔新材 Qingdao Air++ New Materials Co., Ltd.

Air++

SAFETY FIRST



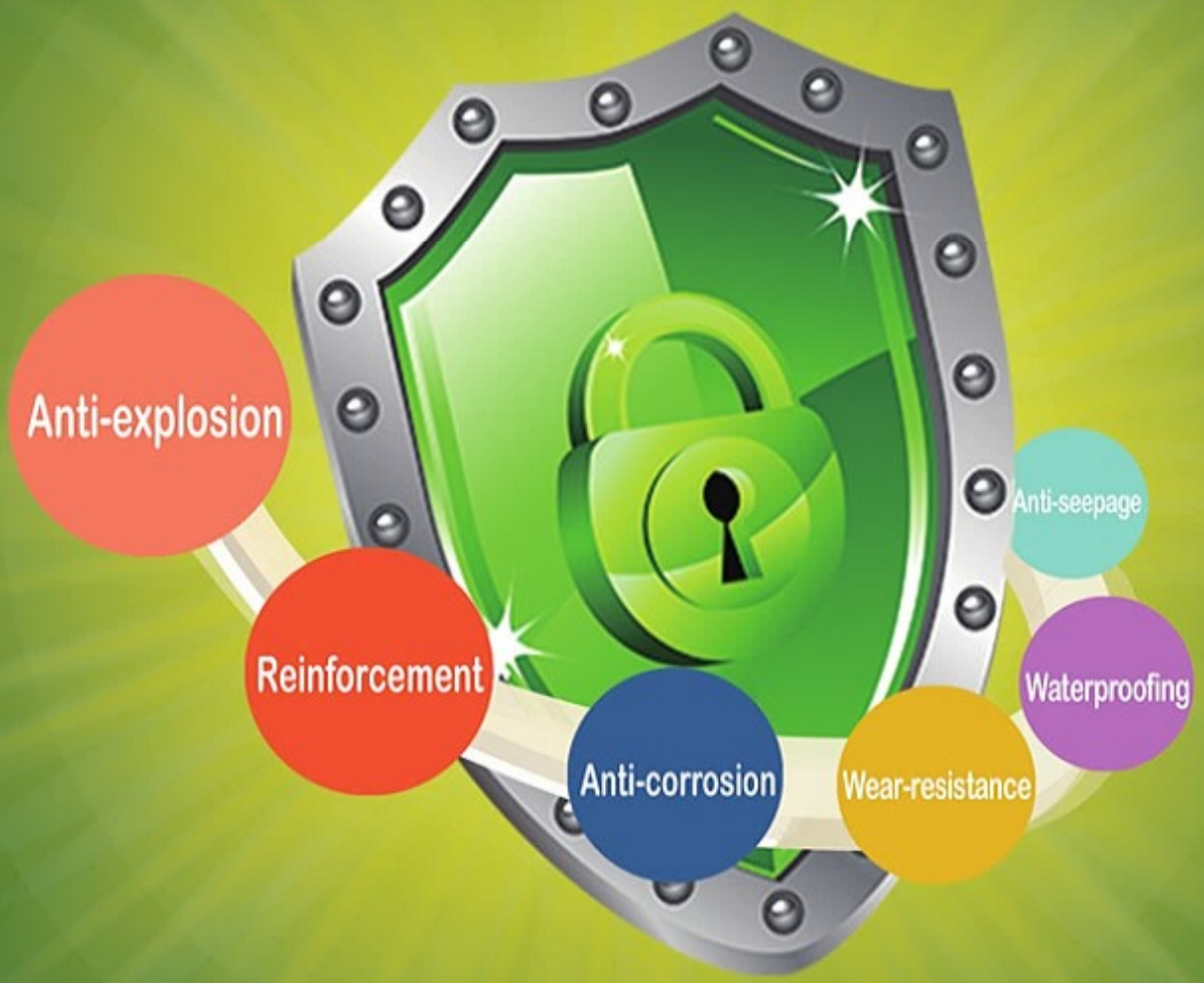
01

ENTERPRISE PROFILE

Company Introduction

Qingdao Air++ New Materials Co., Ltd. (abbreviated as Air++), established in 2006, known for its specialization and sophistication, is a national high-tech enterprise crowned with "little giant" that focuses on the research and manufacturing of new materials for safety protection such as polyurea elastomers and special functional materials. It is also recognized as a Gazelle enterprise in Shandong Province. The company has established technical platforms such as Qingdao Polyurea Elastomer Key Laboratory, Qingdao Smart Coating Scenario Application Laboratory, Qingdao Certified Enterprise Technology Center, and Qingdao Technology Innovation Center. The company's independently developed high-performance polyurea elastomer technology has filled the domestic gap, and its special functional materials have successively broken foreign technology monopolies. The company holds 65 national patents, including 48 invention patents; it has participated in the formulation of 27 national and industry standards, and has undertaken key special projects under the National Key Research and Development Program. Air++ is dedicated to becoming a leader in new materials for safety protection. "Air++" is a well-known brand in the industry. Through continuous and deep development, the company has been developing internationally competitive technologies for new safety protection materials in the fields of anti-explosion, fire protection, anti-corrosion, waterproofing, vibration and noise reduction, and so on. Its products play a significant role in the safety protection of advanced manufacturing industries and large-scale infrastructure projects, including defense and military, water conservancy and electric power, rail transit, petrochemical, and new energy.

Technology · Innovation · Brand · Development



Polyurea elastomer - listed in the "Guidance Catalogue for the First Batch Application Demonstration of Key New Materials (2024 Edition)" of the Ministry of Industry and Information Technology as an advanced basic material.

Contents

Air ++

Not only a platform for pursuing dreams

But also a home for growth

Advancing and growing together!

Corporate Mission

Leveraging technology to create value for customers
Empowering employees to achieve happiness through their careers

Corporate Vision

A Leader in New Materials for Safety Protection

Corporate Values

Customer First

Air++ 青岛爱尔家佳新材料股份有限公司
Qingdao Air++ New Materials Co., Ltd.


民参军先进单位
证 书
高新技术企业
证书
企业名称：青岛爱尔家佳新材料股份有限公司
证书编号：GR202237001179
发证时间：2022 年 12 月 14 日
有效期：三年
批准机关：
青岛市认定
企业技术中心
中国建筑防水行业
知名品牌企业
（青岛爱尔家佳新材料股份有限公司）
荣誉证书
青岛爱尔家佳新材料股份有限公司：
贵公司参加了国家标准 GB/T 1732《漆膜耐冲
击测定法》的修订，为促进涂料行业的技术进步
做出了积极贡献。
特颁此证，以资鼓励。

ENTERPRISE HONOR

In August 2008, the company was awarded the Certificate of Recommended Product for Safety and Environmental Protection Coatings.

In August 2008, it obtained IS09001 Quality Management System certification.

In January 2013, it was honored as one of the Top Ten Innovative Enterprises in Qingdao.

In December 2013, it passed the identification of national high-tech enterprise

In August 2015, it was awarded as a Qingdao high-tech "Thousand Sail Plan Enterprise"

In January 2016, it was rated as a famous trademark in Shandong Province

In March 2016, it was rated as a Qingdao famous trademark

In June 2016, it was recognized as an excellent member of PDA Polyurea Development Association

In September 2016, it became the Council Member Unit of China Industry Anti-corrosion Technology Association

In October 2016, it awarded as AAA Credit Rating Enterprise

In November 2016, it was successfully listed on the National Equities Exchange and Quotations (NEEQ)

In December 2016, it was rated as a famous brand in Shandong Province

In December 2016, it passed the certification of Qingdao Enterprise Technology Center

In December 2016, it was awarded as the hidden champion of the industry

In June 2017, it was rated as the demonstration unit for the development of new economy in small and medium-sized enterprises in Shandong Province

In October 2017, it obtained environmental management system certification

In December 2017, it was rated as a Qingdao famous brand

In October 2018, it won the third prize in the national finals of China Maker Innovation & Entrepreneurship Contest

In November 2019, it was rated as the 2018-2019 advanced unit of coatings standardization

In December 2019, it won the first prize of Science and Technology Progress Award in Building Waterproofing Industry

In December 2019, it was recognized as Qingdao Enterprise Innovation Center

In November 2020, it was awarded as a national specialized and sophisticated"little giant" enterprise

In November 2020, it won the third prize of Qingdao Science and Technology Invention Award

In December 2020, it was awarded as a gazelle enterprise in Shandong Province

In December 2020, it won the third prize of "2020 New and Old Kinetic Energy Conversion High Value Patent Cultivation Competition"

In November 2021, the "Air++ Ultra-thin Intumescent Fire Retardant Coating Project" won the third prize in the finals of the National Innovation Center of High Speed Train competition

In February 2022, it undertook the sub-tasks of key special technological research and development as well as demonstration production of the "National Key Research and Development Program" launched in 2011

In June 2022, the "Qingdao Smart Coating Scenario Application Laboratory"was successfully selected into the second batch of scenario application laboratories in Qingdao

In November 2022, the Qingdao Polyurea Elastomer Key Laboratory built by Qingdao Air++ New Materials Co., Ltd. was successfully approved

In November 2023, it was awarded as the 2023 national intellectual property advantage enterprise

In October 2024, it was assessed as the 2024 key "little giant" enterprise.

Product Advantages

Product Overview

- The spray polyurea elastomer technology is a new solvent-free, pollution-free "green" construction technology developed in the early 1980s to meet the needs of environmental protection.

- The spray polyurea elastomer technology combines new technologies, new materials and new processes together, representing a revolutionary leap in traditional painting technology. It is known in the industry as a "new universal coating technology" that integrates the advantages of plastics, rubber, coatings, and fiberglass reinforced plastics (FRP), breaking through the limitations of traditional coating technologies. The technology is currently one of the most advanced waterproof construction technologies in the world, and since this technology came out, it has been rapidly developed. It has been applied in various countries for nearly 50 years, with very strong market demand.

Wang Baozhu Appointed as International Council

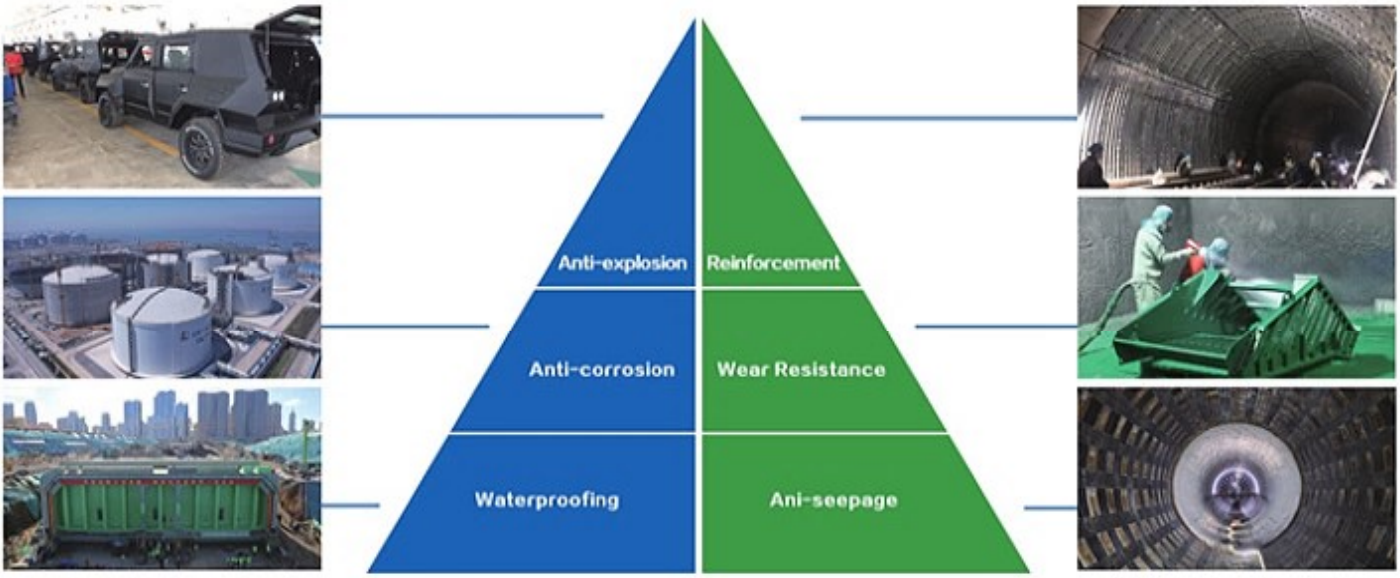
Wang Baozhu is the Vice President of China Polyurea Association

UK WRAS certificate

Performance Index

Item	Performance Index
Tensile strength(MPa)	MAX: 45
Shore Hardness	A50-D80
Elongation at break(%)	MAX: 1000
Tearing strength(N/mm)	43-120
100% modulus(MPa)	3.44-13.8
Low temperature flexibility(-40℃)	No crack
Wear resistance【(750g/500r), mg】	≤40

Application field



Advantages and characteristics

Quick and easy construction

- Fast curing(gels in 10 seconds,reaches pedestrian strength in1 minute)
- Quick construction, short downtime
- No sagging

Excellent performance

- Physical properties
- Medium Resistance (acid, alkali, and salt)
- Dense,seamless

Safe and environmentally friendly

- 100% solid content
- No VOC volatilization

Adaptable to changing needs

- Color adjustable
- Hardness adjustable

Polyurea Coating Anti-explosion Series

Polyurea Anti-explosion Coating (Air^{++}1521)

Product Overview

● The Air^{++}1521 polyurea anti-explosion coating is composed of semi-prepolymers, modified amino polyethers, amine chain extenders and other raw materials. It is applied using specialized high-pressure airless spray equipment for on-site spraying and molding, and is currently one of the most advanced explosion-proof construction techniques. It can be widely used in the protection of the interior and exterior lining, insert board, civil air defense engineering and various concrete buildings of military and police vehicles.

Performance Index

Category	Item		Technical Index
Paint properties	Solid content/%		≥ 98
	Gel time/s		≤ 45
	Surface drying time/s		≤ 120
Coating properties	Tensile strength/MPa		≥ 20
	Elongation at break/%		≥ 400
	Tearing strength/(N/mm)		≥ 80
	Bonding strength/MPa	Carbon steel	≥ 4.5
		Concrete	≥ 2.5 (Or substrate damage)
	Hardness/(Shore A)		≥ 85
	Impact resistance/(kg·m)		≥ 1.0

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Anti-explosion Series

High-Performance Blast-Resistant Protective Material (Air++1522)

Product Overview

● Air++1522 High-Performance Blast-Resistant Protective Material is composed of prepolymer, modifed amine polyol, amine chain extender, special functional additives, and color paste. It is formed by on-site spraying with a special high-pressure airless spraying device. It is a special protective material with high strength and high impact resistance designed for military equipment and military special transport tools. It can be widely used for the protection of military and police vehicles.

Performance Index

Category	Item		Technical Index
Paint properties	Solid content/%		≥ 98
	Gel time/s		≤ 45
	Surface drying time/s		≤ 120
Coating properties	Tensile strength/MPa		≥ 20
	Elongation at break/%		≥ 400
	Tearing strength/(N/mm)		≥ 80
	Bonding strength/MPa	Carbon steel	≥ 4.5
		Concrete	≥ 2.5 (Or substrate damage)
	Hardness/(Shore A)		≥ 85
	Impact resistance/(kg·m)		≥ 1.0

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Anti-explosion Series

Petrochemical Building Blast-Resistant Coating (Air^{++}1523)

Product Overview

● The Air^{++}1523 Petrochemical Building Blast-Resistant Coating is a new safety protection material independently developed by Air^{++}. It is a 100% solids, solvent-free product that can be sprayed onto structural surfaces to rapidly cure and form reinforcement for building walls. This reinforcement helps to address structural rupture, debris sputtering, and deformation response under dynamic loads. It can mitigate explosion shock waves, prevent building debris from sputtering, reduce explosion-related damage to buildings, and protect the safety of personnel and property inside and outside the buildings. Application Scenarios: Explosion-resistant design and renovation of existing buildings in petrochemical plant areas (including control rooms, shift change rooms, guarded cabinet rooms, offices, meeting rooms, training buildings, laboratories, etc.); explosion-resistant protection for newly constructed buildings; as well as explosion-resistant, earthquake-resistant, reinforcement, and strengthening projects for important buildings such as government agencies, schools, police stations, villas, and so on.

Performance Index

Category	Item		Technical Index
Paint properties	Gel time/s(25℃)		≤ 10
	Surface drying time/s(25℃)		≤ 12
Coating properties	Hardness/(Shore D)		40~60
	Tensile strength/MPa		≥ 20
	Elongation at break/%		≥ 200
	Tearing strength/(N/mm)		≥ 100
	Impact resistance/(kg-m)		≥ 2.0
	Combustion performance		Not lower than B2
	Water absorption/%		≤ 1
	Adhesive force/MPa	Masonry	≥ 1.8
		Concrete	≥ 2.0(Or substrate damage)
		Steel	≥ 4.5
	Thermal treatment, acid treatment,alkali treatment,salt treatment, artificial weathering aging (Xenon lamp)	Retention rate of tensile strength, elongation at break and tearing strength(%)	≥ 80

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

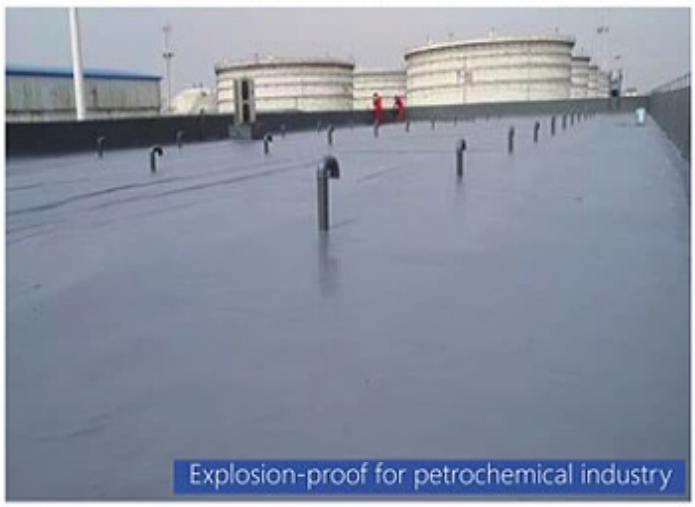
Typical Applications


Military facilities


Military equipment


Civil air defense facilities


Hazardous chemicals vehicle


Explosion-proof for petrochemical industry

Polyurea Coating Reinforcement Series

Flame-retardant and Antistatic Polyurea Material Specifically for Coal Mine Reinforcement (Air^{++}1621)

Product Overview

● Air^{++}1621 Flame-Retardant & Anti-Static Polyurea Material for Coal Mine Reinforcement is the latest developed polyurea elastomer by Air^{++}. Its fame retardant performance meets the requirements of B2 grade in GB8624-2012 "Building Materials and Products Combustion Performance Grading", surface resistance ≤ 3×108 Ω, and has high mechanical properties. The product can be applied to bridge tunnel protection engineering, mine mining protection engineering, petrochemical explosion protection engineering, military protection and other fields.

Performance Index

Category	Item	Technical Index
Paint properties	Solid content/%	≥96
	Gel time/s	≤30
	Surface drying time/s	≤ 120
Coating properties	Tensile strength/MPa	≥ 16
	Elongation at break/%	≥ 300
	Tearing strength/(N/mm)	≥ 60
	Adhesive force (concrete)/MPa	≥ 2.5
	Flame retardance/Grade	B2
	Surface resistance/Ω	≤ 3×10^{8}
	Thermal aging(80±2℃,168h)	Retention rate of tensile strength and elongation≥ 80%
	Alkali treatment (0.1%NaOH + Saturated$Ca(OH)_2$,168h)	Retention rate of tensile strength and elongation≥ 80%
	Acid treatment(2%H_2SO_4 168h)	Retention rate of tensile strength and elongation≥ 80%

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Typical Applications

Tunnel reinforcement

Coal Mine Reinforcement

Polyurea Coating Anti-corrosion Series

Special Polyurea Material for Anti-corrosion (Air++1321)

Product Overview

The Special Polyurea Material for Anti-corrosion is the third generation of polyurea elastomer newly developed by Air++. The coating will cure rapidly in an instant, forming a seamless elastic anti-corrosive film with high strength and elongation, which can withstand the erosion of water, seawater, acid, alkali and salt and other medium. It has excellent anti-corrosion performance and can be widely used in the protection of large-scale infrastructural projects such as petrochemical storage tanks, cofferdams and ancillary facilities, marine infrastructural protection, garbage pools, sewage pools and other anti-corrosive projects, especially those exposed to the chemically corrosive medium.

Performance Index

Category	Item	Technical Index
Paint properties	Solid content/%	≥98
	Gel time/s	≤45
	Surface drying time/s	≤120
Coating properties	Tensile strength/MPa	≥16
	Elongation at break/%	≥450
	Tearing strength/(N/mm)	≥50
	Bonding strength (Concrete)/MPa	≥2.5(Or substrate damage)
	Low temperature flexibility/℃	-40℃, no crack
	Water impermeability(0.4 MPa,2h) Wear	Impermeable
	Wear resistance/mg	≤30
	Water absorption/%	≤5
Functionality	Resistant to neutral salt spray(2500h)	No bubbling, no rust and no shedding
	Medium resistance (Water, acid, alkali, salt, etc., 30d)	No bubbling, no rust and no shedding

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Anti-corrosion Series

Pipeline-Specific Polyurea Anti-Corrosion Coating (Air⁺⁺1322)

Product Overview

- Air⁺⁺1322 Pipeline Specialized Polyurea Anti-Corrosion Material is the latest third-generation polyurea elastomer developed by Air⁺⁺ new Materials. It is formed by on-site spraying of semi-prepolymers, modified amino polyethers, amine chain extenders, and other raw materials. This material can be widely applied in various pipelines such as petroleum, petrochemical pipelines, and cast iron pipelines, as well as overhead and directly buried pipelines, municipal pipelines like sewage pipes and water supply pipes, and various steel chemical storage tanks.

Performance Index

Category	Item	Technical Index
Paint properties	Solid Content/%	≥95
	Gel Time/s	≤45
	Surface Drying Time/s	≤60
Coating properties	Tensile Strength/MPa	≥20
	Elongation at Break/%	≥5
	Tear Strength/(N/mm)	≥50
	Hardness/(Shore D)	55~75
	Adhesion Strength (Carbon Steel)/MPa	≥8
Functionality	Salt Spray Resistance (2000h)	No rust, no blistering, no peeling
	Water Resistance (30d)	No rust, no blistering, no peeling
	Oil Resistance (30d)	No rust, no blistering, no peeling
	Liquid Medium Resistance (30d)	No rust, no blistering, no peeling

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Anti-corrosion Series

Flame-Retardant Polyurea Protective Material (Air++1325)

Product Overview

- Air++1325 Flame-Retardant Polyurea Protective Material meets the requirements for B2 flame-retardant material in GB 8624-2012 Classification of the Combustion Performance of Construction Materials and Products. At the same time, it also combines high mechanical properties, making it suitable for a wide range of occasions such as bridge tunnel projects and ship cabin interiors.

Performance Index

Category	Item		Technical Index
Paint properties	Gel time/s		≤45
	Surface drying time/s		≤120
Coating properties	Tensile strength/MPa		≥16
	Elongation at break/%		≥350
	Tearing strength/(N/mm)		≥50
	Low temperature flexibility/℃		-35℃,Pass
	Water impermeability/(0.4 MPa,2h)		Impermeable
	Heating expansion rate/%		≤1.0
	Bonding strength (Concrete)/MPa		≥2.5
	Water absorption/%		≤5
	Alkali treatmen	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥280
		Low temperature flexibility/℃	-30

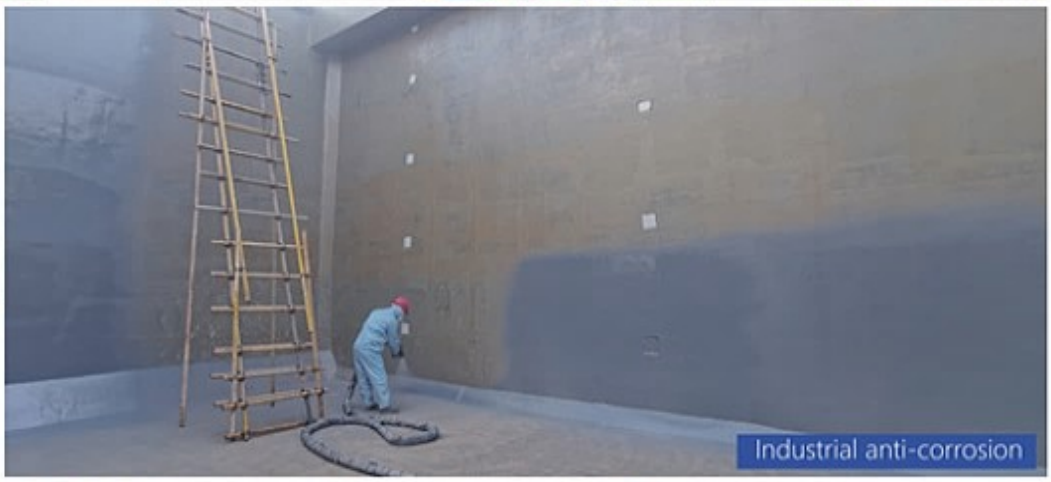
Category	Item		Technical Index
Coating properties	Acid treatment	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥280
		Low temperature flexibility/℃	-30
	Salt treatment	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥280
		Low temperature flexibility/℃	-30
	Artificial weathering aging	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥280
		Low temperature flexibility/℃	-30
	Hardness/(Shore A)		≥75
	Wear resistance/[(750g/500r),mg]		≤40
	Impact resistance/(kg.m)		≥1.0
Functionality	Flame retardance/grade		B2

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Typical Applications


Petrochemical


Pollution prevention


Industrial anti-corrosion


Pipeline anti-corrosion


Salinization anti-corrosion

Polyurea Coating Wear-resistant Series

Soft Polyurea Wear-Resistant Protective Coating (Air^{++}1421)

Product Overview

- Air^{++}1421 Soft Polyurea Wear-Resistant Protective Coating is a high-performance flexible polyurea material composed of curing agents, high-performance elastic resins, color pastes, and various additives. It is formed by on-site spray application, combining advanced materials, equipment, and processes to ensure high construction efficiency and superior quality.

This product exhibits excellent elasticity and softness, making it ideal for use in children's playground equipment, inflatable play structures (e.g., bounce houses), and other areas where impact protection and cushioning are critical to prevent injuries. Additionally, it is suitable for tents, commercial sofas, and other flexible ride-on facilities in amusement parks and shopping centers.

Performance Index

Category	Item	Technical Specification
Coating Properties	Solid Content / %	≥95
	Gel Time / s	20~40
	Surface Drying Time / s	30~90
Coating Performance	Tensile Strength / MPa	≥10
	Elongation at Break / %	≥500
	Tear Strength / (N/mm)	≥30
	Hardness / (Shore A)	65±5
	Abrasion Resistance / (750g/500r), mg	≤10
	Impact Resistance / (kg·m)	≥1.0
	Low-Temperature Flexibility (-35°C)	No cracking

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Wear-resistant Series

Helmet-Specific Wear-Resistant Polyurea Protective Material (Air++1422)

Product Overview

● Air++1422 Helmet-Specific Wear-Resistant Polyurea Protective Material is constructed with specialized spraying equipment from GRACO, a company in the United States, with rapid reaction speed, quick strength growth and good granulation effect. It has excellent aging resistance and extremely high impact resistance, and can effectively dissipate the impact energy when it is subjected to the penetrating impact, making it widely applicable for protection in various police helmets and plug boards.

Performance Index

Category	Item	TechnicalIndex
Paint properties	Solid content/%	≥98
	Gel time/s	≤20
	Surface drying time/s	≤40
Coatingproperties	Tensile strength/MPa	≥10
	Elongation at break/(%)	≥300
	Tearing strength/(N/mm)	≥50
	Water absorption/%	≤5
	Impact resistance/(kg·m)	1.0
	Hardness/(Shore A)	≥80
	Wear resistance/[(750g/500r),mg]	≤30

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Wear- resistant Series

Protective Helmet-Specific Wear-Resistant Polyurea Material (Air^{++}1423)

Product Overview

- Air^{++}1423 Protective Helmet-Specific Wear-Resistant Polyurea Material is the latest third-generation polyurea elastomer developed by Air^{++}. It has excellent mechanical properties and abrasion resistance, and can be widely used for the protection of various EVA fenders.

Performance Index

Category	Item	Technical Specification
Coating Properties	Solid Content / %	≥98
	Gel Time / s	≤240
	Surface Drying Time / s	≤600
Coating Performance	Tensile Strength / MPa	≥10
	Elongation at Break / %	≥300
	Tear Strength / (N/mm)	≥40
	Low-Temperature Flexibility / °C	Pass at -40°C
	Water Absorption / %	≤5
	Impermeability (0.4 MPa, 2h)	Watertight
	Water Resistance (30d)	No rust, blistering, or peeling
	Impact Resistance / (kg·m)	1.0
	Hardness / (Shore A)	≥70
	Abrasion Resistance / (750g/500h, mg)	≤30

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Wear- resistant Series

Prop-Specific Wear-Resistant Polyurea Material (Air^{++}1424)

Product Overview

- Air^{++}1424 Prop-Specific Wear-Resistant Polyurea Material can be directly sprayed onto EPS or other brittle foam surfaces to form a rigid protective layer. It provides waterproofing, abrasion resistance, impact protection, and decorative effects.

This coating offers excellent shape reproducibility, strong adhesion, lightweight properties, good weather resistance, and high production efficiency. It is widely applicable to the exterior surfaces of various foam props.

Performance Index

Category	Item	Technical Specification
Coating Properties	Solid Content / %	≥98
	Gel Time / s	≤20
	Surface Drying Time / s	≤40
Coating Performance	Tensile Strength / MPa	≥20
	Elongation at Break / %	≥50
	Tear Strength / (N/mm)	≥50
	Impact Resistance / (kg·m)	1.0
	Hardness / (Shore D)	≥50
	Abrasion Resistance / (750g/500r), mg	≤30

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Wear- resistant Series

Speaker-Specific Wear-Resistant Polyurea Material (Air⁺⁺1425)

Product Overview

● Air⁺⁺1425 Speaker-Specific Wear-Resistant Polyurea Material for Speakers Compliant with EU ROHS and REACH standards for export, this coating instantly cures upon application, forming a high-strength, scratch-resistant, seamless, and aesthetically pleasing protective layer. It represents a revolutionary leap in speaker surface decoration technology. Suitable for a wide range of indoor and outdoor speaker cabinets, household or commercial furniture surfaces, and wooden materials.

For anti-glare, matte, or textured finishes, its rapid-curing properties allow for direct adjustment of spraying distance to achieve uniform "pebbled" surfaces with controlled granular textures.

Performance Index

Category	Item	Technical Index
Coating Properties	Solid Content/%	≥98
	Gel Time/s	≤8
	Surface Dry Time/s	≤15
Coating Performance	Tensile Strength/MPa	≥20
	Elongation at Break/%	≥60
	Tear Strength/(N/mm)	≥60
	Hardness/(Shore D)	≥50
	Adhesion	Substrate Wood Failure
	Impact Resistance/(kg·m)	≥1.0

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Wear- resistant Series

Mining-Specific Wear-Resistant Polyurea Material (Air++1426)

Product Overview

The Air++1426 Mining-Specific Wear-Resistant Polyurea Material for mines is composed of semi- prepolymer, modified amino polyether, amine chain extender, wear-resistant filler and other raw materials. It exhibits excellent wear resistance, far higher than the traditional polyurea products, and is specially used for coal mine launders, cement mortar treatment equipment, vibrating screens, flotation tanks, spiral separators, ore washing drums, grinding equipment, hydro classifiers, conveyor belts, rollers and other mining equipment, with the features of high adhesion, water resistance, wear resistance, etc.

Performance Index

Category	Item	Technical Index
Paint properties	Solid content/%	≥98
	Gel time/s	≤45
	Surface drying time/s	≤120
Coating properties	Tensile strength/MPa	≥15
	Elongation at break/%	≥300
	Tearing strength/(N/mm)	≥50
	Adhesive force (Carbon steel)/MPa	≥4.5
	Wear resistance/[(750g/500r),mg]	≤10
	Hardness/(Shore A)	≥70
	Impact resistance/(kg ·m)	≥1.0
	Resistant to liquid medium	No rust, no bubbling and no shedding
	Oil resistance (0# diesel, crude oil, 30d)	No rust, no bubbling and no shedding
	Artificial weatheringaging(2000h)	Good

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Typical Applications

Film and television props


The vehicle body is wear-resistant


Marine anti-corrosion


Military helmet


Speaker protection


Mine wear-resistant

Polyurea Coating Waterproofing Series

Spray Polyurea Waterproof Coating (Air++1121)

Product Overview

- The Air++1121 Spray Polyurea Waterproof Coating is the third generation of polyurea elastomer newly developed by Air++, and the performance fully meets the regulations of GB/T 23446-2009 Spray Polyurea Waterproofing Coating. The product is constructed with specialized spraying equipment and the coating will cure rapidly in an instant, forming a seamless dense waterproof coating with high strength and elongation. It can be widely used in waterproof projects such as marine facilities, large-scale building structures, chemical infrastructure, water conservancy, etc.

Performance Index

Category	Item	Technical Index
Paint properties	Solid content/%	≥98
	Gel time/s	≤45
	Surface drying time/s	≤120
Coating properties	Tensile strength/MPa	≥16
	Elongation at break/%	≥450
	Tearing strength/(N/mm)	≥50
	Bonding strength/MPa	≥2.5
	Low temperature flexibility/℃	≤-40
	Water impermeability(0.4MPa,2h)	Impermeable
	Water absorption/%	≤5
	Hardness/(Shore A)	≥80
	Wear resistance/[(750g/500r), mg]	≤30
	Impact resistance/(kg-m)	≥1.0

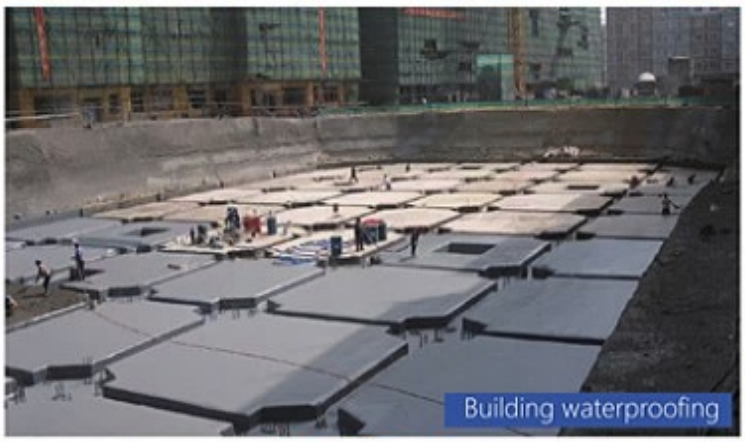
Category	Item		Technical Index
Coating properties	Artificial weathering aging (2000h)	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥400
		Low temperature flexibility/℃	≤-35
	Acid treatment	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥400
		Low temperature flexibility/℃	≤-35
	Alkali treatment	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥400
		Low temperature flexibility/℃	≤-35
	Salt treatment	Tensile strength retention rate/%	80~150
		Elongation at break/%	≥400
		Low temperature flexibility/℃	≤-35

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Typical Applications


Roof waterproofing

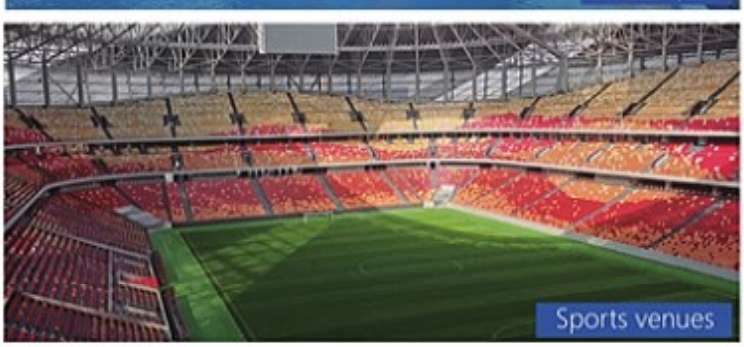

Water conservancy facilities


Building waterproofing


Bridge and Tunnel Engineering


Water par


Transportation facilities


Sports venues


Municipal Landscape

Polyurea Coating Anti-seepage Series

Hydraulic Engineering-Specific Spray Polyurea (Air^{++}1221)

是非成败转头空，青山依旧在，惯看秋

Product Overview

The Air^{++}1221 Hydraulic Engineering-Specific Spray Polyurea is the third generation of polyurea elastomer newly developed by Air^{++}, and the performance fully meets the regulations of DL/T 5317-2014 Technical Regulations on the Polyurea Coating Construction of Hydropower and Water Conservancy Projects. The product is constructed with specialized high-pressure spraying equipment, and the coating will cure rapidly in an instant, forming a seamless elastic waterproof coating film with high strength and elongation. It is currently one of the most advanced waterproof construction technologies internationally, and can be widely used in various water conservancy projects such as dams, reservoirs, canals, spillways and other water conservancy facilities, which can effectively improve the impermeability, aging resistance, freeze-thaw resistance and anti-impact and wear resistance of concrete buildings of water conservancy projects.

Performance Index

Category	Item	Index
Paint properties	Solid content/%	≥98
	Surface drying time/s	≤80
Coating properties	Tensile strength/MPa	≥20
	Elongation at break/%	≥400
	Tearing strength/(N/mm)	≥50
	Hardness/(Shore A)	≥80
	Bonding strength (Concrete)/MPa	≥2.5
	Low temperature flexibility/℃	≤-40，no crack
	Water impermeability(0.4 MPa*2h)	Impermeable
	Water absorption/%	≤3

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Polyurea Coating Anti-seepage Series

Flame-retardant and Antistatic Polyurea Material Specifically for Coal Mine Reinforcement (Air^{++}1223)

Product Overview

● Air^{++}1223 Hydraulic Engineering-Specific Two-Component Hand-Applied Polyurea is a solvent-free, double-component, hand-scrapable elastic polyurethane material. It features strong adhesion, high strength, good elasticity, bright and full coating, excellent wear resistance, insensitivity to humidity, environmental friendliness, and room temperature curing.

This system is a trowel-applied polyurea used mainly for some projects and engineering which can not be easily constructed by spraying, and it is used as an alternative product to sprayed polyurea, and it can also be used as a local repairing material for the sprayed polyurea material.

Performance Index

Category	Item	Indicator
Coating Performance	Surface drying time/h (23±2℃, RH=50±5%)	≤ 2
	Working time/min (23±2℃, RH=50±5%)	15-30
Coating Properties	Tensile strength/MPa	≥ 16
	Elongation at break/%	≥ 450
	Tear strength/(kN/m)	≥ 50
	Impact resistance/(kg·m)	≥ 1.0
	Adhesion/MPa	≥ 3 (or substrate failure)
	Low-temperature flexibility	-40℃, no cracks

Polyurea Coating Anti-seepage Series

Single-Component Hand-Applied Polyurea (Air^{++}1211)

Product Overview

● Air^{++}1211 Single-Component Hand-Applied Polyurea is a special polyurea system composed of an isocyanate-terminated prepolymer and a latent curing agent. After curing, this system forms a dense, high-strength, and highly elastic film with excellent elongation. The product is categorized into Type I and Type II, and its performance complies with the JC/T 2435-2018 standard for "Single-Component Polyurea Waterproof Coatings."

This system is based on an aliphatic resin formulation, offering excellent non-yellowing properties, superior weather resistance, outstanding physical performance, excellent waterproofing and abrasion resistance, and high bonding strength with concrete substrates. Designed as a single-component product, it requires no mixing ratio and can be applied by manual troweling, ensuring convenient construction. It has a wide range of applications.

Performance Index

Category	Item	Indicator	
		Type I	Type II
Coating Properties	Drying time/h (25℃, RH = 60%)	Surface dry ≤ 2, Hard dry ≤ 24	
Coating Performance	Tensile strength/MPa	≥15	≥20
	Elongation at break/%	≥400	≥400
	Tear strength/(N/mm)	≥50	≥60
	Adhesion/MPa	≥ 3.0	
	Low-temperature flexibility	-45℃, no cracks	
	Water impermeability (0.4MPa/24h)	Impermeable	
	Water absorption/%	≤ 3	
	Abrasion resistance/(750g/750r), mg	≤30	≤40
	Impact resistance/(kg·m)	≥ 1.0	

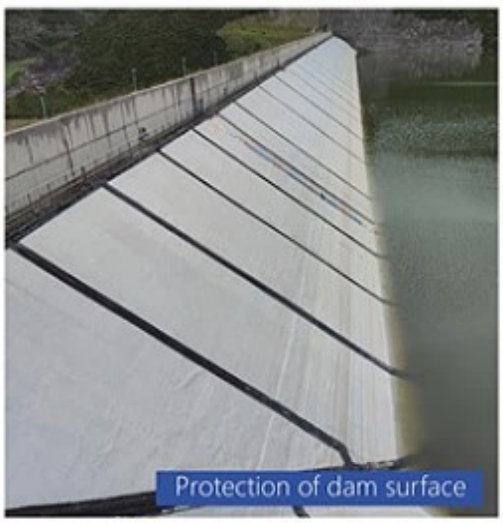
Typical Applications


Surge shaft


Inverted siphon pipeline


Sewage interception gate


Water conservancy dam


Protection of dam surface

Other Series of Polyurea Coating

High-performance Protective Coating (Air++1721)

Product Overview

The Air++1721 high-performance protective coating is a new material for safety protection independently developed by Air++, with a solid content of 100% and no solvents. By spraying onto the surface of the structure and rapidly curing into a film, it can form the reinforcement and protection for the structure, so as to mitigate explosive blasts. The product is mainly used in the field of battery pack bottom plate protection of new energy vehicles, which is used for impact resistance and anti-collision to meet the protection of battery during use.

Performance Index

Category	Item		TechnicalIndex
Paint properties	Solid content/%		≥98
	Gel time/s(25℃)		≤ 10
	Surface drying time/s(25℃)		≤ 20
Coating properties	Hardness/(Shore A)		≥ 85
	Tensile strength/MPa		≥ 22
	Elongation at break/%		≥ 220
	Tearing strength/(N/mm)		≥ 110
	Impact resistance/(kg-m)		≥ 1.6
	Water absorption/%		≤1.0
	Adhesive force/MPa	Steel	≥10
	Artificial weathering aging(1000h)	Retention rate of tensile strength and elongation at break(%)	≥ 80

Note: The above parameters are all physical properties tested after spraying with specialized equipment in laboratory conditions and curing at room temperature for seven days. Due to the differences in on-site conditions, the actual data measured on site may differ from the above-mentioned data.

Other Series of Polyurea Coating

Foamed Thermal Insulation Coating (Air^{++}6201)

Product Overview

- Air^{++}6201 Foamed Thermal Insulation Coating is a new safety protection material independently developed by Aier New Materials. When sprayed onto structural surfaces, it rapidly solidifies into a film with low thermal conductivity and excellent flame-retardant properties. The product is primarily used for thermal insulation in the battery casings of new energy electric vehicles, as well as for door panel spray reinforcement and thermal insulation design.

Performance Index

Category	Item	Technical Indicator
Coating Properties	Solid content/%	≥ 99
	Gel time/s (25℃)	≤ 10
	Surface drying time/s (25℃)	≤ 0
Coating Performance	Flame resistance/UL-94	V-0 grade
	Insulation resistance/(DC 2700V)	>500MΩ
	Voltage resistance/(DC 2700V, 1min)	No breakdown, no flashover
	Thermal conductivity/(Avg. temp 23℃)	≤0.025W/(m·K)
	Low-temperature adhesion/(-30℃, 4h)	No delamination, meets 5A
	High-temperature adhesion/(65℃, 4h)	No delamination, meets 5A

Typical Applications

Matching Products for Polyurea Coating

Matching base coating

Matching base coating (D211)

Solventless Compatible Primer (D212)

KT Solvent-free Matching Primer (D213)

Special base coating for metal (D221)

Special base coating for glass fiber reinforced plastics (D231)

Matching base coating for rubber substrate(D241)

Matching face coating

Aliphatic polyurea topcoating (M211)

Matching Primer

Matching putty (N211)

Matching putty (N212)

Matching base coating (D211)

Product Overview

- The D211 matching base coating is a two-component reactive material. The component A is mainly composed of modified resin additives, and diluents, while the component B is a modified hardener. The product features fast drying speed and high construction efficiency, with good adhesive force to concrete and carbon steel substrates, as well as excellent interlayer adhesive force with polyurea.

The product is suitable for using on the surfaces of concrete and carbon steel substrates as an matching base coating for spray polyurea.

Performance Index

Item		TechnicalIndex
State in Container		The component A is a transparent liquid. The component B is a yellow transparent liquid.
Drying Time (23±2℃, RH=50±5%)	Surface Drying/h	≤2
	Actual Drying/h	≤12
Operating Period/min		≤40

Solventless Compatible Prime (D212)

Product Overview

- D212 Solvent-Free Compatible Primer is a two-component reactive material. Component A primarily consists of modified resin, additives, and reactive diluents, while Component B is a modified curing agent. It features a long open time, easy application, excellent adhesion, room-temperature curing, and is environmentally friendly with no pollution. Before use, the two components should be uniformly mixed at a weight ratio of A:B= 2.5:1. This product is mainly used as a compatible primer for single-component polyurea coatings and is suitable for concrete substrate surfaces.

Performance Index

Item	Technical Specification
Appearance in container	Component A: Transparent liquid
	Component B: Pale yellow transparent liquid
Dry-to-touch time, h (23±2°C, RH=50±5%)	≤ 24
Pot life, h	≤ 1
Adhesion (Pull-off method), MPa	≥ 2.5 or substrate failure

KT Solvent-free Matching Primer (D213)

Product Overview

- D213KT Solvent-Free Compatible Primer is a two-component reactive material. Component A primarily consists of polyether alcohol resin and additives, while Component B is mainly composed of isocyanate and diluents. It features low odor, environmental safety, and eco-friendliness, along with fast drying and high construction efficiency. The product exhibits excellent adhesion to concrete substrates and superior interlayer bonding with polyurea coatings. Before use, the two components should be uniformly mixed at a weight ratio of A:B = 2:1.

This product is primarily used as a compatible primer for polyurea coatings and is suitable for concrete surfaces such as roofs, stadium bleachers, and similar applications.

Performance Index

Item		Technical Specification
Appearance in container		Homogeneous transparent liquid, free of gel or lumps; Component B: Yellow transparent liquid
Drying time (23±2°C, RH=50±5%)	Surface dry/ h	≤4
	Hard dry/ h	≤12
Density/ (g/cm^3)		1.04±0.03
Viscosity/ (mPa·s)		300-500
Adhesion (Pull-off method)/MPa		≥ 2.5 or substrate failure

Special Base Coating for Metal (D221)

Product Overview

● The D221 metal-specific base coating is a two-component reactive material. The component A is mainly composed of modified resin, pigments, fillers, additives, and diluents, while the component B is a modified hardener. The product features fast drying speed and high application efficiency, with good adhesive force to metal substrates such as carbon steel and stainless steel, as well as excellent interlayer adhesive force with polyurea. Before use, simply mix the two components uniformly at a weight ratio of A:B = 2:1.

The product is primarily used as an matching base coating for polyurea and is suitable for application on the surfaces of metal substrates such as carbon steel and stainless steel.

Performance Index

Inspection Item		Technical Index
State in Container		The component A is a transparent liquid.
		The component B is a transparent liquid.
Drying Time (23±2℃, RH=50±5%)	Surface Drying/h	≤2
	Actual Drying/h	≤12
Operating Period/min		≤60

Special Base Coating for Glass Fiber Reinforced Plastics (D231)

Product Overview

● The D231 special base coating for fiberglass rein forced plastic(FRP) is a two-component reactive material. Component A primarily consists of polyether alcohol resin and additives, while Component B is mainly composed of isocyanate and diluents. It features low odor, environmental friendliness, and safety, with fast drying and high construction efficiency. It exhibits excellent adhesion to concrete substrates and outstanding interlayer bonding with polyurea. Before use, the two components should be uniformly mixed at a weight ratio of A:B = 2:1.

This product is primarily used as a compatible primer for polyurea, suitable for surfaces such as roofs and stadium bleachers on concrete substrates.

Performance Index

Inspection Item		Technical Index
State in Container		The component A is a uniform and viscous substance, free from gels and agglomerations.
		The component B is a colorless and transparent liquid.
rying Time (T=23±2℃, H=50±5%)	Surface Drying/ h	≤2
	Actual Drying/h	≤12
Density/ (g/cm^3)		1.0±0.02

Matching Base Coating for Rubber Substrates (D241)

Product Overview

The D241 matching base coating for rubber substrates is a two-component reactive material. The component A is mainly composed of modified resin, additives, and diluents, while the component B is a modified hardener. The product exhibits excellent rust resistance and anti-corrosive performance, capable of enduring the erosion of most chemical medium. It has a strong bonding force with various ordinary rubbers and demonstrates good compatibility with polyurea elastomer series. Before use, simply mix the two components uniformly at a weight ratio of A:B = 4:1.

This product is mainly used as a matching base coating for spray-applied polyurea, suitable for rubber substrates.

Performance Index

Item		TechnicalIndex
State in Container		The component A is a brown transparent liquid.
		The component B is a transparent liquid.
Drying Time (T=23±2℃, RH=50±5%)	Surface Drying/ h	≤4
	Actual drying/h	≤24
Operating Period/h		≤2

Aliphatic Polyurea Topcoating (M211)

Product Overview

The M211 aliphatic polyurea topcoat is a two-component coating. Component A is composed of special resin, additives, pigments and fillers, and diluents, while Component B is a modified hardener. The two components can be mixed uniformly according to the weight ratio indicated on the product label for use. The product exhibits good toughness and bonding strength, excellent weather resistance and anti-corrosive performance, without yellowing, and has good adhesive force to polyurea substrates.

Performance Index

Inspection Item	TechnicalIndex
Appearance Quality	Uniform Liquid
Pot Life (25°C)/min	≤ 60
Surface Drying Time/h	≤ 2
Actual Drying Time/h	≤ 24
Adhesive Force (Cross-Cut Test)/Grade	≤1
Resistant to liquid medium (water, acid, alkali, and oil for 96 hours)	No bubbling, and no shedding

Matching Primer (N211)

Product Overview

- The N211 Matching Primer is composed of modified resin and special hardener, and is a two-component functional material. It features good adhesive force, high hardness, low volumetric shrink age, room temperature curing, fast post-curing speed, and insensitivity to moisture. The N211 Matching Primer is widely used for repairing sprayed polyurea concrete substrates. It allows for thick application and one-time molding, has good sanding properties, and exhibits excellent compatibility with sprayed polyurea materials.

Performance Index

Item		TechnicalIndex
Appearance(visual)		Component A: Paste-like Solid
		Component B: Viscous Liquid
Adhesive Force (Pull-off Test)/MPa		≥ 2.5
Drying Time (25℃, RH = 50%)	Surface drying time/h	≤ 4
	Actual drying time/h	≤ 24

Matching Primer (N212)

Product Overview

- N212 Matching Primer is a two-component functional material composed of modified epoxy resin, fillers, additives, and a specialty curing agent. It features excellent adhesion, high hardness, low volumetric shrinkage, and low sensitivity to moisture. Its leveling and thixotropic properties can be adjusted on-site for convenient application. It cures at room temperature with fast post-curing speed.

N212 Matching Primer is widely used for repairing large voids on concrete substrates. With excellent thixotropy, it can be applied in thick coats in a single pass and offers good sanding performance.

Performance Index

Item		Technical Specification
Appearance (visual)		Component A: Paste-like solid
		Component B: Viscous liquid
Adhesion (pull-off)/MPa		≥2.5 (or substrate failure)
Drying time (25℃, RH = 50%)	Surface drying time/h	≤6 (hours)
	Actual drying time/h	≤24 (hours)

POLYUREA COATING EQUIPMENT

■ Spray Polyurea Technology requires specialized high-temperature, high-pressure impingement mixing equipment. Currently, the most commonly used equipment includes the H-Series from GRACO (USA) and the AP/MP guns from the FUSION series.

■ As an authorized gold-level distributor of GRACO (USA), Air^{++} Materials provides customers with comprehensive "turnkey" services, including on-site equipment installation and commissioning, operation and maintenance guidance, and technical training.

H-2035 Hydraulic Polyurea Spraying Equipment

H-XP3 Hydraulic Polyurea Spraying Equipment

GX-8 Spray Gun

H-2035 Hydraulic Polyurea Spraying Equipment		H-XP3 Hydraulic Polyurea Spraying Equipment	
Max Output (L/min)	5.7	Max Output (L/min)	10.6
Max Pressure (psi)	3500	Max Pressure (psi)	3500
Max Temperature (°C)	88	Max Temperature (°C)	88
GX-8 Spray Gun		**AP Air-Purge Spray Gun**	
Flow Range (kg/min)	0.45-0.7	Flow Range (kg/min)	1.4-22.7
Max Pressure (psi)	3500	Max Pressure (psi)	3500
Max Temperature (°C)	93	Max Temperature (°C)	88

Partial case

Field	Name	Part/Section	Area
National Defense and Military Industry	Military Helmet, Military Insert Plate, Military Shield Military Ship, Explosion-proof Armored Vehicle, Explosion-proof Shelter		
Bridges and Tunnels	Dalian Bay Subsea Tunnel of China Communications Construction First Navigation Bureau	Tunnel roof, side wall of the tunnel, etc.	130000
	Suzhou Jinji Lake Tunnel Tunnel	Tunnel	35000
	Hainan Boao River-crossing Tunnel	Tunnel	20000
	Haikou Wenmingdong River-crossing Tunnel Project	Tunnel	17000
	Guardrail Protection Project of Jingrou Expressway	Guardrail	15000
	"Zhanjiang West Railway Station Passenger Transportation Comprehensive Transportation Hub	Tunnel	10000
	Yunnan Gele Tunnel, Hubei Longfengba Tunnel, Shanxi Shuiquanwan Tunnel, Hubei Baiyangping Tunnel, Shanxi Changliangshan Tunnel Project, Hubei Kangjiacun Tunnel	Prefabricated Reinforcement Components	——
Petrochemical Industry	CNOOC Jiangsu Binhai LNG Terminal Project	Storage Tank	244000
	Jinmao Group Coal Chemical Plant in Luliang, Shanxi Province	Sewage Pool	40000
	Hengyi Wenlai PMB Petrochemical Anti-corrosion Project	Sewage Pool	26000
	Liaocheng Luxi Chemical Industry's Relocation from Urban Areas to Industrial Parks Project	Comprehensive Protection	26000
	Corrosion Protection for Pipelines in Liaohe Oilfield	Pipeline	22000
	Corrosion Prevention for Carbon Steel Storage Tanks at the Power Plant of Shanghaimiao Energy Company Limited in Inner Mongolia	Storage Tank	18000
	Shandong Shengrong Chemical Co., Ltd.	Cooling Tower	16000
	Sinopec Huangdao LNG Terminal	Storage Tank	15000
	Shanxi Yulin Shenhua Energy Co., Ltd.	Biochemical Storage Tank for Coal-to-Liquid Sewage Treatment Plant	15000
	Nanjing Huntsman Chemical Project	Comprehensive Protection	11000
	Anticorrosion Project of Jiangsu Jingshen Salt and Chemical Plant	Storage Tank, Flooring	10000
Electric Power Project	China Wind Power Yantai Wind Power Plant	wind turbine base	8000
	Indonesia Minggulu Thermal Power Project	Demineralized Water Tank	8000
	Zhejiang Zhoushan Power Plant	Demineralized Water Tank	6500
	Shaanxi Xianyang Datang Power Plant	Demineralized Water Tank	6300
	Hub Power Plant in Pakistan	Storage Tank	6000
	Guodian Wenzhou Hydropower Co., Ltd.	Demineralized Water Tank	5600
	Shandong Yantai Bajiao New Power Plant	Steam Stripping Tower	5600
	Pakistan Bhikki Power Plant	Storage Tank	5000
Pollution Prevention and Control	Shandong Weiqiao Aluminium & Electricity Group	Pools, etc.	35000
	Shanxi Coal Yulin Chemical Ethylene Glycol Project	Water Treatment Plant,Water Tank, etc.	20000
	The Third-phase Expansion Project of Yuelu Wastewater Treatment Plant in Changsha	Sewage Pool	20000
	Shaanxi Jintai Chlor-Alkali Shenmu Chemical Co., Ltd.	Alkali Demineralized Water Tank	12000
	Construction Project of the New 110kV Underground Substation in Chengdu Gaoxin New Area	Floor, Side Wall	10000
	Waterproofing Engineering for the Biochemical Pool of the Second Phase Wastewater Treatment Station of the Fourth Industrial Park of Haomai's Plant Protection Project	Biochemical Pool	10000
Environmental Governance	Sewage Pool of Rizhao Pharmaceutical Industry Park (Rizhao Water Affairs)	Sewage Pool	15000
	Sewage Pools (Phase 1 + Phase 2) of Wanhua Chemical Group Co., Ltd.	Inner Wall of Sewage Pool	13000
	Hazardous Waste Disposal and Comprehensive Utilization Landfill Site in Ningdong, Ningxia	Sewage Pool	13000
	Integrated Solid Waste Landfill Site and Abandoned Rock Cavern Ecological Restoration Project in Yinglin Town, Jinjiang City	Abandoned Quarry	12000
	Qingdao High-tech Industrial Zone Wastewater Treatment Plant	Sewage Pool	12000
	Sewage Pool of Rizhao Iron and Steel Company	Sewage Pool	11000
	High and Low Concentration Biochemical Wastewater Treatment Pools of Sinopec Zhongke Refining and Chemical Company	Concrete Water Tank	10000
	Hazardous Waste Disposal at Sinochem Environment Shenyang Renewable Resource Industrial Park	Incineration Material Pit	1400
Industrial Flooring	Qingdao Runnong Polyurea Flooring	Workshop Flooring	9400
	Beijing Century Science and Trade Building	Underground Parking Lot Flooring	6800
	Shandong Xingyu Gloves Co., Ltd.	Workshop Flooring	2000
	Shandong Denghai Seed Industry Co., Ltd.	Workshop Flooring	1500
Film and Television Props	The Float Project for the 70th National Day Celebration	Floats	——
	Props for the movie "The Great Wall", props for Disneyland	Props	——
Municipal Landscape	The Garage Roof of Nanhu International, Jiayuguan	The Roof of the Underground Garage	50000
	Restoration Project of Ningtie Xinyuan of Nanning Railway Bureau	Overall Restoration Project	22000
	Shandong Yongsheng Rubber Group	Underground Structure of the Rubber Mixing Workshop	11000
	The Flooring of Fuyang River Landscape Path in Hengshui City	Riverside Road	11000

03

CASE PROFILE

Field	Name	Part/Section	Area
Sports venues	Ma' anshan Sports Center	Stand	35000
	Fuzhou Strait Olympic Sports Center	Stand	30000
	Zhumadian Sports Center in Henan Province	Stand	30000
	Renovation Project of Wulanchabu Stadium in Inner Mongolia	Stand	26000
	Chongqing Longxing Professional Football Stadium	Stand	25000
	Jimo Blue New Area Stadium	Stand	25000
	Northern National Football Training Base	Stand	23000
	World Leisure Sports Conference Stadium	Stand	20000
	Grenada National Stadium	Stand	18000
	Xiaoshan Sports Center	Stand	16000
	Repair Project of Color Steel Tile Roofing of the Capital Gymnasium	Roof Surface	15000
	Wenzhou Sports Center	Stand	15000
	Tianzhu Stadium in Gansu Province	Stand	14000
	Hangzhou Asian Games Baseball (and Softball) Sports Center	Stand	10000
	Protective Measures for the Jingyu Sports Stand	Stand	10000
	Hangzhou Olympic Sports Center	Roof of the natatorium	2800
Roof waterproofing	Roof Waterproofing Project of the 2023 Urban Old ang Dilapidated Reaidential Area Renovation in Chengyang District	Tiled roof	80000
	Limestone Shed of Linqu Company, Shanshui Group	Colored steel tile	24000
	Chengdu Water Conservancy Survey and Design Institute	Colored steel tile	20000
	Teaching Buildings and Dormitory Buildings of Yantai University	Tiled roof	20000
	Xi'an Xitie Chanba Residential Area	Tiled roof+Concrete roof surface	12000
	Roof Waterproofing of China University of Mining and Technology	Roof surface	10000
	Roof Waterproofing of Haomai Group	Roof surface	10000
	Water-related Renovation Project of the Workshop of CRRC Qingdao Sifang Co., Ltd.	SBS membrane	9000
	Vietnam Industrial Park	Concrete roof surface	5500
	Yunnan Impression Five Golden Flowers Theatre	Roof surface	5000
	Anyang International Convention and Exhibition Center	Ceramic tile	5000
	Roof of Shandong Sports Center	Concrete	5000
	Waterproofing Project of Jining Baoxiang Temple	Tiled Roof	3800
	Roof Renovation of Electronic Workshop of Sanli Group	Ceramic tile	2000
Water Park	Libo Ice and Snow Water World Theme Park	Water park	45000
	Shenyang Qixing Sea World Water Park	Giant Flood Canyon,Wave Pool,Water Village	35000
Water Conservancy Project	Reinforcement and Renovation Project ofAqueduct ang Inverted Siohon in Hunan Ouyanghai Irrigation District	Aqueduct+Inverted Siphon	25000+45000
	Sanhekou Water Conservancy Hub Project of Diverting Water from Han River to Weihe River	Dam Surface	51000
	South-to-North Water Diversion Caohe Aqueduct Protection Project	Aqueduct	20000
	Sewage Interception Project on Both Banks of Henghe River in Qingdao	Gate	20000
	Repair and Reinforcement Project of the Baima River Barrage in Qingdao	Gate	18000
	Waterproofing Project of the Aqueduct and Canal of Mahe Reservoir in Tengzhou	Aqueduct	12000
	Dahua Reservoir in Huangyuan County, Xining	Dam Surface	12000
	Slope Protection Project of the South-to-North Water Diversion Channel from Handan to Shijiazhuang	Slope Protection	11000
	Yuxikou Water Conservancy Hub Project in Jiangxi Province	Dam Surface	11000
	Xiatianji Water Conservancy Hub in Xinjiang	Dam Surface	10000
	The Main Canal of the Fourth- Grade Pumping of China Mountain on the Chu River of Chian Railway 12th Bureau	The Main Canal	9000
	Upgrading and Renovation Project of Heihe Xigou Reservoir	Dam Surface	8000
	Tidal Gate of Gaoyu River in Qingdao	Gate	8000
	Surge Shaft of Fengning Pumped Storage Power Station	Surge Shaft	7000
	Kekeya Reservoir Project in Shanshan County, Xinjiang	Dam Surface	7000
	Reconstruction Project of Dajian Gate on Taoyuan River in Chengyang District,Qingdao	Gate	5000
	Huaitoutala Reservoir Project in Qinghai	Dam Surface	5000
	Tai'an Pumped Storage Power Station	Reservoir Basin	5000
	Dam Body Protection of Rubber Dam on Moshui River	Dam Body	3800

Technology · Innovation

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