

STANDARD COIL PROTECTION

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Our standard finish is a solvent based clear gloss acrylic finish. It is specifically designed for application to ferrous and non-ferrous metals.

Standard finish is a clear finish that remains flexible throughout its life.

APPLICATIONS

Standard finish is applied to all AIRPAK manufactured coils. It prolongs the life of heat exchange coils in mild working environments. Ideal for office environments and high humidity environments. Can be used in moderate temperate oceanic environments.

TYPICAL INSTALLATIONS

Offices and comfort cooling and/or heating applications.

Moderate Oceanic Environments

General outdoor installation, rooftop installations.

Other mild to moderate commercial and industrial applications.

PRODUCT PERFORMANCE Standard finish offers resistance and protection from corrosion and corrosive agents such as acid rain and saltwater.

Poor resistance is offered against agents such as sulphuric & hydrochloric acids, acetic acid and nitric acid, acetone and other thinning agents and solvents.

If a higher degree of protection is required, Blue Fin pre-coated fins with Standard finish should be specified. Where coils are subject to extremely harsh environments, the combination of Blue Fin plus Epoxy Cote or D-Coat is recommended. Refer to the appropriate technical data

sheets for the alternative protection products.

PRODUCT PROPERTIES

Colour: Clear Gloss
Temperature range: Up to 100°C

Chemical resistance: Excellent to poor depending on concentration
Heat transfer: Insignificant impairment at given thickness

Film build up: 8-11µ dry film thickness

Coil application: Spray finish

Coating: Coil coverage including all return bends,

framework, and headers

Features: Excellent coil protection

Environmentally safe

Non-Toxic Flexible

Good chemical resistance

Maintenance: Low water pressure cleaning methods

Light soap based detergents

Reapplication: Any damaged or repaired surfaced can be

reapplied using brush or spray methods

ADDITIONAL INFORMATION

Standard finish offers a prolonged heat exchange coil life span when coils are used in mild conditions and environments, therefore prolonging the overall life of the equipment and system.



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EPOXY COTE COIL PROTECTION

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Epoxy Cote is a high performance two part epoxy based finish that is designed

for application to aluminium, copper, and other non-ferrous metals.

Epoxy Cote is a black tone that is baked onto each coil to provide the highest

possible degree of protection.

Epoxy Cote can resist abrasion and harsh weathering.

APPLICATIONS

Epoxy Cote is ideal for refrigeration heat exchange coils where they might be exposed to harshest conditions within coastal or industrial process environments that contain airborne contaminants that are corrosive to the

materials of the coil.

TYPICAL INSTALLATIONS

Swimming Pool Heat Recovery Systems

Chocolate and Food Factories where acids are present

Harsh Coastal environments

Food applications and food cabinets

Other harsh commercial and industrial process environments

PRODUCT PERFORMANCE

Epoxy Cote offers outstanding resistance to many corrosive agents such as hydrochloric acid, sulphuric acid, ammonia, sodium hydroxide, lactic acid,

oxalic acid, saltwater, tannic acid, and sodium chloride.

Excellent resistance is offered against agents such as acetic acid, nitric acid,

toluene, acetone, and other thinning agents and solvents.

PRODUCT PROPERTIES

Colour: Black

Temperature range: Up to 130°C Chemical resistance: Excellent

Heat transfer: Insignificant impairment at given thickness

Film build up: 9-12µ dry film thickness

Coil application: Sprayed and baked to a hard film

Coating: 100% coil coverage including all return bends,

framework, and headers Total coil protection

Features: Total coil protection

Environmentally safe

Non-Toxic

High chemical resistance

Maintenance: Low water pressure cleaning methods

Light soap based detergents

Reapplication: Any damaged or repaired surfaced can be

reapplied using brush or spray methods

ADDITIONAL INFORMATION

Epoxy Cote offers the highest protection and prolonged heat exchange coil life span when coils are used in harsh environments. Therefore, prolonging

the overall life of the equipment and system.



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BLUE FIN COIL PROTECTION

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION Blue Fin is a high performance aluminium foil manufacturer's 2-pack epoxy gloss finish that is specifically designed for application to aluminium.

Blue Fin appears as an anodised finish with a gloss blue tone that remains

flexible.

The manufacturer applies Blue Fin to the raw aluminium fin stock. Therefore only the fins of the coil are coated. All other parts of the coil are natural finish.

APPLICATIONS

Blue Fin is ideal for refrigeration heat exchange coils where they might be exposed to harsh coastal conditions or mild hazardous industrial or commercial environments that contain airborne contaminants that are corrosive to the materials of the coil. In particular, environments that would be harsh to aluminium only.

TYPICAL INSTALLATIONS Harsh Coastal environments

Mild commercial and industrial environments

Other harsh commercial and industrial process environments

PRODUCT PERFORMANCE Blue Fin offers excellent resistance to common corrosive agents such as ammonia, sodium hydroxide, saltwater, and sodium chloride.

Blue Fin offers a degree of protection against agents such as toluene, acetone, and other thinning agents.

Blue Fin is bonded to the aluminium fin for life.

When combined with Epoxy Cote, total coil protection is obtained to the highest degree. Maximum chemical resistance is achieved when both Epoxy Cote and Blue Fin are combined.

PRODUCT PROPERTIES Clear Gloss with Blue Tone

Temperature range: Up to 200°C

Chemical resistance: Excellent to poor depending on concentration Insignificant impairment at given thickness Heat transfer:

Film build up: N/A

Coil application: Manufacturer application Coating: 100% fin coverage only Features: Environmentally safe

> Non-Toxic Flexible

High chemical resistance

Maintenance: Low water pressure cleaning methods

Light soap based detergents

Cannot be re-applied Reapplication:

ADDITIONAL **INFORMATION** Blue Fin offers prolonged heat exchange coil life span when coils are used in harsh environments that are particularly corrosive to aluminium, therefore

prolonging the overall life of the equipment and system.



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BLUE FIN & BAKED EPOXY COTE COMBINATION COIL CORROSION PROTECTION

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Blue Fin is a high performance aluminium foil manufacturer's 2-pack epoxy gloss finish that is specifically designed for application to aluminium.

Blue Fin appears as an anodised finish with a gloss blue tone that remains flexible.

The manufacturer applies Blue Fin to the raw aluminium fin stock. Therefore only the fins of the coil are coated. All other parts of the coil are natural finish.

Epoxy Cote is then applied to the entire coil and baked to form a very tough resilient black finish.

Coils have a double layer of protection, which does not allow any corrosive attack on the aluminium fin material.

APPLICATIONS

Blue Fin & Epoxy Cote can cope with the most extreme of chemical and environmental conditions.

Provides a higher degree of protection from corrosive agents than Copper finned coils.

Petrochemical plant installation, Swimming Pools, Corrosive chemical process plants.

TYPICAL INSTALLATIONS PRODUCT

PERFORMANCE

Harsh commercial and industrial environments

Petrochemical plant and equipment.

Blue Fin & Epoxy Cote offers the highest protection from corrosive agents such as Ammonia, Sodium Hydroxide, Saltwater, and Sodium Chloride.

Blue Fin & Epoxy Cote offers a very high degree of protection against agents such as Toluene, Acetone, and other thinning agents.

Blue Fin is bonded to the aluminium fin for life. Epoxy Cote is a double layer of protection that is baked permanently onto the coil.

PRODUCT PROPERTIES

Colour: Black Gloss
Temperature range: Up to 300°C
Chemical resistance: Excellent

 $\begin{array}{lll} \mbox{Heat transfer:} & \mbox{Insignificant impairment} \\ \mbox{Film build up:} & \mbox{9-12}\mu \mbox{ dry film thickness} \\ \mbox{Coil application:} & \mbox{Manufacturer application} \\ \mbox{Coating:} & 100\% \mbox{ fin \& coil coverage} \\ \mbox{Features:} & \mbox{Environmentally safe} \end{array}$

Non-toxic Rigid

Very high chemical resistance

Maintenance: Low water pressure cleaning methods

Light soap based detergents

Reapplication: Re-application by spraying methods

ADDITIONAL INFORMATION

Blue Fin offers prolonged heat exchange coil life span when coils are used in harsh environments that are particularly corrosive to aluminium. Therefore, prolonging the overall life of the equipment and system.



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D-COAT COIL CORROSION PROTECTION

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

D-Coat is a high performance coating applied to the entire coil and baked to form a very tough resilient finish.

Available in three types:

- D-Coat Standard (light blue colour)
- D-Coat UV with UV resistance additive for external applications (light grey colour)
- D-Coat Plus with anti-microbial additive for healthcare facilities.

D-Coat has coil protection certification as follows:

- ASTM B117 >10,000hrs Modified Salt Spray Test
- ASTM G85 2000hrs Modified Salt Spray Test
- ASTM D522 Flexibility Test
- ASTM G21 Resistance to Fungi
- ASTM G22 Resistance to Bacteria
- ASTM G87 Moist SO Test
- MIL-STD-810 Sand & Dust Test

APPLICATIONS

D-Coat offers protection to a majority of aggressive environments, with the exception of strong alkalis and oxidising chemicals.

Petrochemical plant installation, Swimming Pools, Corrosive chemical process plants.

TYPICAL INSTALLATIONS

Harsh commercial and industrial environments

PRODUCT D

ISTALLATIONS Petrochemical plant and equipment.

PRODUCT PERFORMANCE D-Coat offers the highest level of protection from corrosive agents such as Hydrochloric Acid, Sulphuric Acid, Phosphoric Acid, Acetic Acid, Sodium Hydroxide, Trichloroethylene, as well as Saltwater.

D-Coat offers a very high degree of protection against agents such as Toluene, Acetone, and other thinning agents.

PRODUCT PROPERTIES

Colour: Light Blue (D-Coat) or Grey (D-Coat UV)

Temperature range: Up to 120°C Chemical resistance: Excellent

Heat transfer: Insignificant impairment Film build up: 6-20μ dry film thickness Coil application: Manufacturer application

Coating: 100% fin, tube, and casing coverage
Features: Environmentally safe with US EPA approval

Non-toxic with US FDA approval

Rigid

Very high chemical resistance

Maintenance: Low water pressure cleaning methods

Light soap based detergents

Reapplication: Re-application by spraying methods

ADDITIONAL INFORMATION

D-Coat offers protection against the harshest environments, therefore prolonging the overall life of the equipment and system.



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