

## Dual-Layered Paint System

### ELECTROCOATING & POWDER COATING

#### SPECIFICATION

Kinesik Advantage® Cast Iron TWSI Plates with Dual-Layered Paint System consisting of Cathodic Electrocoating and Powder Coating processes.

#### DESCRIPTION

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Kinesik Advantage cast iron tactile walking surface indicator (TWSI) plates with the dual-layered paint system consisting of Cathodic Electrocoating and Powder Coating offer a more superior coated cast iron plate than asphalt dipped or only powder coated plates. The combination of both coating processes provides great initial appearance with improved durability and wear resistance.

Our dual-layered paint system follows the tight coating specifications of the automotive industry (WSS-M70J5-B or WSS-M2P180-D) that is applied to exterior rigid automotive body parts such running boards of trucks. The surface of cast iron is more porous than regular steel, therefore the "wet" cathodic electrocoating process acts as a "primer" for the "dry-spray" powder coating. Electrocoating ensures better adhesion and full coating coverage of all crevices on the cast iron plate than only powder coated cast iron plates. Having this Dual-Layered paint system enhances corrosion protection, increases wear resistance, and promotes a better initial appearance than only powder coated or asphalt dipped cast iron plates.



#### BENEFITS OF DUAL-LAYERED PAINT SYSTEM

- Electrocoating is used as a primer to improve the adhesion of the powder coating
- Controlled uniform film thickness and coverage of all crevices of the cast iron plate
- Advantage® Dual-Layered paint system follows coating specifications of the automotive industry
- No environmental impacts from wear and tear of coating particles
- Increased wear resistance and higher coating durability
- Improved initial appearance

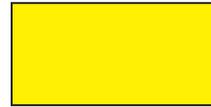


#### PROFESSIONAL ASSOCIATIONS

Kinesik is proud to be a member of the following organisations



#### AVAILABLE COLOUR FINISHES



Federal Yellow



Safety Red



Onyx Black

# Advantage<sup>®</sup> Cast Iron Plates

with Dual-Layered Paint System

## CATHODIC ELECTROCOATING

Cathodic Electrocoating is more comparable to electroplating than powder coating. With electrocoating, the cast iron plate is immersed in a bath consisting of paint, epoxy and other water-based solutions. An electric current is then used to attract the particles of the liquid solution and deposit those particles on to the surface of the cast iron plate. The electrical current continues until the desired level of coating thickness is achieved, which is regulated by increasing or decreasing the voltage level. This ensures a controlled and uniform film thickness throughout the plate surface. The coated substrate is then cured in an oven to promote cross-linking. For the Dual-Layered Paint System of cast iron plates, Cathodic Electrocoating acts as primer to Powder Coating.

## POWDER COATING

While electrocoating is considered to be a “wet” process, powder coating involves the application of a dry powder. This dry powder consists of a specific combination of epoxy resins and various curing agents. A spray gun is used to electrostatically apply the particles onto the surface of the cast iron plate. Since the particles are electrically charged, they will adhere to the surface. The application of the spray gun governs the thickness and uniformity of the powder coated film. The finishing step in the powder coating process is curing where the particles are melted onto the cast iron plate. Curing also serves as the catalyst for the chemical reaction that produces the desired surface finish.

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