

GUIDELINES FOR CHOOSING COLORS ON FIRE DOORS

The electrostatic paint applied to fire doors plays an essential role in their protection, durability, and aesthetics in various fire safety critical environments. This technical document focuses on fundamental technical aspects of the application process, such as paint baking temperature, fire and peel resistance, as well as specific protection and maintenance characteristics.

Application Process and Quality Control

Electrostatic paint, a powder coating, is applied through a rigorous process involving surface preparation and coating application. Thorough cleaning and degreasing of the fire door ensure optimal coating adhesion. Electrically charged particles are evenly sprayed onto the surface, attracted by it through the electrostatic process. Maintaining adequate quality control throughout the process is crucial, involving careful attention to factors like temperature, environmental conditions, and powder quantity to ensure consistent, high-quality coating results.

Thermal Curing and Maintenance

Following application, the coated door undergoes high temperatures, typically between 160°C and 200°C, for a specific period to fuse the paint and form a durable coating. Regular maintenance of the electrostatic painting equipment is key to extending its lifespan and ensuring optimal performance. This includes not only cleaning and repairing the equipment but also periodic inspection of powder containers to prevent contamination and ensure smooth operation.

Finishes, Regulations, and Recommendations

Available finishes and their technical characteristics include smooth, textured, and metallic finishes, each with its advantages in terms of resistance and aesthetics. It is recommended to select colors that comply with safety and visibility regulations, such as standard red, white, and yellow. Custom color options are possible, although this may increase the door's cost. The application of electrostatic paint on fire doors must comply with international regulations like NFPA 80 and obtain certifications from organizations like UL to ensure compliance with safety and fire resistance standards.

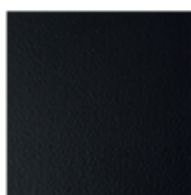
Protection Characteristics and Powder Selection

Electrostatic paint applied to fire doors provides fire resistance, corrosion resistance, and long-lasting adhesion, protecting the metal surface against wear and extreme conditions. Proper surface preparation, along with the selection of suitable powder in terms of particle size and resistivity, are crucial steps to ensure successful application and good substrate adhesion.

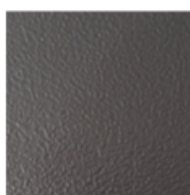
Maintenance Recommendations and Conclusion

To preserve electrostatic paint and ensure its long-term effectiveness, regular inspections, surface cleaning with mild detergents, and repairs or repainting as needed are recommended. In summary, the application of electrostatic paint on fire doors not only provides protection against fire and corrosion but also enhances the aesthetics and durability of these critical safety structures in a variety of environments.

The final finish of Fortis doors is commonly in gray, which allows them to be painted later by the customer according to their needs. We can also offer standard finishes that would not affect their final price, with a variety of 8 pre-established colors. If our customers desire another finish, this could increase the price of the finished product. For more information, please contact a Fortis Doors advisor.



Embossed Black
Ral 9005



Embossed Brown
Ral 8019



Gray
Ral 7012



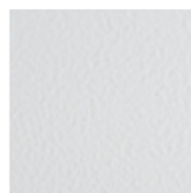
Embossed Gray
Ral 7004



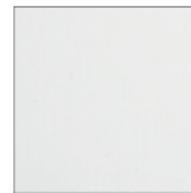
Embossed Red
Ral 3001



Embossed Beige
Ral 1013



Embossed White
Ral 9003



Matte White
Ral 9003