



IFS 400SD

Technical Data Sheet

SRSS 910983 Blackened Steel

Description:	SRSS 910983, Blackened Steel is a thermo-setting super durable polyester-TGIC powder coating and is designed specifically for architectural applications and superior exterior durability. It is formulated with super durable polyester resin technology and high-performance pigments to conform to the performance requirements of AAMA2604-22.	
Features and Benefits:	*5+ year film integrity on properly pre-treated aluminum available *5+ year color retention available *Very good flow (smooth film appearance) *Scratch and Mar resistance powder coating (hard wearing/serviceable finish)	
Applications:	Extruded Architectural aluminum including windows, curtain wall, door frames, and extruded panel work on commercial buildings, etc.	
Typical Powder Properties:	Specific Gravity (ASTM D5965-96, C)	1.22±0.05
	Theoretical Coverage	158 sq.ft/lb./mil
	Shelf life (at below 80°F in dry condition)	12 months
Typical Coatings Performance:	Film Thickness (ASTM D7091)	2.0-3.0 mil
	Gloss 60°angle (AAMA 2604-22, Sec. 8.2)	60-70
	Hardness (AAMA 2604-22, Sec. 8.3)	H-2H
	Dry Adhesion (AAMA 2604-22, Sec. 8.4.2.1)	5B (100%)
	Boiling Water Adhesion (AAMA 2604-22, Sec. 8.4.2.2)	5B (100%)
	Wet Adhesion (AAMA 2604-22, Sec. 8.4.2.3)	5B (100%)
	Direct Impact Resistance (AAMA 2604-22, Sec. 8.5)	3mm±0.3 mm deform, No Coating Pick off with tape
	Abrasion Coefficient (AAMA 2604-22; Sec. 8.6)	≥40
	Muriatic Acid Resistance (AAMA 2604-22, Sec. 8.7.1)	No visual change and blistering
	Mortar Resistance (AAMA 2604-22, Sec. 8.7.2)	No visual change, 5B Adhesion
	Nitric Acid Resistance (AAMA 2604-22, Sec. 8.7.3)	ΔE: ≤ 5.0 (No visual change)
	Detergent Resistance (AAMA 2604-22, Sec. 8.7.4)	No color change, 5B Adhesion, and blistering
	Window Cleaner Resistance (AAMA 2604-22, Sec. 8.7.5)	No visual change 5B Adhesion, and blistering
	Humidity Resistance (ASTM D2247, 3000 hours)	Rating 7 (creepage) No blistering
	Cyclic Corrosion (ASTM G-85, Annex 5, 1500 hours)	Rating 7 (creepage) Rating 8 (blistering)



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Surface Preparation:	Surfaces should be prepared according to AAMA2604-22 or the recommendations of Chemical supplier as appropriate.
Application Data:	SRSS 910983, Blackened Steel is to be applied with a corona electrostatic powder spray gun at between 60 kV – 100 kV. For box feeders ensure that the probe is fully inserted into the powder and operated per the manufacturer's instructions. For fluid bed applications ensure uniform fluidization of the powder in the hopper. Fluidized powder should resemble "simmering liquid". Aged or compacted powder may require pre-conditioning for several minutes to fluidize evenly.
Cure Schedule:	SRSS 910983, Blackened Steel can be cured in a direct or indirect gas convection, electric, or infrared oven. A combination of any of these ovens is also suitable. Care should be exercised when stoving at 425°F as some colors are prone to discoloration. Standard Cure: 10 minutes @ 400°F Peak Metal Temperature
Care and Maintenance:	Reference should also be made to IFS400SD Applicator's Manual or the AAMA610-15 standard for cleaning of surfaces. This is a condition of the warranty. In broad terms, cleaning of externally located powder coating surfaces must take place every three months. When salts or pollutants are more prevalent such as seaside and industrial areas, a cleaning program should be carried out more frequently. <i>Three steps to cleaning powder coated surfaces:</i> 1. Remove loose deposits with a wet sponge (avoid scratching the surface by dry dusting). 2. Using a soft, clean cloth and a mild detergent in warm water, clean the powder coating to remove dust, salt, or other deposits. 3. Always rinse after cleaning with fresh water to remove any remaining detergent. <i>Warning:</i> In some cases, strong solvents recommended for thinning various types of paints and for cleaning up mastics/sealants are harmful to the extended life of the powder coated surface. These solvents should not be used for cleaning purposes and will render the warranty void if used. If paint splashes or sealants/mastics need to be removed then the following solvents can be used safely: Methylated Spirits, Turpentine, White Spirits, Ethyl Alcohol, and Isopropanol.
Storage:	SRSS 910983, Blackened Steel should be stored at temperatures below 80°F, in a dry area away from any heat source.
Health and Safety:	SDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed and other relevant SH&E information. For detailed information, refer to product label and the current Chemical Data Sheet available through Sales and Customer Service Offices (Phone: 940-668-1062).
Notes:	All tests were performed on Alodine panels with a nominal film thickness of 2.0-3.0 mils.

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