



IFS 500FP Technical Data Sheet

FRSL 11390 2605 Black

Description: **FRSL 11390, 2605 Black** is thermo-setting powder coatings based on **Fluoropolymer** and designed specifically for architectural applications where color and gloss retention are critical for prestigious architectural projects. It is formulated with advanced fluoropolymer resin technology and high performance pigments to conform to the performance requirements of AAMA2605-17. It will give superior film integrity, increased gloss and color retention over high-end super durable polyesters, and matches fluoropolymer liquid systems with the advantage of very good mar and scratch resistance.

Features and Benefits:

- *20+ year film integrity on properly pre-treated aluminum available
- *20+ year color retention available
- *No primer required (reduced application costs versus equivalent liquid coatings)
- *Very good flow (smooth film appearance)
- *Tough powder coating (Hard wearing/serviceable finish)

Applications: Extruded Architectural aluminum including window, Curtain wall, and door frames, Extruded panel work on commercial buildings, etc.

Typical Powder Properties:	Specific Gravity (ASTM D5965-96, C)	1.68±0.05
	Theoretical Coverage	114sq.ft/lb./mil
	Shelf life (at below 80°F in dry conditions)	6 months

Typical Coatings Performance:	Film Thickness (ASTM D7091)	2.0-3.5 mil
	Gloss 60° angle (AAMA 2605-17, Sec. 8.2.1)	25-35
	Hardness (AAMA 2605-17, Sec. 8.3.1)	2H-3H
	Dry Adhesion (AAMA 2605-17, Sec. 8.4.1.1)	5B (100%)
	Wet Adhesion (AAMA 2605-17, Sec. 8.4.1.3)	5B (100%)
	Boiling Water Adhesion (AAMA 2605-17, Sec. 8.4.1.4)	5B (100%)
	Direct Impact Resistance (AAMA 2605-17, Sec. 8.5.1)	3mm±0.3 mm deform, No Coating Pick off with tape
	Abrasion Coefficient (AAMA 2605-17; Sec. 8.6.1)	≥40
	Muriatic Acid Resistance (AAMA2605-17, Sec. 8.7.1)	No visual change and blistering
	Mortar Resistance (AAMA2605-17, Sec. 8.7.2)	No visual change, 5B Adhesion
	Nitric Acid Resistance (AAMA2605-17, Sec. 8.7.3)	ΔE: ≤ 5.0 (No visual change)
	Detergent Resistance (AAMA2605-17, Sec. 8.7.4)	No color change, 5B Adhesion, and blistering
	Window Cleaner Resistance (AAMA2605-17, Sec. 8.7.5)	No visual change 5B Adhesion, and blistering
	Humidity Resistance (ASTM D2247, 4000 hours)	Rating 7 (creepage) No blistering
	Cyclic Corrosion (ASTM G-85, Annex. 5, 2000 hours)	Rating 7 (creepage) Rating 8 (blistering)



IFS 500FP Technical Data Sheet

Surface Preparation:

Surfaces should be prepared according to AAMA2605-17 or the recommendations of Chemical supplier as appropriate.

Application Data:

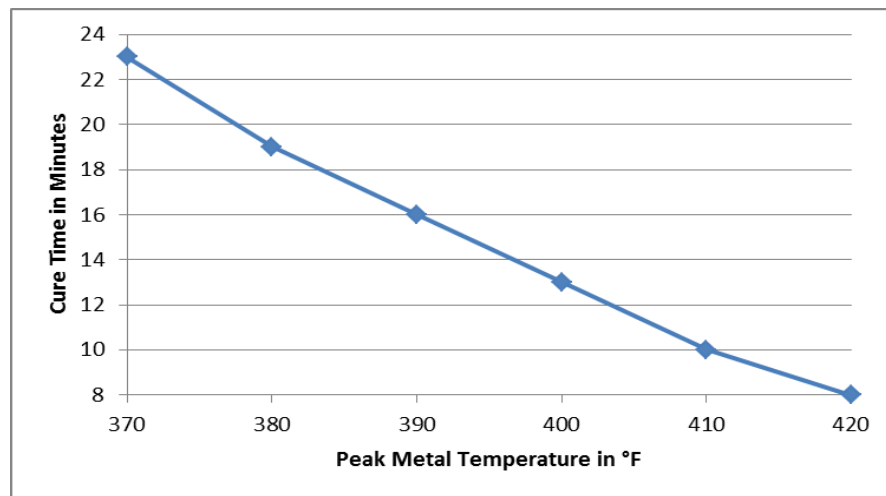
FRSL 11390, 2605 Black is to be applied with a corona electrostatic powder spray gun at between 60kv – 100 kV. For box feeders, ensure probe is fully inserted in powder and operated as manufacturer's instructions. For fluid bed applications, ensure uniform fluidization of powder in the hopper. Fluidized powder should resemble "simmering liquid". Aged or compacted powder may require pre-conditioning for several minutes to fluidize evenly.

Cure Schedule:

FRSL 11390, 2605 Black can be cured in a direct or indirect gas convection oven, an electric oven, or an Infrared. 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. The object temperature must not above 430°F.

Standard Cure: 10 minutes @ 410°F Peak Metal Temperature (or)
13 minutes @ 400°F Peak Metal Temperature (or)
16 minutes @ 390°F Peak Metal Temperature

Cure Curve:



Care and Maintenance:

Reference should also be made to IFS500FP Applicator's Manual or 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. Where salts/pollutants are more prevalent such as seaside and industrial areas, a cleaning program should be carried out more frequently.

Three steps to cleaning powder coated surfaces:

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.

Warning: In some cases, strong solvents recommended for thinning various types of paints and also 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



IFS 500FP Technical Data Sheet

removed then the following solvents can be used safely: Methylated Spirits, Turpentine, White Spirits, Ethyl Alcohol, and Isopropanol.

Precautions and Limitations:

- *For use by IFS500FP registered applicators only, who can demonstrate ability to meet and measure criteria according to IFS500FP Applicator's Manual or AAMA610-15 standard.
- *IFS500FP is only available in solid and metallic colors that meet IFS Coatings, Inc. pigmentation criteria. Strong, bold colors may not necessarily meet these criteria and should be referred to IFS Coatings, Inc. before specifying.
- *As a result of possible wide application variations and stoving conditions, some products and colors may show variation between IFS Coatings Inc. prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.
- *Not recommended for post forming.
- *Whilst technically capable, it is not recommended for re-coating unless it is absolutely essential. This product is not designed for re-coating and special care must be taken to ensure good adhesion and uniform appearance.
- *For optimum performance ensure recommended dry film thickness is obtained.
- *Not recommended for use in highly corrosive environments such as severe marine or industrial locations.
- *Not recommended for components that are exposed to constant temperatures exceeding 90°C.
- *Do not exceed 430°F metal temperature when stoving **FRSL 11390, 2605 Black**.
- ***FRSL 11390, 2605 Black** can release an irritating white fume on baking, which is particularly noticeable if there is inadequate ventilation. Ensure adequate ventilation/extraction is available when baking this product to minimise fuming.

Storage:

FRSL 11390, 2605 Black 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 2.0-3.5 mils.

Any recommendations contained herein or any information given by any IFS COATINGS representative is based on tests and information believed to be accurate. However, since we have no control over the conditions under which our products are transported, stored, handled, or used by purchasers, all recommendations and sales are made on condition that IFS COATINGS will not be held liable for any damages resulting from their use. No representative of ours has any authority to waive or change this provision.