IFS 400SD
Technical Data Sheet

SRML 90499
Warm Bronze Bonded

Description:

SRML 90499, Warm Bronze Bonded is thermo-setting Super Durable Polyester-TGIC powder coatings and designed specifically for architectural applications and exterior durability. It is formulated with Super durable polyester resin technology and high performance pigments to conform to the performance requirements of AAMA2604-21.

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 window, Curtain wall, and door frames, Extruded panel work on commercial buildings, etc.

Typical Powder Properties:

Specific Gravity (ASTM D5965-96, C)	1.51±0.05
Theoretical Coverage	127 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 2604-21, Sec. 8.2)	Visual
Hardness (AAMA 2604-21, Sec. 8.3)	2H
Dry Adhesion (AAMA 2604-21, Sec. 8.4.2.1)	5B (100%)
Boiling Water Adhesion (AAMA 2604-21, Sec. 8.4.2.2)	5B (100%)
Wet Adhesion (AAMA 2604-21, Sec. 8.4.2.3)	5B (100%)
Direct Impact Resistance (AAMA 2604-21, Sec. 8.5)	3mm±0.3 mm deform, No Coating Pick off with tape
Abrasion Coefficient (AAMA 2604-21; Sec. 8.6)	≥40
Muriatic Acid Resistance (AAMA 2604-21, Sec. 8.7.1)	No visual change and blistering
Mortar Resistance (AAMA 2604-21, Sec. 8.7.2)	No visual change, 5B Adhesion
Nitric Acid Resistance (AAMA 2604-21, Sec. 8.7.3)	ΔE: ≤ 5.0 (No visual change)
Detergent Resistance (AAMA 2604-21, Sec. 8.7.4)	No color change, 5B Adhesion, and blistering
Window Cleaner Resistance (AAMA 2604-21, 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)

Surface Preparation:

Surfaces should be prepared according to AAMA2604-21 or the recommendations of Chemical supplier as appropriate**.**

Application Data:

SRML 90499, Warm Bronze Bonded 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:

SRML 90499, Warm Bronze Bonded 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.

Standard Cure: 10 minutes @ 400°F Peak Metal Temperature

Care and Maintenance:

Reference should also be made to IFS 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 removed then the following solvents can be used safely: Methylated Spirits, Turpentine, White Spirits, Ethyl Alcohol, and Isopropanol.

Storage:

SRML 90499, Warm Bronze Bonded 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. Bonded metallic and effect powder coatings can be recycled and this is one of their big advantages over dry blended powder. However there is still a need for some caution. The amount of reclaimed powder needs to be carefully monitored and ideally reclaim should be automated. It is recommended that recycled powder should be no more than 30% at all times. If the recycled powder level fluctuates too much, this could potentially lead to color inconsistency over a large project. It is best practice to keep the hopper well charged and to maintain a 70:30 ratio of virgin powder to reclaim at all times. Reclaim can of course be less but should never be higher than 30%.

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