



# FLAT 500

protective  
decorative

An alkyd based anticorrosive matt finish with excellent surface adhesion on steel & wooden surfaces

## DESCRIPTION

- FLAT500 is modified alkyd base, one component quick drying high build multipurpose coating
- FLAT500 used for interior and exterior application for steel and wood works.
- FLAT500 can also be used as finish paint and undercoat applications for structural steel of food and chemical processing plants and wood coatings
- FLAT500 is containing high quality of anticorrosive pigments designed for various paint systems.
- FLAT500 shows excellent adhesion to steel and forms a hard, abrasion resistant coating.

## COLORS, GLOSS AND APPEARANCE

- FLAT500 is a solvent base one component brushable liquid with flat film
- FLAT500 is available in different colors (white, grey and other colors)

## PROPERTTIES & BASIC DATA AT 23°C

Specific Gravity	1.4 ± 0.05
Gloss	matt
Volume Solids	47± 2 %
Flash Point	36° C
Touch Dry	1 hour
Shelf Life	12 months
Minimum Over coating Interval	6 hours at 20°c 5 hours at 30°c 4 hours at 40°c
Maximum Over coating Interval	10 months at 20°c 7 months at 30°c 5 months at 40°c
Dry to handle	8 hours
Shelf Life	12 months
Dry Film Thickness Range	25-150 µm
METHOD OF APPLICATION	Roller, Brush Airless & Conventional Air Spraying

## THEORITICAL SPREADING RATE (M²/L)

Thickness	MIN	MED.	MED.	TYPICAL
Wet Film	35	120	160	80
Dry Film	25	75	100	50
(M²/Liter)	16	7.3	5	10

- Depending on type of application and surface preparation quality, two coats of PROLACK MT is the minimum recommended as undercoat for ideal application.
- Loss factors will apply in practice.

## SYSTEM SPECIFICATION

DECORATIVE SYSSYTEM  
PROTECTIVE COATINGS SYSTEM

## DRYING TIMES/HOURS

Substrate Temp.	5° C	10° C	25° C	35° C
Touch Dry	3 h	2 h	1 h	40 min
Dry to handle	10 h	8 h	6 h	4 h
Dry to recoat, minimum	11	9 h	7 h	5h

The given data serve as guideline only. The actual drying time differs according to film thickness, ventilation, humidity and underlying paint system.

## WHERE TO USE

- **FLAT500** is designed to be used for both interior & exterior use as an anticorrosion alkyd system.
- **FLAT500** is also suitable for both wood and steel works as steel structures, marine works and for maintenance
- Used for small and large infrastructure projects.
- Used with low slip additive for floors and decks.

## ADVANTAGES

- Quick drying tough hard wearing and high build application
- Excellent recoatable, can be over coated with most alkyd-, chlorinated rubber-, and most of one component system.
- Excellent anti-corrosive properties and water resistance
- On board maintenance under coat
- Good mechanical properties and Surface tolerant
- Low odor and excellent application properties.
- Good flow and hiding power.
- Excellent weather resistance and color retention.
- Low – flame spread

## PRECAUTIONS

- No extra thinner to be added more than recommended
- Excess thinner will cause sagging, segregation and will reduce adhesion, durability, anticorrosive properties and weathering resistance.
- Remaining material (in closed containers) should be maintained in protected storage in accordance with information given in the storage, health and safety section of this data sheet.
- Maximum relative humidity during application and curing is 85% R.H

## INSTRUCTIONS FOR USE

### --1 RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- This product will not cure adequately below 5°C (41°F).
- For maximum Performance ambient curing temperatures should be above 10°C (50°F).
- Optimum performance is achieved when this coating is applied over blasted steel.

### --2 SURFACE PREPARATION

#### CONCRETE

- Concrete should be free of contamination, dust and efflorescence, and properly prepared
- Any steel in the application area should be exposed around its full circumference and thoroughly cleaned to remove all loose scale and corrosion deposits either by mechanical properties like sand blaster or mechanical abrasive like chipping or whip sand blasting or by using a suitable rust remover

## **Bare Steel (Ferrous & Non Ferrous Metal)**

### **NEW BUILDING**

- As with all coating systems, surface preparation is of prime importance.
- All substrate surfaces must be properly prepared, clean, and free from oil, grease, dust, rust or any loosely adhering material.
- High pressure of fresh water wash is required to release soluble contaminants, and other detrimental foreign matter
- Surface should be cleaned by sand blasting to Sa2½ (ISO-8501-1:2007), blasting profile 30 – 75 µm
- Power tool cleaning to min. St2 (ISO 8501-1:2007) may be acceptable,
- Apply one layer or two layer of PRIMER (max. 75 µm )
- If oxidation has occurred between blasting and application of PRIMER, the surface should be re-blasted to the specified visual standard and directly apply another layer of primer before applying of first layer **SHOP PRIMED STEEL**
- Weld seams and areas of damaged shop primer or breakdown should be blast cleaned to Sa2½ blasting profile 30 – 75 µm or power tool cleaned to SPSS- Pt3
- Directly Apply one layer or two layer of PRIMER (max. 75 µm ) before applying of first layer of **FLAT500T**

### **COATED SURFACE**

- Clean, dry and undamaged compatible primer.
- Directly Apply one layer or two layer of PRIMER (max. 75 µm ) before applying of first layer of **FLAT500**

### **OTHER SURFACES**

- For aluminum substrates, thorough washing and sweeping with a nonmetallic blast medium is required.
- Directly Apply one layer or two layer of PRIMER (max. 75 µm ) before applying of first layer of **FLAT500**

### **MAJOR REPAIR & REFURBISHMENT**

- Abrasive blast clean to Sa2½.
- Blasting profile 30 – 75 µm.
- If oxidation has occurred between blasting and application of PRIMER, surface should be re-blasted to the specified visual standard.
- Surface defects revealed by the blast cleaning process, should be ground filled, or treated in the appropriate manner
- Directly Apply one layer or two layer of PRIMER (max. 75 µm ) before applying of first layer of **FLAT500**

## **--3 MIXING**

- Material is supplied in one container.
- The temperature of the paint should preferably be above 15°C, otherwise extra solvent may be required to obtain desired application viscosity
- Handle with care. Stir well before use and mix thoroughly with power agitator till homogenous.
- The paint temperature should be above 15° C.
- Don't add too much thinner more than recommended (0–10%)

## **--4 APPLICATION**

- **FLAT500** can be applied with airless spray, conventional spray, brush or roller.
- When applying **FLAT500** in confined spaces ensure adequate ventilation during application and curing
- Substrate temperature should be above 50°F (10°C) & at least 5°F (3°C) above dew point.
- Apply in good weather when air temperature and surface temperatures are above 50°F (10°C) and humidity is 70% R.H
- For optimum application properties, bring material to 70-80°F (21-27°C) prior to mixing and application.
- This product is not recommended for use in immersed conditions

## **5-- THINNING**

Thinning range should be only (5 : 15%) with special thinner

### **BRUSH AND ROLLER**

- Thin if required with 0-10% of special thinner depending on required thickness and application conditions.
- Do not allow material to remain in brush and rollers
- Thoroughly flush brush and rollers with cleaning thinner

### **CONVENTIONAL AIR SPRAYING**

- Use suitable proprietary equipment
- Thin with 5-10% of special thinner depending on required thickness and application conditions.
- Tip size is approx...1.7 - 2.0 mm
- Nozzle pressure at spray tip not less than 4.0 kg/cm<sup>2</sup> (0.2 – 0.3 MPa = 2 - 3 bar = 28 - 43 p.s.i.)
- Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with cleaning thinner

### **AIRLESS SPRAYING**

- Thin with 0-10% of special thinner depending on required thickness and application conditions.
- Recommended tip size 0.38 - 0.48 mm approximately
- Nozzle pressure at spray tip not less than 150 kg/cm<sup>2</sup> (12 - 16 MPa = 12 – 160 bar = 1700 - 2270 p.s.i.)
- Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with cleaning thinner
- Thoroughly flush all equipment with cleaning thinner

### **WELDING**

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation

### **PACKAGING:**

**FLAT500T** is available in 0.7 3.75, & 15 LT

### **STORAGE AND SHELF LIFE**

**FLAT500** has shelf life of 12 months minimum at 77°F (25°C) when store in its original unopened packs in proper conditions under shaded cover, out of direct sunlight and protected from extremes of temperature conditions and away from sources of heat and ignition and humid environmental and free from heat and frost

### **CLEANING**

- **FLAT500** should be removed from tools & equipment immediately after application by cleaning with SPECIAL cleaning thinner
- Do not allow material to remain in hoses, gun or spray equipment.
- Thoroughly flush all equipment with International
- It is good working practice to periodically flush out spray equipment during the course of the working day
- Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays.
- All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

### **HEALTH AND SAFETY:**

- All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations.
- Prior to use, obtain, consult and read well the Material Safety Data Sheet for this product and follow all precautionary notices.
- Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards.
- This product may contains hazard materials or aggressive solvent.
- Take precautions to avoid inhalation of spray mist, skin, mucous membrane and eye contact by the use of safety equipment (gloves, goggles, face masks, barrier creams etc.) and other personal protection.
- If skin comes in contact, it should be thoroughly flushed and washed with fresh water and proprietary cleanser and soap.
- Eyes should be cautiously washed with fresh water or proprietary wash and medical attention obtained.
- Don't use solvents for skin cleaning.
- Equipment and tools to be cleaned immediately after use
- Don't dispose of water or soil but according to local regulations.
- **FLAT500** is class 4 according to health and safety codes.
- Keep labelled until decontaminated.

### **ADDITIONAL INFORMATIONS**

**FLAT500** provides all type of coatings and construction chemicals which answers the queries of modern engineers for trouble free durable structure.

**FLAT500** reate special and specific products when there are critical applications that require specific requirements (tailor made designs)

**FLAT500** technical office gives this information and recommendations relating to the application of products in this data sheet representing test results & practical experience obtained under a good and controlled conditions when properly stored, handled and applied under normal condition.

However, as products are often used under different conditions, we can only guarantee the quality of our product, and reserve the right to change data without further notice

**FLAT500** data are correct to the best of our knowledge and experience of products.

The differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose.

All orders are accepted subject to our current terms of sale and delivery.

**FLAT500** users should always refer to the most recent issue of the technical data sheet for the product concerned, copies of which will be supplied on request.

**FLAT500** technical services department is ready to provide our customers with more information and after sales support to assist our customers in a proper application, so don't hesitate to consult us.