

APPLICATION GUIDELINES

EXTERIOR DECK SYSTEM

Intercryl[®] 588

Revision 6

Issue Date: 15th September 2015

Marine Coatings

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1. SCOPE AND PURPOSE

The purpose of these guidelines is to ensure that the coating system, as applied, provides adequate protection against mechanical damage and corrosion.

Successful in-service performance of a deck coating system depends upon both the correct choice of coating and the adoption of the correct procedures for surface preparation and paint application.

The responsibilities for achieving the specific standards outlined and for carrying out surface preparation and paint application rest with the Contracting Company and Shipyard. Under no circumstances do these responsibilities rest with International Paint. If International Paint provide for the presence of a Technical Service Representative, their role is advisory only unless otherwise specified.

2. PRODUCT SPECIFICATION AND PRODUCT CURE GRAPHS

2.1 SURFACE PREPARATION

Fresh water wash to remove all dirt and contamination. Remove all grease, oil, soluble contaminants and other foreign matter by solvent cleaning (SPC-SP1).

Ensure area is clean and dry prior to paint application.

2.2 SPECIFICATION

Product	Alternative	Dft (mils)			Dft (microns)		
		Spec	Min	Max	Spec	Min	Max
Intercryl 588	N/A	N/A	1.8	2.5	N/A	45.9	63.7

2.3 NOTES

2.3.1 Intercryl 588 should give the following theoretical coverage at 2 mils dft (5.7 mils wft) – 319 sq. ft/gal (8 sq.m/litre). Allow appropriate loss factor for real life conditions. It is vitally important to avoid over-application.

2.3.2 Refer to the accompanying graphs for curing requirements and recommended overcoating intervals for touch up purposes only.

2.3.3 The drying times quoted refer to a single coat applied at 50% Relative Humidity to give the required dry film thickness (i.e. at the specified spreading rate). At higher film thickness drying times may be extended, particularly at low temperatures. In conditions of high humidity (>70%) drying and overcoating times will also be extended.

2.3.4 All thicknesses are to be checked by the Contractor Quality Control Department and by International's Technical Service Representative (if present) on site. Any substandard areas are to be rectified.

2.3.5 For application of Intercryl 588 the deck temperature must not be lower than 10°C (50°F) or exceed 70°C (158°F). For maximum performance, the curing temperature should be above 10°C (50°F) and at least 3°C (5°F) above dew point, but lower than 50°C (122°F). Good air flow is essential factor for proper drying times and film formation (min. 0.1m/sec or 4 inches/sec).

2.4 PRODUCT CURE GRAPHS

2.4.1 Touch Dry Times

2.4.2 Hard Dry Times

2.4.3 Minimum Overcoating Intervals (for touch up only)

2.4.4 Maximum Overcoating Intervals

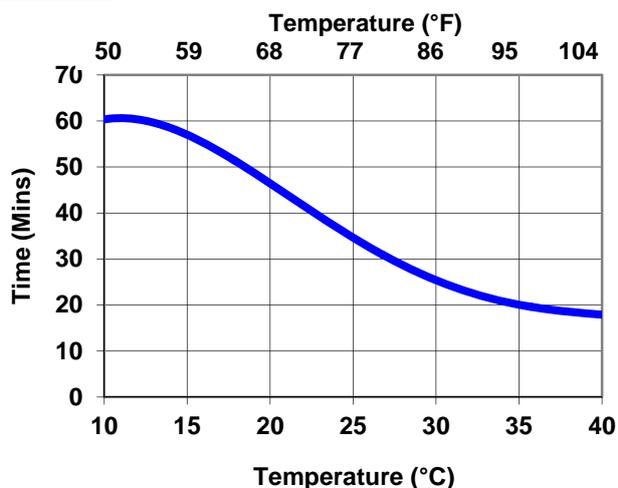
Application Guidelines

Intercryl® 588

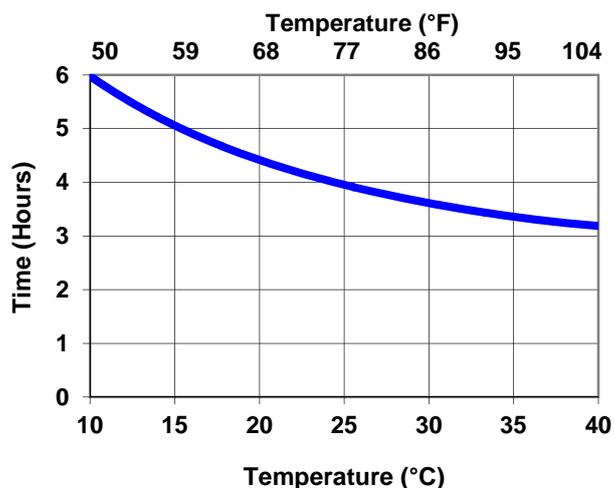
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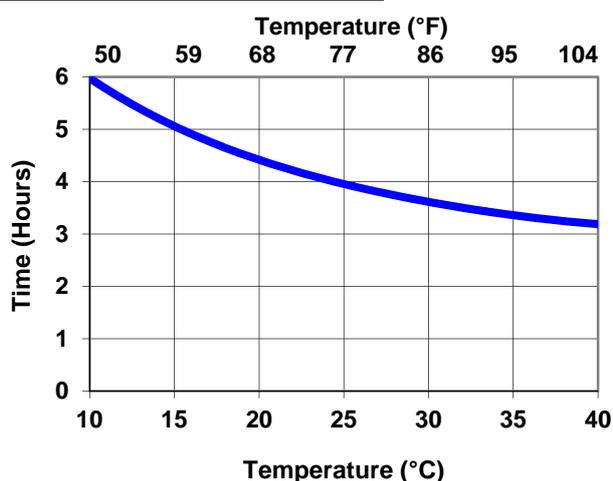
Touch Dry



Hard Dry



Minimum Overcoating With Self



Maximum Overcoating With Self

There is no maximum time limit to overcoat with self.

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3. COATING APPLICATION PROCEDURES

- 3.1 Prepare all Non-Skid surfaces to be coated to the standard detailed in section 2.1 of this procedure.
- 3.2 Upon completion of the surface preparation, and after inspection by the Contractor Quality Control Department, International's Technical Service Representative (if present) will also inspect the whole area and mark up any substandard areas.
- 3.3 Thoroughly mask any areas to which the Intercryl 588 is not to be applied.
- 3.4 Ensure the ambient air and deck temperatures and relative humidity are within the limits set by sections 2.3.3 – 2.3.5 of this procedure.
- 3.5 Intercryl 588 is a one pack material containing Non-Skid aggregate. Always mix thoroughly with a power agitator before application. Make sure there is no aggregate on the bottom.
- 3.6 Do not thin paint.
- 3.7 Clean rubber booties are required for paint application.
- 3.8 When the area to be painted is clean and dry apply a full coat of Intercryl 588 to the specified film thickness. See section 5.4 for application methods.
- 3.9 Allow to dry for 1 - 6 hours (depending upon temperature and relative humidity) before inspecting the applied coating and checking the dry film thickness.
- 3.10 **Note that thick, carelessly applied coats will result in minimum coverage and be subject to mud-cracking and/or blistering.**
- 3.11 When hard dry, inspect the surface profile of the applied coating.
- 3.12 Once the full system has been applied, and has been accepted by the Contractor Quality Control Department, International's Technical Service Representative (if present) will check the dry film.
- 3.13 Ensure that the completed deck area is kept free of all traffic until the coated areas have fully cured.
- 3.14 Remove all masking.

4. TECHNICAL INSPECTION AND PROJECT CONTROL

Project control by regular inspection and agreement on future action is vital to successful deck coating projects, and in maximising the potential of a coating system.

All parties involved in the deck coating work must agree an inspection procedure prior to work commencing, this should outline how and when both work and inspection will be undertaken.

Prior to commencing the project the contractor(s) must be provided with copies of the relevant product data sheets. Attention should be drawn to pack sizes, mix ratios, thinning restrictions etc.

The International Paint Technical Service Representative (if present) should supervise initial mixing of the first drums of product to be applied to ensure that all parties are aware of mixing and application characteristics.

Daily meetings should be arranged to confirm performance of the work and inspection schedules, minutes of these meetings must be taken and circulated to all participants. Representatives of the contractor, shipyard and ship owner would normally be present at these meetings.

In the event of work continuing at any stage without the approval of International Paint, the Company cannot be held responsible for any subsequent failure of the deck coating system on the areas concerned. Such an event is termed an EXCEPTION. All parties MUST be officially informed in writing using the standard Exception Report Form immediately following the occurrence.

International Paint, and any other authorised personnel, may inspect any stage in the process.

Contractors must supply interpreters if necessary.

On completion of the project all relevant documentation must be retained, and safely archived, by the Local Technical Service Manager.

Inspection equipment for measurement of profile depth, humidity, wet and dry film thickness, etc should be of approved types and should be within calibration limits.

NOTE: When measuring the dry film thickness of coatings, the d.f.t. gauge must be calibrated prior to use as follows:

1. Check that the probe is clean.
2. Place the probe on a sample of millscale-free **smooth** steel of thickness greater than 1mm.
3. Calibrate the instrument to zero.
4. Select a certified shim of similar thickness to that expected for the coating under test.
5. Calibrate the gauge to the shim thickness.
6. Check that the gauge reads zero when replaced on the smooth steel sample.

Measurement of dry film thickness is described in ISO Standard 2808:2007 and in ASTM D7091:2005.

5. GENERAL NOTES

5.1 DECK AND AIR CONDITION

Prior to commencement of surface preparation it is essential that the deck is clean, dry, and in a condition suitable for surface preparation and application of the deck coating. The following briefly outlines the minimum requirements:

All grease, oil and especially salts must be removed from all surfaces – waterborne materials will not tolerate them.

Apply coatings only within ambient air and deck temperatures and relative humidity limits set by this procedure.

5.2 STORAGE

Intercryl 588 must be protected from freezing at all times during storage. Store at 40°F – 100°F (4°C – 38°C) and avoid direct sunlight.

For maximum performance keep Intercryl 588 at 50°F – 75°F (10°C – 25°C) for a period of not less than 24 hours immediately prior to application.

Intercryl 588 should be stored in tightly closed containers.

5.3 CLEANING

With all waterborne coatings initial cleaning of spray equipment is crucial. Prior to utilization, spray equipment, pumps, lines and guns which previously had been used for solvent borne coatings must be initially cleaned with International GTA138 Thinner, followed with water. After use, clean all equipment with water followed with International GTA138 Thinner.

It is good working practice to periodically flush out spraying equipment during the course of the working day with water.

All surplus materials and empty containers should be disposed in accordance with appropriate regional requirements.

5.4 PAINT APPLICATION METHODS

Efficient mechanical stirrers for the correct mixing of Intercryl 588 must be used. Ensure there is no aggregate on the bottom.

Apply by conventional or airless spray, brush or roller.

All spray equipment must be in good working order and be capable of performing to the output requirements defined in International's product technical data sheets.

Tips must not be in a worn condition.

Specific paint application considerations for Intercryl 588 are as follows:

- For airless spray, a minimum 45:1 ratio pump should be used. The spray tip should be of orifice 0.48-0.53mm (0.019-0.021 inch).
- For conventional spray, suitable proprietary equipment should be used.
- A china bristle brush is recommended for brush application.
- When applying by roller, use an All Purpose Roller Cover over 9.5mm (3/8 inch) pile, smooth to medium. Prewash the roller cover prior to use to remove loose fibers.

6. HEALTH & SAFETY

6.1 INTRODUCTION

Some coatings contain volatile flammable organic solvents which can form explosive mixtures with air. Definite safety precautions must be taken whilst applying this type of coating. Detailed attention must be given to the following points:

- Danger of explosion or fire.
- Provision of a suitable breathing environment for workers.
- Prevention of skin irritation problems.

6.2 DANGER OF EXPLOSION OR FIRE

The key factor in preventing an explosion or fire, when considering the application of coatings in open air is elimination of naked flames, sparks and any ignition sources.

Welding, cutting or grinding in the vicinity of paint application should be forbidden until paint fumes are totally dispersed.

Smoking must be prohibited in the vicinity of paint application.

Airless spray equipment must be earthed (because of the danger of static electricity build-up).

Mobile telephones and electrical cameras must not be used in the vicinity of paint application until paint fumes are totally dispersed.

6.3 SOLVENT VAPOUR AND PAINT MISTS - PROTECTION OF PAINTING PERSONNEL

Painters must wear protective clothing, e.g. overalls, gloves, and suitable footwear of non-spark type.

6.4 SKIN IRRITATION

If the correct protective clothing has been worn, e.g. overalls, gloves, air fed hood etc, no discomfort should be experienced from skin irritation. Any small areas not protected by clothing, e.g. wrists or neck, can be treated with a non-greasy barrier cream. (Petroleum jelly is not recommended as this can assist the transport of solvents into the skin).

Any areas of skin accidentally contaminated with paint must be thoroughly washed with soap and water. A skin conditioner that is designed to replace the natural oils in the skin can be used.

Note

1. The preceding safety information is given for guidance only.
2. It is imperative that, prior to the commencement of any hold coating project, local Regulations regarding Health and Safety be consulted.
3. Consult the relevant Product Health & Safety Data Sheets prior to use.

Application Guidelines

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