

# Intercure 99 Application Guidelines

Prepared by: M&PC Technical Operations Department

International Paint Ltd.  
[www.international-pc.com](http://www.international-pc.com)

*The information in this guideline is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this guideline without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this guideline or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. THEREFORE, UNLESS WE SPECIFICALLY AGREE IN WRITING TO DO SO, WE DO NOT ACCEPT ANY LIABILITY AT ALL FOR THE PERFORMANCE OF THE PRODUCT OR FOR (SUBJECT TO THE MAXIMUM EXTENT PERMITTED BY LAW) ANY LOSS OR DAMAGE ARISING OUT OF THE USE OF THE PRODUCT. WE HEREBY DISCLAIM ANY WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this guideline is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this guideline is current prior to using the product.*

<b>ID</b> 99_uk	<b>Rev.</b> 00	<b>Date</b> 29/09/2014	<b>Intercure 99</b>	<b>Page 1 of 14</b>
--------------------	-------------------	---------------------------	---------------------	---------------------

The International Paint Application Guidelines have been produced and revised in line with the Worldwide Protective Coatings Product Range. The purpose of the guidelines is to ensure that the product, as applied, provides the required level of durability.

Successful in-service performance of a coating system depends upon both the correct choice of product(s) and the adoption of the correct guidelines 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. Under no circumstances do these responsibilities rest with International Paint. We will generally provide for the presence of a Technical Service Representative at key stages during the performance of the contract. The role of the International Paint Technical Service Representative is advisory only unless otherwise specified in the terms and conditions of the contract. The information contained herein presents guidelines for the application of Intercure 99 to correctly prepared surfaces.

## Table of Contents

1. Introduction	3
2. Where to Apply Intercure 99	3
3. Storage of Material	3
4. Environmental Conditions for Application	4
5. Surface Preparation	4
6. Primers and Overcoat Intervals	5
7. Mixing	6
8. Pot Life	6
9. Airless Spray Application	7
10. Air Spray Application	7
11. Brush and Roller Application	8
12. Standard of Cosmetic Finish	8
13. Possible Film Defects	9
14. Measurement of Dry Film Thickness	11
15. Inspection and Repair	11
16. Health and Safety	12
17. General Notes	13
APPENDIX – Fabrication Rectification	14

## 1. INTRODUCTION

Intercure 99 is a novel, high performance gloss coating that is primarily intended as a one coat primer/finish to provide both anticorrosion and barrier protection in direct-to-metal applications in moderate environments (ISO 12944 C3 or less). It is also suitable as a finish when applied over suitable primers in onshore environments which are more aggressive than C3 (as defined in ISO 12944-2). It is capable of providing corrosion protection to steel as soon as it is hard dry and may be stacked with care after the product is hard dry (please see the product data sheet).

This document gives detailed guidance on the use and application of Intercure 99 and should be read in conjunction with the Intercure 99 Technical Datasheet and Material Safety Datasheet (MSDS).

## 2. WHERE TO APPLY INTERCURE 99

Intercure 99 is suitable for application in the steel fabrication shop or at applicators' works, provided sufficient time is given for through dry (hard dry) properties to be achieved. At this point the system can be readily handled but care should be taken during transportation and erection to minimise mechanical damage. It rapidly hardens in the first 24 hours yet remains flexible, thus affording good damage and impact resistance.

Typically applied direct to metal, as a one coat system, Intercure 99 is effective in moderately corrosive environments up to ISO 12944 C3, offering early water resistance. It should not be used as a one coat system in the higher corrosivity environments of ISO 12944 C4 and C5. In these environments, Intercure 99 should be used as part of a two coat system over a suitable primer (covered in section 6). For C5 environments, Intercure 99 should only be specified for onshore assets and should not be specified offshore.

Intercure 99 offers hard dry times of 1.5 hours at 25°C/50%RH (77°F/50%RH) and is therefore extremely valuable when rapid drying and handling is required. These dry times are further reduced as temperature and humidity levels increase.

## 3. STORAGE OF MATERIAL

Due to its moisture sensitive nature, Intercure 99 should always be stored in covered dry conditions. If the outside of the tin becomes wet it should be thoroughly dried before opening to ensure no moisture contamination occurs. Ideal storage temperature ranges from 5°C- 30°C (41°F-86°F).

At lower temperatures the base component will become more viscous and may require warming or thinning prior to application. At higher temperatures, materials will flow more easily and dry faster. It should be noted that there will be pot life variations depending on the temperature.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 3 of 14
-------------	------------	--------------------	---------------------	--------------

## 4. ENVIRONMENTAL CONDITIONS FOR APPLICATION

Intercure 99 is moisture sensitive and both the rate of drying and pot life can be affected; therefore environmental monitoring is important. The following parameters apply and should be measured and recorded:-

Application should be conducted under cover from the elements and Intercure 99 should not be exposed to external weather conditions until through dry properties have been achieved.

Ideal application temperature is between 15°C and 25°C (59°F and 77°F).

The surface onto which Intercure 99 is to be applied must be clean, dry and free from contaminants. Steel temperatures must always be 3°C (5°F) above the dew point.

Relative humidity (RH) during application and curing should ideally be between 40% and 70%. The higher the humidity, the faster the rate of cure; however, gloss reduction may accompany higher levels of humidity, especially where this exceeds 85%. Rate of cure (touch/hard dry times) will be affected at low relative humidity (<25%).

Moisture contamination in the mixed product may result in a significant reduction in pot life. Temperatures above 40°C (104°F) will also impact on pot life although 45 minutes is typical under these conditions. Conversely, low temperatures (below 10°C (50°F)) may extend pot life and will also retard the drying process.

Ambient conditions should be measured at regular intervals, particularly if conditions are changeable, for example, if coated steel is subsequently stored outside prior to full cure being achieved.

## 5. SURFACE PREPARATION

In common with most protective coatings schemes, the performance level of Intercure 99 is ultimately determined by degree of surface preparation. The higher the degree of surface preparation achieved, the greater the long-term performance.

For optimum performance, all surfaces to be coated should be clean, dry and free from contamination including dirt, salts, oil and grease. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000. Where necessary, remove weld spatter and smooth weld seams and sharp edges.

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP6, where this is not practical prepare to a minimum of SSPC-SP11, ensuring that the steel doesn't become 'polished'; a minimum surface profile of 50µm (2 mils) is required.

### **Abrasive Blast Cleaning**

All steel surfaces to be coated should be correctly prepared prior to application of the coating system. The preferred method of preparation is abrasive blast cleaning to Sa2½ (ISO 8501-1:1988) or SSPC-SP6.

A minimum surface profile of 50 microns (2 mils) is recommended.

### **Primed Surfaces**

Primers should be clean and free of dirt, grease, oil, zinc salts or other deleterious matter. If the primer has exceeded its maximum overcoating interval, then abrasion may be necessary to provide a surface that will accept the Intercure 99.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 4 of 14
-------------	------------	--------------------	---------------------	--------------

## 6. PRIMERS AND OVERCOAT INTERVALS

Intercure 99 has been designed to provide rapid cure handling properties and as a result, not all primer coats are compatible in terms of cure properties and intercoat adhesion. The following primers are currently approved for use in conjunction with Intercure 99 in onshore C4 and C5 corrosive environments.

Intercure 200HS            C4  
 Interzinc 52            C4 and C5 (curing agents EPA176 and EPA180 only; EPA177 is not suitable)

The overcoating intervals quoted on the relevant product datasheet for the approved primers are not applicable to this finish coat. The maximum overcoating interval for Intercure 99 over Intercure 200HS and Interzinc 52 is 28 days. All primer surfaces should be clean, dry and free of contamination such as oil, grease, dirt, dust, etc.

### Additional Recommendations

Over-application of Intercure 99 will adversely affect the development of intercoat adhesion.

In instances where over-application of Intercure 99 has occurred, the satisfactory level of intercoat adhesion will be extended and could be in excess of 1 month. This issue will be further exacerbated if the primer itself is over-applied.

When considering the use of approved primers, the following is recommended: Application should occur in controlled environmental conditions as part of a new construction process. Temperatures during application should be between 5°C and 40°C, and, ideally between 15°C and 25°C.

The table below is for guidance purposes.

Product	Temperature	<sup>2</sup> Minimum overcoating time	Minimum time to adhesion inspection following application of IC99	Comments
<sup>1</sup> Interzinc 52	5°C – 15°C	48-24hrs	48hrs	<sup>3</sup> Satisfactory intercoat adhesion can take between 2-7 days to develop.
	>15°C up to 40°C	As per Interzinc 52 datasheet	24hrs	
Intercure 200HS	5°C – 15°C	24hrs	48hrs	<sup>3</sup> Satisfactory intercoat adhesion can take between 2-7 days to develop.
	>15°C up to 40°C	As per Intercure 200HS datasheet	24hrs	

<sup>1</sup>The use of Interzinc 52 is required for approved specifications in C5-M environments. The guidelines provided are to ensure optimum intercoat adhesion for long term performance in such aggressive environments.

<sup>2</sup>Over-application of the primer coat will extend the minimum overcoating time as published on the relevant primer datasheet.

<sup>3</sup>When scheduling adhesion inspections, it should be noted that when temperature is 5°C, 7 days curing will be required. If in doubt, it is recommended that a small trial is carried out under relevant conditions. Provision of Technical Service can be provided upon request.

Maximum overcoating time for both primers at all temperatures is 28 days. If this is exceeded, it is recommended that the primer surface is lightly abraded and cleaned down prior to overcoating with Intercure 99.

## 7. MIXING

This product is supplied in two components; a pigmented base (Part A) and curing agent (Part B). Both tins should be kept dry until used. On opening the base it should be slowly mixed with a pallet knife (or similar implement) to reincorporate any liquid that may have separated out to the surface. The sides and bottom of the container should be scraped to ensure all settlement and residue is recombined. It should then be mixed with a mechanical agitator (air-powered equipment) for a few minutes to ensure full incorporation.

The curing agent should then be added to the base in its entirety and the combination power mixed with a mechanical agitator for several minutes until a uniform paint is obtained. When power mixing, use a slow speed to avoid air entrapment.

For tinted colours, a 5 minute induction time is recommended to fully develop colour. Failure to allow induction, particularly at low temperatures, may result in inconsistency of the finished shade.

The quantities of base and curing agent supplied in the packs are such that the combination should not exceed the lip of the larger tin. There will also be room for partial thinning with International GTA713 (or GTA056) only, although this would not normally be required. The use of alternative thinners, particularly those containing alcohols, can severely affect the curing mechanism and/or workable pot life of the coating.

### Note

**Intercure 99 reacts with atmospheric moisture and will form a layer of skin on the surface if left exposed for a prolonged period. Once the containers have been opened, it is recommended that the material be mixed and used as soon as possible. If a skin does form it should be removed and not re-incorporated into the paint. A thin layer of solvent added to the surface of the paint on commencing will prevent excessive skinning. International GTA713 or GTA056 should be used for this.**

**The importance of thorough and correct mixing cannot be over-emphasised and is essential in order to ensure the precise performance of the coating.**

Do not mix more material than can be used within the pot life of the material. For small packs, hand mixing is possible, but can be labour intensive. As a result, hand mixing is not recommended when large quantities of material are to be used. Any surplus or unused base (Part A) and curing agent component (Part B) exposed to the atmosphere for more than 2 hours should be **discarded and not used.**

## 8. POT LIFE

If the stated pot life is exceeded, then the final coating film may have inferior properties and will not give the specified level of performance. **Intercure 99 must not be applied after the stated pot life has been exceeded.**

Pot life times outlined below refer to 50% relative humidity:

Temperature	Pot life
5°C (41°F)	2 hours
15°C (59°F)	1 hour
25°C (77°F)	45 minutes
40°C (104°F)	45 minutes

**Note:** Relative humidity as well as temperature can affect the pot life. Generally, the higher the humidity, the shorter the pot life. Environmental measurements should be made before and during application as to the exact environmental conditions.

## 9. AIRLESS SPRAY APPLICATION

Airless spray is one of the methods of application recommended to give the optimum cosmetic appearance of Intercure 99.

The airless spray equipment should be in good working order. Pump ratios of 32:1 up to 60:1 can be used or any pump capable of producing a minimum output pressure of 176kg/cm<sup>2</sup> (2503 psi). Paint lines should have a minimum internal diameter of 9.5mm (3/8”).

Tip size can be from a minimum of 0.38mm (15 thou) up to 0.48mm (19 thou), depending on application requirements.

Tip angles will depend on the profile and area of the steelwork to be sprayed but are preferable to be low, i.e. less than 50°, to assist better wet film formation and reduce potential overspray.

Airless gun type used should be rated above the maximum working tip pressure anticipated.

It is recommended to flush out all application equipment with International GTA713 or GTA056 thinner prior to application to ensure that there is no contamination and/or moisture in the lines. All equipment should be cleaned immediately after use. It should be noted that Intercure 99 is moisture curing therefore it is good working practice to periodically flush out spray equipment during the course of the working day.

**Note:** Intercure 99 is designed to be applied between 150-250 microns DFT (6-10 mils) in one spray coating without the need for thinning via air spray and airless spray techniques. This product must only be thinned using the recommended International thinners, GTA713 or GTA056. The use of alternative thinners, particularly those containing alcohols, can severely affect the curing mechanism and/or workable pot life of the coating. Application at higher film thicknesses than recommended may result in a higher gloss appearance.

## 10. AIR SPRAY APPLICATION

Conventional air spray with attached pressure pot is best achieved when using a De Vilbiss MBC or JGA gun or an equivalent design with a 704 or 765 air cap and an E fluid tip with a minimum of 1.4mm (55 thou “) diameter and up to a 1.8mm (70 thou “) diameter. A moisture and oil trap in the main air supply line is essential.

**A 12.5mm (½ inch) internal diameter paint line is recommended with all in-line filters removed. The pot pressure should be kept as low as is possible.**

When starting to apply, keep the fluid tip fully open at the commencement and adjust until optimum settings are obtained.

Typical pressures:

Atomising Pressure : 40-50 p.s.i. (2.8-3.5Kg/cm<sup>2</sup>)  
 Pot Pressure : 10-20 p.s.i. (0.7-1.4Kg/cm<sup>2</sup>)

### **Note**

To achieve optimum finish characteristics when applying by air spray equipment, Intercure 99 may require thinning with the recommended solvent.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 7 of 14
-------------	------------	--------------------	---------------------	--------------

## 11. BRUSH AND ROLLER APPLICATION

Brush and roller are suitable methods of application for Intercure 99 although the standard of cosmetic appearance may be reduced. They are best used on small areas or stripe coating, where minimal overlap to other areas is required and where local site access prevents spray application. When using a brush/roller technique it may be necessary to apply multiple coats to achieve specified system dry film thickness. Typically, 100 – 150 microns (4.0 – 6.0 mils) dry film thickness can be achieved.

Wet film thickness readings should be taken periodically during application using a wet film comb or similar. Wet film thickness readings are a guide to the applicator to enable him to judge his application technique. They should be taken as frequently as necessary to enable a 'feel' for the material to be established.

Dry film thickness readings should be measured upon completion and any low areas should be brought up to specification.

Attention should be given to the pot life for this product when applying by brush and roller. Periodic cleaning (using recommended International cleaners as stated on the technical datasheet) will be required to prevent build-up of paint on the equipment and therefore retain 'workability', efficiency of transfer from brush/roller to steel and aesthetic requirements.

## 12. STANDARD OF COSMETIC FINISH

Typically, at a dry film thickness of 150 – 250µm (6 – 10 mils) a gloss finish is achieved (60-80 gloss units at a 60° angle measurement as per ISO 2813 or ASTM D523 depending upon colour). At higher dry film thickness, gloss levels will tend to increase.

The degree of cosmetic finish attained is dependent on the quality of application, applicator experience and the equipment employed.

The applicator is advised to use the maximum/minimum film thickness guidelines and avoid using a mixture of application techniques whenever possible.

Airless spray and conventional air-spray applications will generally give the best results in terms of uniform films. The level of gloss and surface finish may be affected when using other techniques such as brush/roller application, which creates a more uneven appearance due to the presence of brush marks.

Intercure® 99 should be allowed to cure for a minimum of 48 hours at 20°C prior to any label application. It should be noted that label adhesives do vary and this can affect the required cure period as can higher dry film thicknesses and any variation in the environmental conditions such as temperature and relative humidity. It is therefore recommended that a trial is carried out using the required labels and under the paint shop cure conditions in order to determine the appropriate cure period prior to label application. Failure to observe this may result in an unsatisfactory appearance of the label, such as blistering.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 8 of 14
-------------	------------	--------------------	---------------------	--------------



## 13. POSSIBLE FILM DEFECTS

The functions of Intercure 99 coating are:

- To provide corrosion protection direct-to-metal in moderate corrosion environments;
- To provide corrosion protection over an approved primer in higher corrosion environments;
- Rapid drying to enable quick handling of steelwork and rapid throughput within the paint shop;
- Good gloss and uniform appearance.

A number of potential defects are detailed below together with recommended remedial treatment.

### Gloss Reduction

Above a relative humidity of 80% it is possible that the coating will noticeably reduce in gloss so regular 'environmental' measurements should be conducted throughout application. Overspray may also lead to gloss reduction and this is referred to below. A thin coat, around 75-100µm dry film thickness may be applied over the initial coat once it has attained hard dry condition to alleviate this.

At temperatures exceeding 35°C (95°F) the rapid drying film properties may hinder good film flow which will result in perceived gloss reduction due to the subsequent uneven surface. The addition of 5% solvent in such instances may improve film flow where surface dry times are rapid. The thinning solvent should be either International GTA713 or GTA056.

Excessive blast profiles on substrates (e.g. those higher than half of the total film thickness applied) may lead to lower gloss as a result of an uneven film surface. To overcome this problem, the blast profile should be monitored and reduced or Intercure® 99 should be applied at the higher recommended dry film thickness.

### “Orange Peel”

This is due to application technique and the effect can be minimised by thinning of the material and/or adjusting the spray/pump pressures and ensuring that the material is at a working temperature of 15°C-25°C (59°F-77°F). This effect normally occurs if the coating is applied with the gun held too close to the workpiece.

### Over-Application

Intercure 99 is tolerant to some over-application. However, excessive film thickness may lead to extended cure times and potential blistering, especially when operating at elevated temperatures.

It is advised that Intercure 99 should not be specified at a nominal dry film thickness in excess of 250µm (10 mils) per coat.

### Under-Application

If insufficient coating is applied then coalescence will be poor and the steel profile or primer will be clearly visible beneath the coating.

Stripe coats should be applied to bolts, welds, angles, corners and other difficult areas which are likely to receive less than the specified film thickness.

When the material is theoretically up to specified thickness, film thickness readings must be taken and any low areas brought up to specification.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 9 of 14
-------------	------------	--------------------	---------------------	--------------

## Overspray / Dry Spray

Overspray will have the appearance of poor coalescence and/or surface roughness. This will result in poor aesthetics and reduced gloss.

This can be minimised by work planning (i.e. taking into account the rapid touch dry times), good spray technique, thinning, reduction of air pressure, sensible tip size, etc., depending on the structure to be sprayed (i.e. using a larger tip results in less “passes” to achieve a wet film although it will be more difficult to control the amount of paint being applied at any one time). If the effect is severe, leaving a rough, uneven surface, a further thin coat may have to be applied on top of it once it has dried sufficiently. Touch dry times can be attained in as little as 15-20 minutes given the right environmental conditions of high temperature and humidity. It is advisable not to apply a fresh coat which will overlap a drying coat if this time period has been passed.

For large areas or areas where overspray may be unavoidable, it is advised that the adjacent steelwork be covered or taped to prevent overspray damaging cosmetic appearance.

## Pinholes

Pinholes may occur as a result of application over porous substrates, hand-prepared substrates, surfaces that are suffering from overspray/dry spray or poorly cleaned surfaces containing dust debris. Surfaces should be suitably prepared before application commences. Pressurised air may be used to blow down the surfaces but it should first be checked for cleanliness to avoid further contamination of the substrate, e.g. to ISO 8573 or ASTM D4266. If pinholing is observed, holiday testing can be used to confirm whether or not there is a conductive route through to the steel surface. Surface contaminants on zinc primers, i.e. white zinc salts, should be removed.

## Sagging

This is the result of excessive film thickness and poor spray technique or over-thinning. If the areas are greater than 100mm equivalent diameter, the coating should be removed and re-applied. Sagging may be prevented by using a smaller tip size, by avoiding thinning and by carrying out regular wet film thickness readings.

## Soft Films

Films which show signs of being mobile after the hard dry time indicate lack of curing. This may be as a result of poor mixing, the addition of an alcohol-containing solvent or even omission of the curing agent and affected areas will require removal and re-application of Intercure 99. Film hardness can be affected by temperature and humidity; at lower temperature and humidity the film will need further time to reach hard dry properties.

If the Intercure 99 is applied to a zinc primer too quickly (i.e. before hard dry time is achieved) this can lead to a softening effect due to solvent entrapment between the two coats. This can be detrimental to the adhesion between the two films. Overcoat intervals quoted in the data sheet should be adhered to for each temperature.

## Bubbling, Blistering or Microfoaming

This can present itself where the film build is excessive or where moisture contamination has occurred. Such defects may be more pronounced at temperatures  $\geq 40^{\circ}\text{C}$  depending on the amount of moisture incorporated into the mixed product. This can be avoided by ensuring that:

- The pot life is observed;
- The recommended International thinner is used for cleaning and thinning at all times including flushing the pump prior to use;
- Excessive solvent addition is avoided (e.g. no more than 2-3%);
- Environmental conditions are appropriate for application and cure;
- Part-mixing of base and curing agent is avoided;
- Moisture traps on pumps are checked regularly;
- Clean brush/rollers are used;
- Good control of the dry film thickness.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 10 of 14
-------------	------------	--------------------	---------------------	---------------

## 14. MEASUREMENT OF DRY FILM THICKNESS

An electronic dry film thickness gauge capable of storing statistical data is strongly recommended to enable a meaningful DFT survey to be conducted. Refer to equipment manufacturer for calibration advice.

### Tolerances

Specified thicknesses for Intercure 99 are nominal, rather than minimum, values. Client specification on frequency and method of DFT measurements will take precedence; however, as a guide, ISO 19840: 2004 recommends the following tolerances:

- Individual dry film thicknesses of less than 80% of the nominal dry film thickness are not acceptable.
- Individual values between 80% and 100% of the nominal dry film thickness are acceptable provided that the overall average (mean) is equal to or greater than the nominal dry film thickness.

Care shall be taken to achieve the nominal dry film thickness and to avoid areas of excessive thickness. It is recommended that the maximum dry film thickness is not greater than 2 times the nominal film thickness.

## 15. INSPECTION AND REPAIR

### Damage Down to Steel

For small areas of damage, single coat applications only:

Clean down to remove all dirt, grease, oil or other deleterious matter. Remove any loose coating and/or corrosion products by abrading the surface to a minimum of SSPC-SP11, feathering back the edges of sound coating by 50mm to provide a suitable overlap area. Intercure® 99 produces a hard, glossy film which could have a detrimental effect on the adhesion of subsequent coats and therefore overlap areas should be correctly prepared. The sound coating should be first treated by thorough surface abrasion or another suitable process which will not cut through or detract from the performance of the underlying coating. Thorough abrasion is required to provide a key for adhesion and typically an abrasive grade of P60 has proved to be successful. Care must be taken not to polish the steel.

Patch prime the bare areas using Intercure 99 thinned by 5% (with the appropriate International thinner) using brush application, ensuring that it is worked into the profile of the steel to allow good adhesion. The coating can then be reinstated with unthinned paint by roller application to the required dry film thickness; this may require multiple applications, taking care to observe the relevant overcoating interval.

For large areas of damage or for multi-coat systems:

Surface preparation should be carried out as per the original standard, i.e. spot blast to IS 8501-1:2007 Sa2½ (SSPC-SP6/NACE No. 3), followed by reinstatement of the original specified protective scheme. It is advised that adjacent areas to the repair site be 'masked' off with tape to help prevent fine pin-holing at the edges of the repair site.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 11 of 14
-------------	------------	--------------------	---------------------	---------------

Note: As mentioned above, Intercure<sup>®</sup> 99 produces a hard, glossy film which could have a detrimental effect on the adhesion of subsequent coats and therefore overlap areas should be correctly prepared. The sound coating should be first treated by thorough surface abrasion, sweep blasting or another suitable process which will not cut through or detract from the performance of the underlying coating. Thorough abrasion is required to provide a key for adhesion and typically an abrasive grade of P60 has proved to be successful. For large areas, palm sanders have been used successfully. It should be noted that overlapping onto unprepared areas should be avoided as this could reduce the adhesion of the overlap areas. Once suitably abraded, solvent wash to remove any surface contamination, then apply a fresh coat of the product in accordance with the technical datasheet.

It is important to limit the amount of damage and subsequent repair work as much as possible so as not to detract from the overall appearance of the coating. By ensuring the correct film thickness is applied first time and that through dry properties are attained before handling, the amount of repair required can be minimised.

#### Damage Down to Sound Primer

Clean down to remove all dirt, grease, oil or other deleterious matter. Remove any loose coating by abrading the surface, feathering back the edges of the surrounding sound coating. The Intercure 99 can then be reinstated by roller application to the required dry film thickness; this may require multiple applications, taking care to observe the relevant overcoating interval.

## 16. HEALTH AND SAFETY

Intercure 99 is intended for use only by professional applicators in industrial situations in accordance with the advice given in this leaflet and on containers and should not be used without reference to the Material Health and Safety Data Sheets (MSDS) which International Protective Coatings has provided to its customers. If for any reason a copy of the relevant Material Health & Safety Data Sheets (MSDS) is not immediately available the user should obtain a copy before using the product.

**Warning: Contains isocyanate. Wear air-fed hood for spray application.**

Minimum safety precautions in dealing with all paints are:

- Take precautions to avoid skin and eye contact (i.e. use overalls, gloves, goggles, face mask, barrier creams etc.).
- Where possible provide adequate ventilation. In confined spaces with poor or no ventilation, use airfed hoods.
- If product comes in contact with the skin, wash thoroughly with lukewarm water and soap or suitable industrial cleaner. Do not wash with solvents. If the eyes are contaminated flush with water (minimum 10 minutes) and obtain medical attention at once.
- These coatings contain flammable materials and should be kept away from sparks and open flames. Smoking should be prohibited in the area.

Observe all precautionary notices on containers.

ID 99_uk	Rev. 00	Date 29/09/2014	<b>Intercure 99</b>	Page 12 of 14
-------------	------------	--------------------	---------------------	---------------

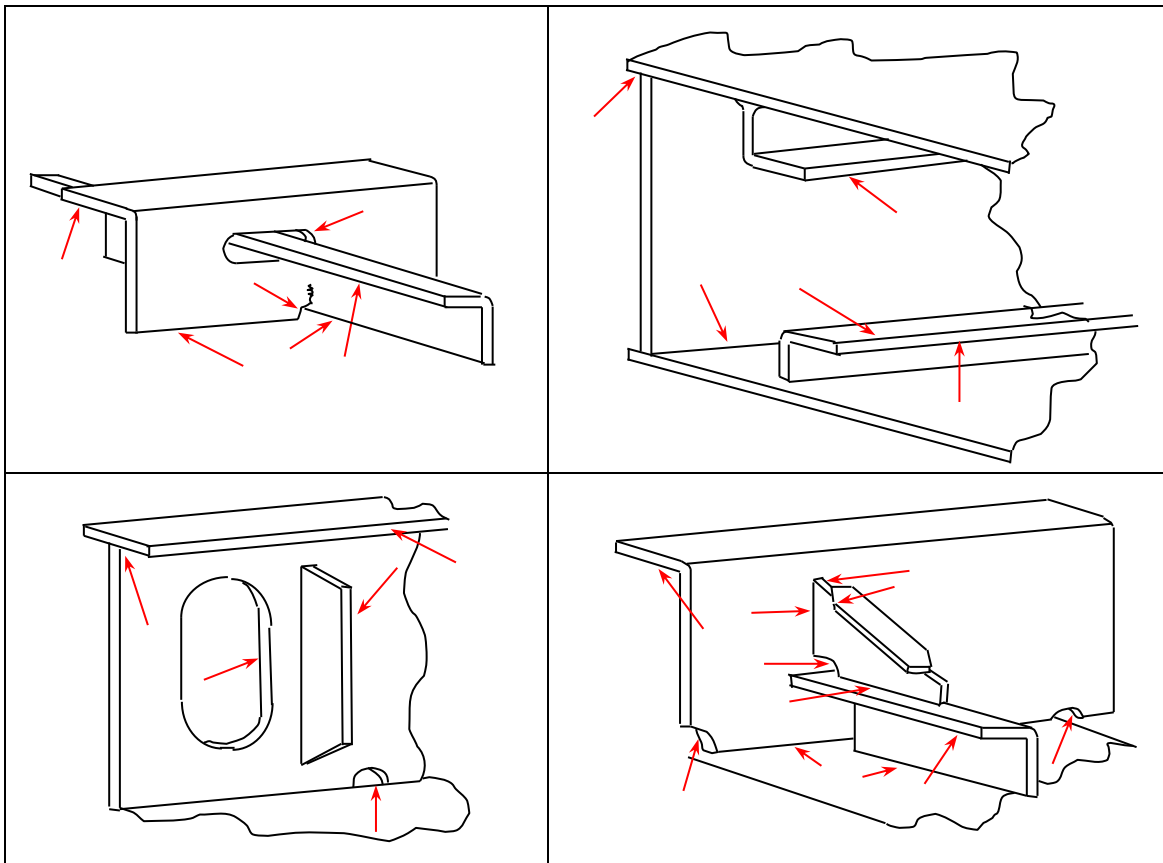
## 17. GENERAL NOTES

### Stripe Coating

Stripe coating is an essential part of good painting practice. Typical areas where stripe coats must be applied include:

1. Behind bars
2. Plate edges
3. Cut outs i.e. scallops, manholes etc.
4. Welds
5. Areas of difficult access
6. Small fitments of difficult configuration
7. Areas of pitting

Note: The above list is not comprehensive, all areas must be included. The following diagrams indicate key areas requiring stripe coating:

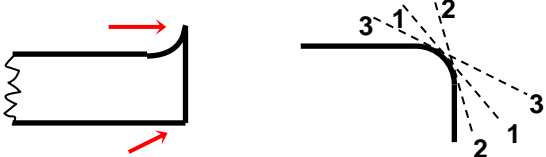
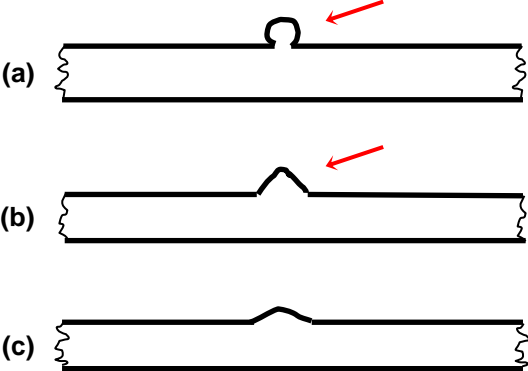
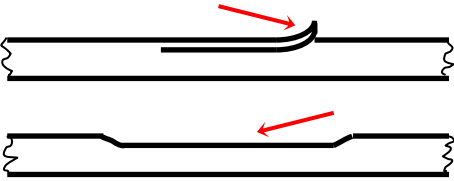
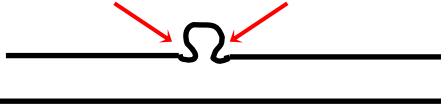

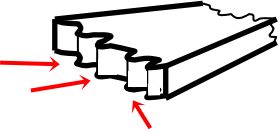



In general, stripe coats should be applied by brush. Application by roller should be limited to the inside of scallops.

In exceptional circumstances it may be acceptable to apply a stripe coat to the backs of angle bars by narrow angle spray. The use of spray applied stripe coats however, must be discussed and agreed with the International Paint representative on site.

✘ , **International** and all product names mentioned in this publication are trademarks of, or licensed to, Akzo Nobel.

## APPENDIX 1 – Fabrication Rectification

ITEM	PROBLEM / SOLUTION	
<b>Sharp Edge</b>	Remove sharp edges or gas cutting edges with grinder or disc sander to achieve a radius of 1.5mm-2.0mm	
<b>Weld Spatter</b>	<ol style="list-style-type: none"> <li>1. Remove spatter observed before blasting by grinder, chipping hammer etc.</li> <li>2. For spatter observed after blasting:               <ol style="list-style-type: none"> <li>a) Remove with chipping hammer /scraper etc.</li> <li>b) Where spatter is sharp, use disc sander or grinder until obtuse</li> <li>c) Obtuse spatter – no treatment required</li> </ol> </li> </ol>	
<b>Plate Lamination</b>	Any lamination to be removed by grinder or disc sander	
<b>Undercut</b>	Where undercut is to a depth exceeding 1mm and a width smaller than the depth, repair by welding or grinding may be necessary	
<b>Manual Weld</b>	For welding bead with surface irregularity or with excessive sharp edges, remove by disc sander or grinder	
<b>Gas Cut Surface</b>	For surfaces of excessive irregularity, remove by disc sander or grinder	

 , International and all product names mentioned in this publication are trademarks of, or licensed to, Akzo Nobel.