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# Interchar<sub>®</sub> 2200 **Application Guidance Notes**

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TECHNICAL AND APPLICATION DATA herein is for the purpose of establishing a general guideline of the coating and proper coating application procedure. Test performance results were obtained in a controlled laboratory environment and International makes no representation that the exhibited published test results, or any other tests, accurately represent results actually found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance, and use of the coating(s).



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### SCOPE AND PURPOSE

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 a coating system, as applied, provides adequate protection and fire protection properties.

Successful in-service performance of an intumescent fire protection system depends upon both the correct choice of product and the adoption of the correct guidelines for surface preparation and product application.

The responsibilities for achieving the specific standards outlined, and for carrying out surface preparation and product 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 Interchar 2200 for repair of damaged single pack acrylic Interchar substrates.

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#### 1.0 Introduction

Interchar 2200 is a single pack solvent borne intumescent filler designed for repairing small areas of mechanically damaged single pack acrylic Interchar intumescent coatings, where repair with original material is not practically feasible.

This document gives detailed guidance on the use and application of Interchar 2200 and should be read in conjunction with the Technical Datasheet and Material Safety Datasheet (MSDS).



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## 2.0 Where to use Interchar 2200

Interchar 2200 can be used in both on-site or off-site application situations

Interchar 2200 can be used over a range of approved priming systems and overcoated with a range of approved top coats (refer to section 6 more details). Only approved primers and topcoats should be used; for use of other primers and topcoats, please contact International Protective Coatings for assistance.

The successful use of Interchar 2200 typically requires the following:

Good Surface Preparation	To provide optimum adhesion to the primer to ensure sufficient adhesion for the developing char under a fire scenario.
Priming System	To provide anti-corrosive protection to the steelwork, Interchar 2200 must always be applied to a suitably primed steel substrate.
Interchar Product	In a fire scenario, the intumescent coating reacts to heat by rapidly swelling to produce a carbonaceous char which acts as an insulating layer between the steelwork and the elevated temperature of the environment.
Top Coat	Also known as sealer coats or finish coats to protect Interchar 2200 from moisture, provide a decorative cosmetic finish, and reduce dirt and dust retention.



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## 3.0 Storage of Materials

Interchar 2200 should be stored in dry, shaded conditions away from sources of heat and ignition. Recommended storage conditions are between 5°C and 40°C (41-104°F). For optimum application characteristics, Interchar products should be stored at minimum 15°C (59°F) storage temperatures for 24 hours prior to use.

The shelf life of Interchar 2200 at 25°C (77°F) is 12 months from date of manufacture, subject to re-inspection thereafter. Containers should remain unopened until needed and used in date order. Shelf life may be reduced if product is stored outside the recommended storage temperatures



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## 4.0 Environmental Conditions For Application

Interchar 2200 should be applied at steel temperatures between  $+5^{\circ}$ C and  $+40^{\circ}$ C ( $41 - 104^{\circ}$ F) The surface must be dry and the surface temperature must always be a minimum of  $3^{\circ}$ C ( $5^{\circ}$ F) above the dew point. The maximum acceptable relative humidity during application is 85%.

The area where Interchar 2200 is applied should be well ventilated. Any build-up of solvent vapour in the surrounding area will retard the drying of the filler. Interchar 2200 must be protected from condensation and water during application and drying

### **Un-topcoated Interchar 2200**

Interchar 2200 without a topcoat should only be applied where there is NO possibility of exposure to pooling or running water, driving rain, high humidity/condensation or chemical attack.

### **Topcoated Interchar 2200**

Topcoated Interchar 2200 MUST be specified when:-

• Application is taking place in "off-site" scenarios.

• The environment during the lifetime of the building is expected to be other than C1, as defined in ISO 12944-2.



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## 5.0 Surface Preparation

Correct surface preparation is the foundation for success of any coating application and intumescent systems are no exception.

All surfaces to be filled should be clean, dry and free from contamination including dirt, salts, oil and grease.

### Primed Surfaces

The primer surface should be dry and free from all contamination and Interchar 2200 must be applied within the overcoating intervals specified (consult the relevant primer product data sheet). The primer must have been applied to properly cleaned substrate detailed above.

Any Areas of primer breakdown, damage etc., should be prepared to the specified standard e.g. SSPC SP11, Power Tool Cleaning (for small areas) and patch primed prior to the application of the Interchar product.



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#### 6.0 **Primers & Overcoating**

Interchar 2200 must ALWAYS be applied over an approved priming system which will provide the required anticorrosive protection to the steelwork over the lifetime of the structure it is protecting. It is not designed to give anti-corrosive protection alone and is therefore NEVER applied directly to steel substrates.

Primer should be sufficiently cured in accordance with the primer manufacturers application instructions and/or product data sheet prior to application of Interchar 2200.



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## 7.0 Topcoats

Only topcoats approved by International Protective Coatings should be applied over Interchar 2200. A list of the approved topcoats can be found on the latest version of the relevant Interchar 2200 Product Technical Data Sheet. For other suitable topcoats consult International Protective Coatings.

The surface of the Interchar 2200 must be clean, dry and free from contamination before overcoating with the topcoat. The topcoat product must be applied within the overcoating intervals specified. Consult Interchar 2200 product data sheet for specific details.

Where polysiloxane topcoats are to be used, use of a tie coat over the Interchar 2200 will be necessary to avoid discolouration of the finish. Suitable tie coats are Intergard 269, Intergard 276 or Interthane 990; other epoxy products are not suitable. Please observe the maximum overcoating interval for the tie coat, where Interfine polysiloxanes are specified.

Where Interchar 2200 is applied 'off-site' and is to be subjected to any amount of external atmospheric exposure then a topcoat MUST be applied prior to placing outside. Even when the Interchar system is correctly topcoated, any contact with pooling or running water must be avoided.

Topcoated steelwork should not be exposed to direct sunlight and/or elevated temperatures immediately after application, as this may encourage a blistering effect caused by volatilisation of residual retained solvent within the Interchar 2200.



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## 8.0 Application Procedure

The repair method will depend upon the extent of the damage. Repairs should be carried out at the earliest opportunity using the appropriate procedure from those given below.

### Damage Down to Steel

Remove unsound and damaged Interchar coatings to a neat firm edge with sound adhesion. Remove all corrosion products. For limited small areas prepare steel surface in accordance with SSPC SP11 without polishing the substrate.

Feather Interchar edges by abrading. Reinstate the original or other priming system recommended by International Paint. Avoid overlap of primer onto surrounding Interchar. Apply the Interchar 2200 within the recommended overcoating limits of the repair primer.

Apply Interchar 2200 in multiple applications by trowel, knife or spatula. If a topcoat has already been applied to the existing system, abrade back around the edge of the repair to reveal the underlying Interchar coating and so minimise overlap of Interchar 2200 over the existing topcoat. When dry apply topcoat as appropriate.

#### Damage Not Requiring Primer Repair

Depending on severity of damage, either lightly abrade the damaged area to a feathered edge, or cut out a suitable area of Interchar 2200 to a firm edge and feather out. If cutting out, do not damage the priming system, otherwise repair as for damage down to steel will be required.

#### Apply Interchar 2200 as above

For optimum drying properties when applying Interchar 2200 at dry film thicknesses above 1mm (40 mils), it is recommended that multi coats are applied, observing the minimum overcoating times between coats. It is possible to apply Interchar 2200 at up to 2000mm (80 mils) in a single coat; however, hardness development and drying/handling times will be longer.

When applying Interchar 2200 in confined spaces, ensure adequate ventilation.

Interchar 2200(whether topcoated or not) should be protected from pooling or running water and is not designed for frequent water immersion or soaking.

Typical Drying times at varying thickness and temperature:

	Hard dry time		
Thickness (mm)	10°C	25°C	40°C
0.5	10hours	8hours	6hours
1.0	72 hours	48hours	24hours
2.0	10days	7days	3days



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#### **Standard Of Cosmetic Finish** 9.0

Interchar 2200 will dry to a smooth finish however this can be further improved by sanding fully dried and cured Interchar 2200.

Topcoats are relatively thin and will tend to highlight rather than hide surface defects. It is, therefore, important to ensure that the required finish has been achieved prior to application of the topcoat.



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## 10.0 Health & Safety

Interchar 2200 is intended for use only by professional applicators in industrial situations in accordance with the advice given in this document 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 and Safety Data Sheet is not immediately available, the user should obtain a copy before using the product.

- Ensure that all typical personal protective equipment is used, e.g. overalls, gloves, goggles, face mask, barrier creams etc.
- Provide adequate ventilation.
- If product comes into 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.
- Observe all precautionary notices on containers.

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