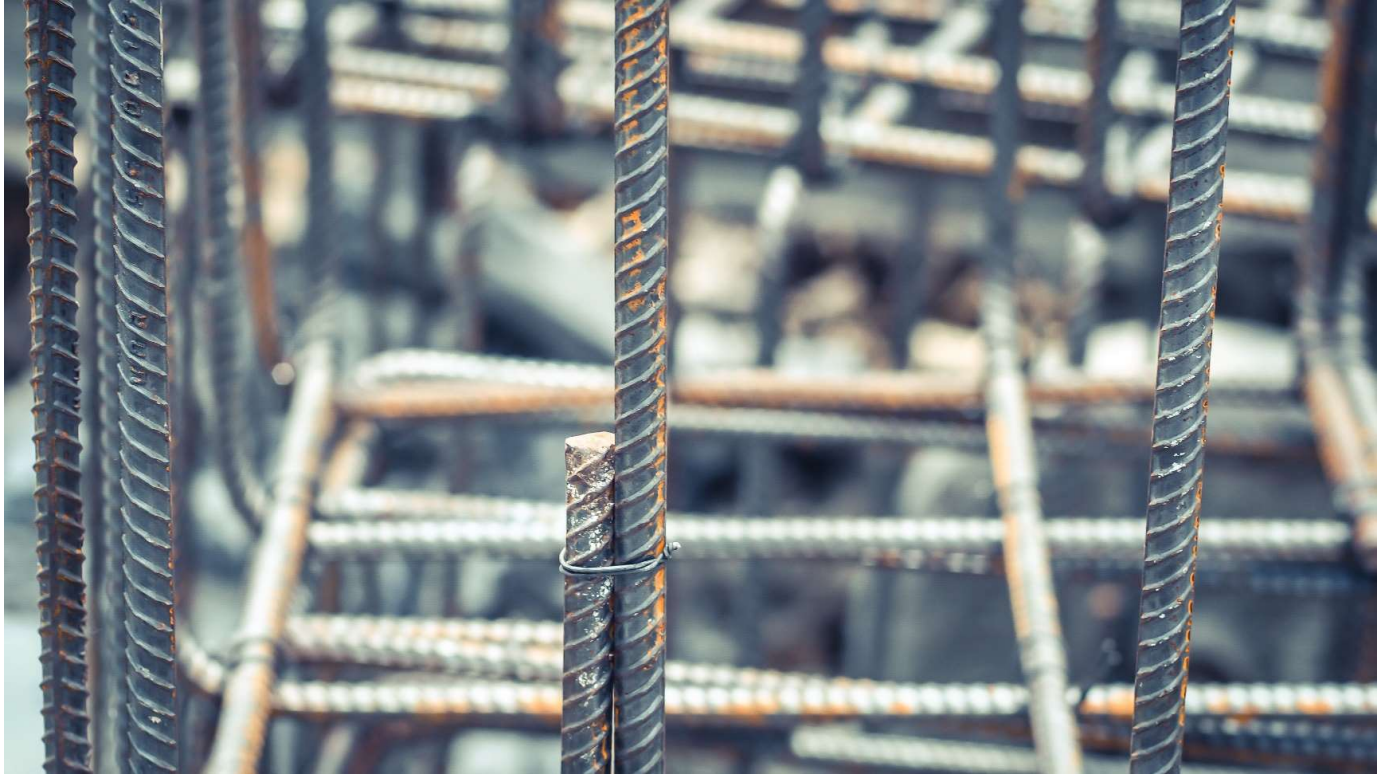




# Method Statement

*Ref. #: DCP10/04-A-2021*



## Repcoat ZR471

(Two component epoxy based zinc rich primer for steel)



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## Section A : General Comments

### General Notes:

The information below is a detailed overview for the application of DCP's **Repcoat ZR** protective and anti-corrosion coating and should be read in conjunction with the relevant technical data sheet prior to application. All DCP Products should be applied by experienced specialist contractors.

All the points below assume correct preparation of the relevant surface.

### High Temperature Working:

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials and equipment should be stored in a cool shaded area and away from direct sunlight.
- ii. Avoid application during peak temperature of the day.
- iii. Plan for enough materials, tools and labor to ensure continuous applicant process.

### Low temperature working:

It is suggested that, for temperatures below 10°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials should be stored in a warm.
- ii. Cold temperatures will affect the properties of the material.
- iii. Avoid applying the coating if the temperature is around 5°C and falling.
- iv. Do not apply under rain or snow, and avoid dew points conditions during application.


### System products:

Rust Remover: **DonClean RR**

Coating: **Repcoat ZR471**

### Tools and Equipment:

It is suggested that the following list of equipment are adopted as a minimum requirement

- |                              |   |  |   |
|------------------------------|---|--|---|
| <i>Personal protection</i>   | : | <ul style="list-style-type: none"> <li><i>Protective overalls</i></li> <li><i>Goggles or a face mask</i></li> <li><i>Good quality gloves</i></li> <li><i>Safety shoes</i></li> <li><i>Safety helmet</i></li> </ul> |  |
| <i>Preparation equipment</i> | : | <ul style="list-style-type: none"> <li><i>Low speed drill fitted with suitable paddle (Fig.1)</i></li> <li><i>Empty bucket (25 ltr) (Fig.2)</i></li> <li><i>Stiff wire brush (Fig.3)</i></li> </ul>                |   |
| <i>Application equipment</i> | : | <ul style="list-style-type: none"> <li><i>Brush (Fig.4)</i></li> <li><i>Roller (Fig.5)</i></li> <li><i>Airless spray machine (Fig.6)</i></li> </ul>  |   |



*Fig.1: Low speed drill fitted with suitable paddle*



*Fig.2: Empty bucket*



*Fig.3: Stiff wire brush*



*Fig.4: Brush*



*Fig.5: Roller*



*Fig.6: Airless Spray Machine*

## Section B : Application

### 1.0 Surface Preparation

#### 1.1 Surface preparation using DonClean RR

1.1.1 It is optional that steel surfaces be cleaned from any corrosion deposits, mill scale, oil, grease and dirt in order to enhance **DonClean RR** results.

1.1.2 In the case of exceptional case surface preparation by appropriate mechanical means is recommended.

1.1.3 Mix **DonClean RR** well before use.

1.1.4 Based on the degree of rust, the following estimated **DonClean RR** exposure times should be considered.



DonClean RR Exposure time	
Light surface rust	5 to 30 minutes
Moderate rust	1 to 2 hours
Heavy rust	2 hours to overnight (check regularly)

#### 1.1.5 **For brush application** such as steel reinforcement bars:

- Apply **DonClean RR** by brush at a coverage rate of 2 - 3 m<sup>2</sup> per liter.
- Ensure proper soaking of the rusted areas.
- Leave the **DonClean RR** soaked surfaces to react with the rust for the proper exposure time depending on the degree of rust as stated in the table above.
- Once the rust treated area's color has turned to clear, remove it and loose materials by wire brush.
- Wash away the area with clean water, ensuring no acidic residue is left.

#### 1.1.6 **For soaking of parts** such as pipe sections, nuts and bolts:

- Pour the estimated amount of **DonClean RR** into a clean container.
- Ensure full submersion of the rusted steel or iron part to react with the rust for the proper exposure time as stated in the table above.
- Once the rust treated area's color has turned to clear, Rinse the area with clean water.
- Remove loose materials by wire brush, ensuring no acidic residue is left.

#### 1.1.7 **For floor application** for the removal of rust and mill scale:

- Pre-wet the affected floors.
- A solution of **DonClean RR** and water should be prepared, the (**DonClean RR** : Water) dilution ratio varies between 1:1 and 1:4.

*Note: Test sample should be conducted to determine the solution ratio.*

- Use a stiff bristle broom to brush the affected areas with the prepared solution.
- Soak the rusted areas and leave to react with the rust for the proper exposure time as stated in the table above.
- Once the rust treated area's color has turned to clear, Rinse the area with clean water.
- Remove loose materials by wire brush, ensuring no acidic residue is left.
- Repeat the procedure above if necessary.

#### 1.2 Surface Preparation by Grit Blasting:

- 1.2.1 Grit blasting as an alternative method used for surface preparation.
- 1.2.2 The steel surface must be cleaned from any corrosion deposits and loose scale.
- 1.2.3 Steel brush can be used for steel cleaning.
- 1.2.4 In all cases the steel should be clean and bright after cleaning.



## 2.0 Mixing

- 2.1 Stir individual components of **Repcoat ZR471** to disperse any settlement.
- 2.2 Transfer the entire content of hardener into the base and mix for 3 minutes using slow speed mixer fitted with suitable paddle until uniform colour and consistency are achieved.



## 3.0 Application

- 3.1 Before the application of **Repcoat ZR471**, the steel surface must be cleaned of any deposits and should have a clean and bright finish.

*Note: Coverage highly depends on the condition of the surface and method of application.*





- 3.2 Application should be carried out as soon as possible after finishing the surface preparation, and in all cases not exceeding 4 hours.
- 3.3 **Repcoat ZR471** can be applied by brush, roller or airless spray machine.
- 3.4 Apply the first coat at a rate of 15 - 25 m<sup>2</sup>/5 kg to give a dry film thickness between 70 - 120 micron per coat.
- 3.5 Ensure obtaining a continuous uniform coating.
- 3.6 Where needed, a second coat should be applied within the over coating time to achieve the maximum adhesion between the two coats.
- 3.7 Particular attention should be given to the reinforcement steel back face.



#### 4.0 Cleaning

- 4.1 All tools and equipment should be cleaned immediately after finishing.
- 4.2 **DCP Solvent** is used to clean **Repcoat ZR471**.
- 4.3 Water is used to clean **DonClean RR**
- 4.4 Hardened materials should be cleaned mechanically.

#### 5.0 Remarks

- 5.1 Used material from **DonClean RR** should not be returned to original container.
- 5.2 Each independent area of application should have sufficient materials, equipment and labour.
- 5.3 **Repcoat ZR471** should be used at temperatures between 5°C to 45°C.
- 5.4 Minimum recoating time between the two coats of **Repcoat ZR471** is 5 hrs @ 35°C.

### Section C : Cautions

#### Health and safety

**DonClean RR** and **Repcoat ZR471** should be handled with care. Avoid contact with skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

#### Fire:

**DonClean RR** is nonflammable.

**Repcoat ZR471** and **DCP Solvent** are flammable.

#### Flash point:

**Repcoat ZR471**: 40°C.

**DCP Solvent**: 37°C.

For further information on refer to the Material Safety Data Sheet.



## Section D : Approval and Variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Recoat ZR471**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.