

# IFS Pureflex FBE for Rebar

The Flexible, Corrosion Resistant, Quick-Cure Solution



## IFS Pureflex FBE

Choosing flexible, long lasting, quality coating protection for rebar is important and so is ensuring the powder is easy to apply, cures quickly and stands up to industry recognized testing and specifications. At IFS, we understand the tough demands placed on reinforced steel bars popular in a wide variety of construction uses. The IFS Coatings' R&D team, with experts from the rebar field, developed **Pureflex FBE** a flexible, corrosion resistant, quick-cure, single coat, thermosetting powder coating designed to offer the very best in protection to rebar.

### Pureflex FBE Delivers

There's no messing around when it comes to ensuring the protection and integrity of rebar, and there's no messing around when it comes to the flexibility, protection and performance **Pureflex FBE** powder coating brings to rebar.

IFS **Pureflex FBE** provides:

- Excellent corrosion resistance
- Excellent flexibility
- Excellent adhesion
- Excellent flow for film consistency
- Excellent chemical resistance
- Excellent durability
- Fast curing for easy application

### Flexible Product

**Pureflex FBE** has been designed for use on reinforced steel bars commonly found in the construction industry, but can also be used on other applications.

Pureflex, a Fusion Bonded Epoxy, is an extremely reactive, fast curing thermoset powder coating that delivers flexibility and corrosion protection exactly where it's needed. It will deliver excellent resistance to deicing salts, air-borne salt, salt fog and sea water as well as excellent corrosion resistance even under wet, hot and salty conditions. Film consistency is incredibly important in rebar coatings, so **Pureflex FBE** is easy to apply and is quick to cure and cool, leaving a beautiful, smooth and consistent film.

Available in quantities from 55lbs upwards, **Pureflex FBE** also comes with dedicated application and technical support.



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## Flexible Performance

Pureflex is named for a reason. Outstanding flexibility, which exceeds ASTM requirements, will ensure that even if the rebar is fabricated in cold winter months, cracking can be prevented.

IFS **Pureflex FBE** meets and exceeds the performance requirements of ASTM A775/A775M, ASTM 1078, AASHTO M284 and AASHTO M254.

Our high quality, hardworking Fusion Bonded Epoxy powder coating has been put through the following tests to ensure it meets the strict performance requirements, including corrosion protective qualities, chemical and physical durability, that the industry requires:

### Chemical Resistance

Industry recognized rebar specifications require the G20 test is completed. Coated rebar specimens, including those without holidays, and specimens with intentional drilled holes, are immersed in various liquid solutions for a specific time at a specific temperature. The coated rebar must not blister, soften, lose bond or develop holidays.

### Cathodic Disbondment

ASTM 775/775M requires the G8 test is performed on various coated rebar sections. Coating performance should show an average coating disbondment radius of 3 rebar pieces that shall not exceed 4mm.

### Salt Spray Resistance

The ASTM B117 test is performed to specific requirements and the average coating disbondment radius of 9 test sites on 3 coated steel bars should not exceed 3mm.

### Chloride Permeability

Testing is completed in line with stated test methods and the accumulative concentration of chloride ions permeating through the film shall be less than  $1 \times 10^{-4}$  M.

## Coating Flexibility

The mandrel bend test is completed to demonstrate coating flexibility. Performance should indicate no coating cracking on the outside radius of the bars.

## Relative Bond Strength

Test method A944 is used to determine that the mean bond strength of coated bars should not be less than 85% of the mean bond strength of uncoated bars.

## Abrasion Resistance

The D4060 taber abrasion test is performed and results should indicate a weight loss of no more than 100mg.

## Impact Resistance

The G14 falling weight test is completed requiring no shattering, cracking or bond loss except at the actual impact area.

For more information, test requirements and performance details please visit [www.ifscoatings.com](http://www.ifscoatings.com)

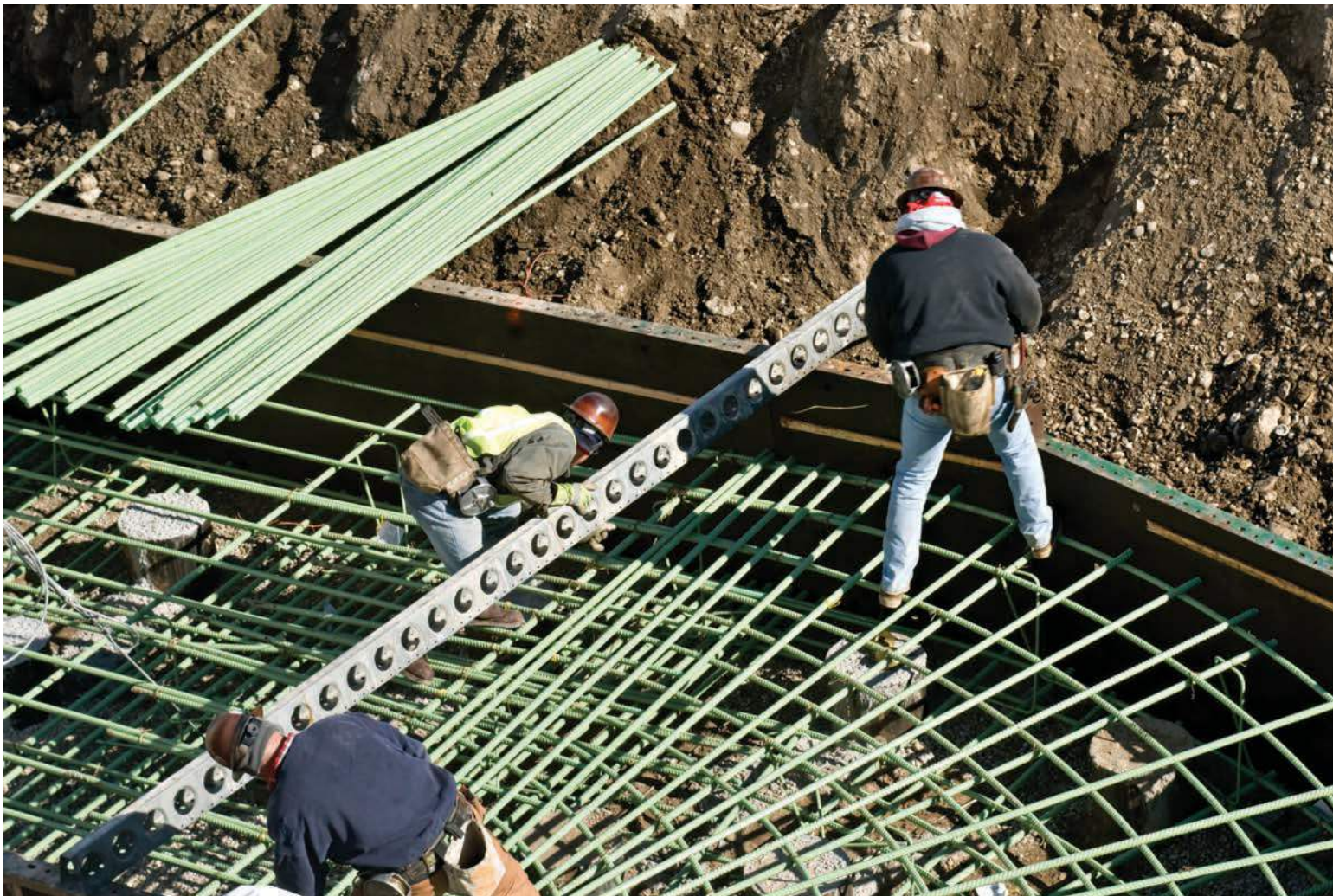
## Flexible Application

As well as first class coating performance, **Pureflex FBE** also has excellent transfer efficiency and application properties, delivering a more consistent film build with minimal wear on gun parts.

## Flexible Service

At IFS we are dedicated to delivering unparalleled service. It's what we do. So we will make sure you have all the information you require, that we understand your product needs and your application line, and we'll make the process of ordering and delivering Pureflex FBE to you as smooth and efficient as possible.

What's more our professional technical team is at your disposal to answer questions, help with application queries and provide expert advice derived from years of experience in the field.



For more information on **IFS Pureflex FBE**,  
talk to your local IFS rep or call **866.437.2864**  
**[www.ifscoatings.com](http://www.ifscoatings.com)**

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