



CEMKRETE

**HYDRATHERM IMS
FIREPROOF PRODUCT SEMINAR**

Cemkrete 's Product Range

1. **Concrete Admixture**
2. **Concrete Repair, Grout and Anchors**
3. **Formwork Aids/ Curing Agent**
4. **Waterproof**
5. **Flooring**
6. **Jointing Compound**
7. **Protective Coating** → **Hydratherm IMS**
8. **Machine and Accessories**

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Why Fireproof Coating?

- Extended the escape time
- Protect the steel structures from collapse





Type of Fireproof Coating?

- Not Expanse when heated
- Expanse when heated → **Intumescent**

Intumescent comes from the Latin word "tumesco" which means to expand or swell up.

"HYDRATHERM IMS"

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What is “Hydratherm IMS”?

- Intumescent Coating
- Solvent Base
- Meets ASTM E-119, BS476 Pt21



How “Hydratherm IMS” work?

- Hydratherm IMS will protect the steel in 2 Phase.

1. Gas Phase

2. Physical Phase

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Heat

+



+

O_2

=



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1. Gas Phase

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Heat

+



+

*Halogen
Gas*

=

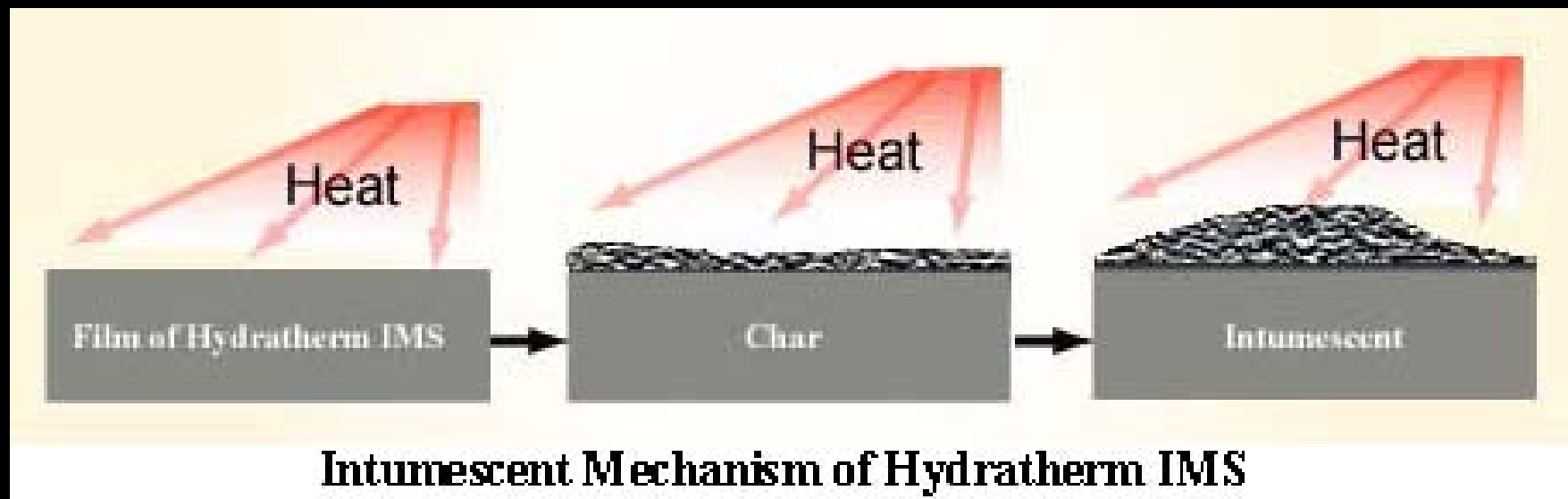


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Why Hydratherm IMS?

- High Performance Quality
- Manufacture Under ISO 9001 : 2000
ISO 14001 : 2004
- Easy to Apply
- Competitive Price
- Good Adhesion with Various Type of Primer and Top Coat

How to apply “Hydratherm IMS” ?

Surface Preparation : Sand Blast, Sand Paper, etc.

Primer : Red Oxide, Red Lead, Epoxy, Zinc, etc

Fire Proof : Hydratherm IMS

Apply by roller, brush or spray

Approx. 250-300 micron/coat

Top Coat : Alkyd Paint, Acrylic, Epoxy, etc.

How to QC on site?

By Weight Use : 0.9 – 1.0 kg./sq.m @ 500 micron

By Thickness Guage : Elecometer 456



Installation Problem

- Problem : Dissolve



- Cause : Raining when the applied film still wet

Installation Problem

- Problem : Dissolve
- Solution : Protective Sheet



Installation Problem

- Problem : Blistering



- Cause : Raining when the applied film dry already

Installation Problem

- Problem : Blistering
- Solution : Protective Sheet



Installation Problem

- Problem : Peel Off



- Cause : Surface Preparation not good enough

Installation Problem

- **Problem** : Peel Off

- **Solution** : The surface should be clean by abrasive blast-clean. Coating should be apply before the degradation of the surface take place. (normally within 4 hr.) If oxidation takes place the steel must be remove. The surface must be clean out of rust, laitance, oil, grease and dust.

Installation Problem

- Problem : Expanded



- Cause : Fired or Weld the IMS 's film

Installation Problem

- **Problem** : Expanded
- **Solution** : Remove the expanded and burned film and re-apply.