

# THERMOCOAT S

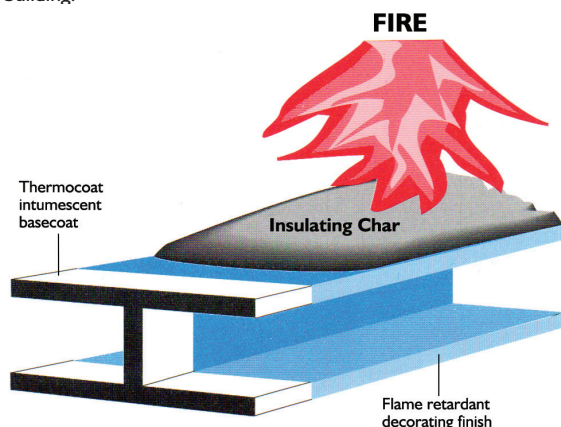
## INTUMESCENT PAINT FOR STRUCTURAL STEEL AND CAST IRON

### INTENDED USE

Thermocoat is an intumescent paint system providing fire resistance to structural steel and cast iron of up to 90 mins with a minimum number of coats. A compatible decorative overcoat system ensures the system will enhance the building's architectural and design features. Recommended for external exposed steel not subject to pooling water.

### HOW IT WORKS

The heat of a fire triggers a catalytic reaction, causing the expansion of an insulating char layer up to 50 times the paint thickness. This layer keeps the steel below its critical temperature, thus maintaining the structural integrity of the building.



### FIRE TESTING

Product performance assessment is based upon UKAS/EGOLF Fire Test Laboratory Certification to BS 476 Part 21 - Fire Resistance to load bearing elements of structures.

Please consult Technical Department 01142 768008 for detailed specification advice.

### FIRE CERTIFICATION

Thermoguard issue a Certificate of Supply on request for each specified project for insurance, Fire and Building Control Authority and Client Records.

### PREPARATION AND PRETREATMENT

- Steel and cast iron should be free from rust and millscale and primed with Thermoguard High Build Metal Primer or Thermoguard HB MIO primer for extra corrosion protection, to 75 microns DFT (or alternative good quality anti-corrosive primer compatible with intumescent paints) in accordance with manufacturers instructions. Treat galvanised surfaces with "T" wash/Mordant solution & prime with zinc phosphate or other primer for steel.
- Thermoguard High Build Metal Primer or Thermoguard HB MIO Primer, may be left without further overcoating or decorated with appropriate conventional paint where no fire resistance is required. Thermoguard HB MIO Primer may be left uncoated in external locations for 6 months.

### TO SPECIFY

- Dry Internal: Apply Thermocoat S in accordance with Thermoguard film thickness schedule to achieve 30, 60, 90, 120 min
- Visible external exposed during construction or occasional modest damp internal areas: Also apply 1 good coat Thermoguard Flame Retardant Paint
- Not suitable for areas subject to "pooling" water
- Wet or External Under Cover: Apply 2nd coat Flame Retardant paint
- Full External Exposure - Contact Technical Dept.

### APPLICATION

- Thermocoat S may be applied by brush, roller or airless spray. To achieve the best finish in the shortest time, spray application is recommended. Prior to application the contractor should contact Thermoguard's Technical Department and obtain a basecoat application schedule. To assist correct application in accordance with this schedule, a wet film gauge will be supplied with the order. Further wet film gauges will be provided on request.
- Maximum wet film thickness per brush coat – 600 microns
- Maximum wet film thickness per spray coat – 1000 microns

### RECOATING

#### Brush/roller application

- Surface touch dry: minimum 2 hours, handle min 24hrs
- Recoat: minimum 6 hours
- Overcoating with Flame Retardant finish: minimum 24 hours

#### Spray application

- Surface touch dry: minimum 4 hours, handle min 24 hrs
- Recoat: minimum 12 hours
- Overcoating with Flame Retardant finish: minimum 48 hours

### SPRAY EQUIPMENT

#### Airless Spray Pump

Use equipment recommended by manufacturer for the application of high viscosity intumescent paints.

- Filter size 30 mesh. 10mm hose 3/8" diameter with no whip end

#### Tip Size

- Tip Size 321, 323, 421, 423

Care should be taken to clean filters regularly. Cleaning should be undertaken with xylene / cellulose thinners.

### FINISHES, COLOURS, SIZES

- Thermocoat S - 20 kg
- Flame Retardant gloss + eggshell 5 lt + 2.5 lt
- BS 4800 colours

### COMPOSITION

Intumescent compounds and resin binders, with high opacity pigments.

### VOC

The EU VoC limit for structural steel intumescent paints is 500 gm / litre. This product contains 398 gm / litre.

All materials and specifications are provided in accordance with the Terms and Conditions of Thermoguard  
Refer to Health & Safety Data Sheets on [www.thermoguard.co.uk](http://www.thermoguard.co.uk) before using these products.

### THERMOGUARD

Kirkby Street, Hull, HU2 0HE.  
Phone: 01142 768008  
Fax: 01142 381966

Email: [technical@thermoguard.co.uk](mailto:technical@thermoguard.co.uk)

**THERMOGUARD**  
FIRE & PROTECTIVE PAINTS  
[www.thermoguard.co.uk](http://www.thermoguard.co.uk)



## TECHNICAL ADVISORY AND ESTIMATING SERVICE

Thermoguard's in-house estimators provide realistic, confidential guidance on project costings to contractors and quantity surveyors. They also provided expert advice and assistance with all aspects of specification and application.

## QUALITY ASSURANCE

Thermoguard is ISO 9000 Registered. All products are manufactured and supplied under the principles of ISO 9000.

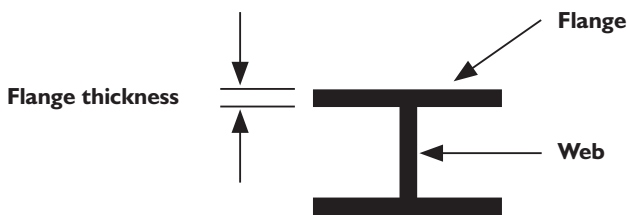
## APPLICATION CONDITIONS

- Maximum Relative Humidity 80%
- Minimum ambient temperature 4°C
- Minimum Steel Temperature 3°C above Dew Point

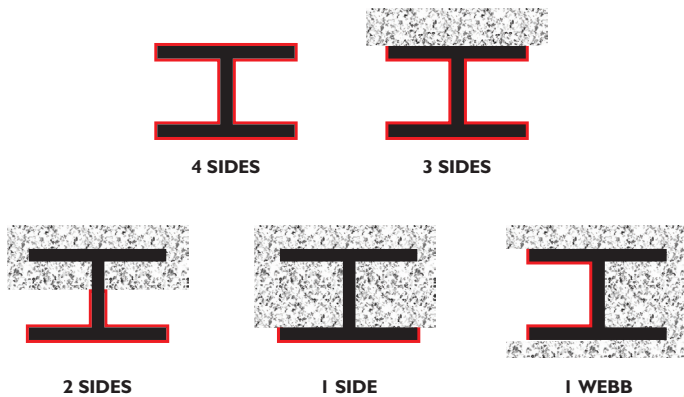
## ENVIRONMENTAL, HEALTH & SAFETY

Thermoguard Thermocoat S is a compliant specialist coating. The range of topcoats are either water-based or 2010 compliant and safe to use in accordance with manufacturer's instructions. The EU & UK VoC limit for this product is 500 gm / litre. Product contains 398 gm / litre.

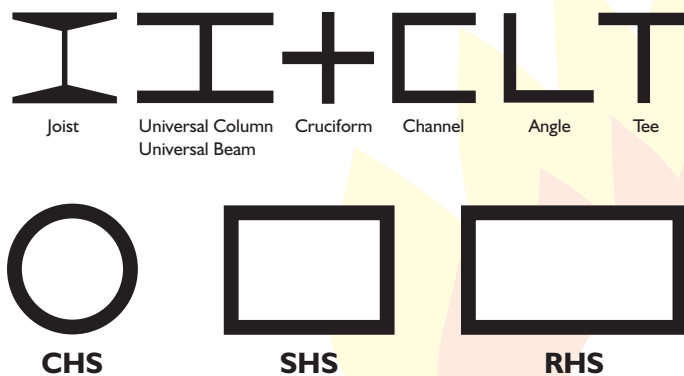
## STEEL TERMINOLOGY



## FIRE EXPOSURE



## STEEL TYPES



All materials and specifications are provided in accordance with the Terms and Conditions of Thermoguard. Refer to Health & Safety Data Sheets on [www.thermoguard.co.uk](http://www.thermoguard.co.uk) before using these products.

### THERMOGUARD

Kirkby Street, Hull, HU2 0HE.  
Phone: 01142 768008  
Fax: 01142 381966  
Email: [technical@thermoguard.co.uk](mailto:technical@thermoguard.co.uk)

**THERMOGUARD**  
FIRE & PROTECTIVE PAINTS  
[www.thermoguard.co.uk](http://www.thermoguard.co.uk)

