

THERMOCOAT WI & WO SYSTEM SHEET

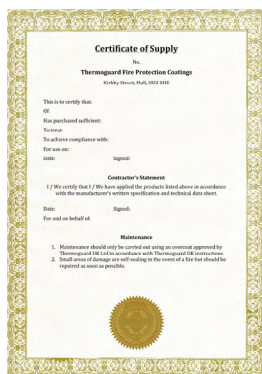
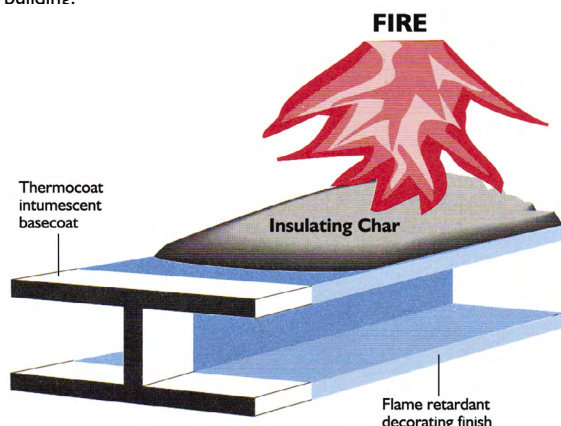
INTUMESCENT PAINT FOR STRUCTURAL STEEL AND CAST IRON

INTENDED USE

Thermocoat is a water-based 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. **WI** optimised for **I** & **C** shape steel and hollow bracing. **WO** optimised for hollow posts.

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 Steel Fire Paint Primer 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 and apply a light coat of Thermoguard Steel Fire Paint Primer or good brand zinc phosphate primer.
- Thermoguard Steel Fire Paint Primer may be left without further overcoating or decorated with appropriate conventional paint where no fire resistance is required.

TO SPECIFY

- Dry Internal: Apply **Thermocoat WO** on internal hollow posts & loadbearing beams and **Thermocoat WI** to other internal steel, in accordance with Thermoguard film thickness schedule to achieve 30, 60, 90 min
- Vibrant colours with poor opacity may need 2 coats. Best over nearest dull shade.
- Visible or occasional modest damp internal areas: Also apply 1 good coat Thermoguard Flame Retardant Gloss or Eggshell
- Wet or External Under Cover: refer to **Thermocoat S**
- Full External Exposure - Contact Technical Dept.

APPLICATION

- **Thermocoat WI** and **WO** 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 – max 700 microns
- Maximum wet film thickness per spray coat – max 1200 microns

RECOATING

Brush/roller application

- Surface dry: minimum 2 hours
- Recoat: minimum 4 hours
- Overcoating with Flame Retardant finish: minimum 10 hours

Spray application

- Surface Dry: minimum 4 hours
- Recoat: minimum 10 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 319, 321, 419, 421

Care should be taken to clean filters regularly. Cleaning should be undertaken with water.

FINISHES, COLOURS, SIZES

- **Thermocoat WI** and **WO** - 20 kg, 5 kg, 2.5 kg
- Flame Retardant Gloss or Eggshell, Dualcoat SFR Eggshell or Matt
- BS 4800 & RAL colours, 2.5 lt + 5 lt cans

COMPOSITION

Intumescent compounds and resin binders, with high opacity pigments.

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.

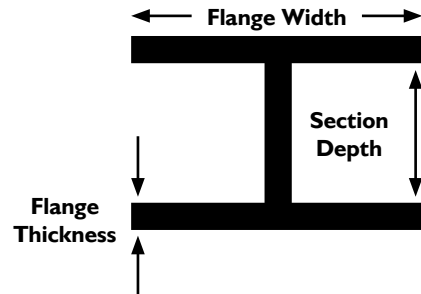
APPLICATION CONDITIONS

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

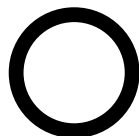
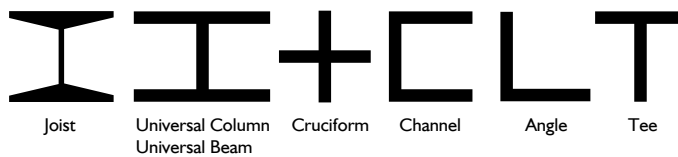
ENVIRONMENTAL, HEALTH & SAFETY

Thermocoat WI and WO are low-odour, water-based coatings, making them user and environmentally friendly. The range of topcoats are either water-based or 2010 compliant and safe to use in accordance with manufacturer's instructions.

STEEL TERMINOLOGY



STEEL TYPES



CHS



SHS



RHS

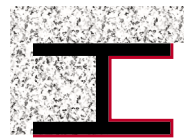
FIRE EXPOSURE



4 SIDES



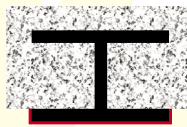
3 SIDES



2 SIDES (PERIMETER)



2 SIDES



1 SIDE



1 WEBB

All materials and specifications are provided in accordance with the Terms and Conditions of Thermoguard UK Ltd.
Refer to Health & Safety Data Sheets before using these products.

Units B1, B2 Enterprise Park,
Wigwam Lane, Hucknall, NG15 7SZ.
Phone: 01142 768008
Fax: 01142 381966
Email: technical@thermoguard.co.uk

THERMOGUARD
FIRE & PROTECTIVE PAINTS
www.thermoguard.co.uk

