

Thermoguard Timbercoat Door Upgrade System

Rev.5.02/24

Timbercoat Intumescent Door Upgrade System is an intumescent solid colour system to upgrade solid doors to 20 or 30min Fire Resistance:

Please note: Timbercoat Intumescent is just one element of protection and DOES NOT create a 'fire door'. Doors should only be considered for upgrade when the historic integrity of the door must be maintained, evaluation of ironmongery and gaps around the door should be undertaken and then all works should be carried out by a specialist to meet the requirements of your authority.

This system CANNOT be used without first receiving acceptance from the Authority and a specification from our Technical Department for your project. Please download and complete the '**Thermoguard Door Enquiry Form**' and return by email to technical@thermoguard.co.uk If you have any questions regarding this process consult Technical on 01142 768008

Assess your door suitability:

Due to the hugely varying nature of doors and their construction, it is impractical and misleading to carry out NAMAS / UKAS Fire Test Laboratory fire door testing. Each door must be assessed for potential suitability.

The great majority of doors, including all hollow doors, are unsuitable for upgrading to 30 or even 20 minutes Fire Resistance.

There are, however, certain well-constructed, solid and substantial doors capable of being upgraded with the Thermoguard Timbercoat system as this is by far the most effective clear fire treatment or coating available.

Generally suitable doors are hardwood or solid with hardwood veneer.

Intumescent paint (white or coloured) is capable of significantly greater Fire Resistance

Available as a convenient pack containing the required basecoat, topcoat and mastic to protect 2 doors in a Coloured Eggshell or Gloss finish

Or purchase individual items if required.

Each **2 Door pack** contains;

1 x 5kg of Thermoguard Timbercoat

1 x 2.5lt Thermoguard Flame Retardant Topcoat.

(This should be applied to 2 doors on BOTH sides (4 door sides in total) and it is assumed that this area will total no more than 7m²).

Specification:

Apply 4 coats of Thermoguard Timbercoat @ 7m² per litre / per coat.

Then apply 2 coats Thermoguard Flame Retardant Topcoat @ 8m² per litre / per coat

Touch Dry: 4 hours / Overcoat: 6 hours

Ensure fully hard dry before next coat, only apply to dry timber in good drying conditions.

Thermoguard recommend Astroflame intumescent strips are fitted around the door edges or in door casings.

Thermoguard UK will issue a Fire Certificate for Authority approved projects following completion.

Important Application Notes:

The Thermoguard Timbercoat Door System should only be applied to clean dry wood, with dry conditions during application and drying of basecoat and overcoat. **Avoid** solvent cleaners before application.

Important Note: Ensure good air movement & ventilation with dry conditions before and during the application, until over-coated.

For Full Mixing instructions and detailed Application information:

Please see or Download, Thermoguard TDS for Fire Varnish 2 pack Basecoat & Fire Varnish Overcoat TDS.

Thermoguard Fire Varnish Basecoat is a water-based 2 pack coating.

Thermoguard Fire Varnish Overcoat (Interior or Exterior grade) should not be applied unless the basecoat is hard-dry and free of any tackiness. Drying time of the basecoat in good conditions is overnight. Once the basecoat has dried in good conditions, good conditions are maintained until the 1st coat of Overcoat has been applied, the basecoat remains ideal to overcoat for a further 4 days. Thereafter, the basecoat becomes gradually harder, until it reaches a point where the overcoat may not obtain a good bond.

Note – if conditions deteriorated before the Overcoat is being applied, the basecoat could reverse from dry back to feeling sticky or slightly sticky. If that occurred, do not apply until the basecoat has dried hard and tack-free again. Once dried again, the 4 day application “window” starts again.

Thermoguard therefore recommend overcoating when basecoat is dry, within the following 4 days of good conditions.

The longer the delay beyond 4 days after basecoat had dried and remained dry ' (ie 5 or 6 days after application) , the greater the risk of overcoat delaminating.

If overcoating is delayed 7 days or more after the basecoat became & remained dry, it is advised;

Basecoat is abraded to obtain a key with 120 grit abrasive

Apply a light coat of basecoat to replaced material removed during abrasion

Apply overcoat within the ideal overcoating window as described above

Clean-Up:

Thermoguard Timbercoat **Basecoat is waterbased**. Return as much unused material to its original container as possible. Wash brushes, rollers and guns with **Clean Water** immediately following use.

Thermoguard FR Eggshell / Gloss **Overcoat is Oil Based**. Return as much unused Fire Varnish Overcoat to its original container as possible. Wash brushes rollers and guns **White Spirit or Brush cleaner** following use.

IMPORTANT-

Thermoguard's Fire Varnish tested for Fire Resistance at a UKAS Fire Test laboratory for 30 mins - Results indicated Thermoguard Fire Varnish added 15 mins Fire Resistance.

Thermoguard Fire Varnish Class 0 Part 6 Fire Propagation Test and BS EN Class B result indicates the protected softwood did not burn significantly within the 10mins (Part 6) and 20mins (BS EN) test duration. Further in-house testing by Thermoguard indicated that when applied at three times the Class O / Class B spec. the Thermoguard Fire Varnish system added 15 minutes Fire Resistance.

Projects requiring 30 minutes Fire Resistance need to be assess on an individual basis.

In order to enable them to issue a 30 minutes Fire Certificate in the case of softwood the surface must be able to afford the loss of 10mm depth from all surfaces exposed to a fire.

For oak or similar hardwoods, the loss to take into account is 6mm.

In other words, the residual timber should be adequate, after such loss in the case of a door to avoid premature collapse, splitting or cracking ensuring neither flame or the substantial heat required to promote combustion can pass through the door.

Pine and Other Softwood

In general terms few modern softwood doors can be protected with confidence. Old and hence very well-seasoned softwood doors can be protected but only if the frame can withstand 10mm loss. In these cases, panels less than 16mm thick should be supplemented by inserting an additional panel to make the total panel thickness 16mm+, trapping the additional panel behind the door's beading. Substantial, solid doors unable to afford the loss of 10mm to the frame can achieve 20 minutes with the 30 min spec as below provided they can afford the loss of 4mm.

Well constructed Oak and Other Resistant Hardwoods

(Including modern doors with solid compressed cores and 6mm oak veneer faces)

These doors with frames 35mm+ thick can be upgraded to 30 minutes. Any inset panel less than 12mm thick should be supplemented by an additional panel trapped by the door's beading to take overall panel thickness to 12mm+.

Door Surrounds & Seals

Thermoguard recommend the gap or joint between the architrave and wall is sealed with Intumescent mastic (included in this pack) after application of Fire Varnish & Fire Varnish Overcoat. They also recommend that intumescent strips are fitted in the door jambs and to the underside of the door.

Note – For more advice email technical@thermoguard.co.uk or Call 01142 768008

