

Fire Varnish Door Upgrade System is an intumescent varnish system to upgrade solid doors to 20 or 30min Fire Resistance:

Please note: Intumescent varnish 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 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 Fire Varnish 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. If you have **softwood doors**, we suggest you refer to **Thermoguard Timbercoat Door Upgrade System**.
(Additional reading on the last page)

Available as a convenient pack containing the required basecoat, topcoat and mastic to protect 3 doors in a clear or Woodstain coloured Matt or Satin finish
Or purchase individual items if required.

Each **3 Door pack** contains;

2 x 20m² Thermoguard Fire Varnish Basecoat

1 x 20m² Thermoguard Fire Varnish Overcoat (Interior) – Matt or Satin finish

2 x 310ml Thermoguard Intumescent Mastic White

Specification:

3 coats of Thermoguard Fire Varnish Basecoat @ 7m² per litre / per coat

2 coats of Thermoguard Fire Varnish Overcoat (Interior) – Matt or Satin @ 10m² per litre / per coat

This should be applied to 3 doors on BOTH sides (6 door sides in total) and it is assumed that this area will total no more than 13m². If your doors are unusual in size or total more than 13m² of area please contact the Technical Department.

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

Important Application Notes:

The Thermoguard Fire Varnish System should only be applied to dry wood, with dry conditions during application and drying of basecoat and overcoat.

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 dry. Drying time of the basecoat in good conditions is overnight. Once the basecoat has dried in good conditions 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.

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

Delamination of overcoat caused by application to near-full cured basecoat has NEVER occurred when the overcoat was applied within 7 days. The longer the delay beyond '4 days after basecoat has dried' (so typically 5 days after application), the greater the risk of overcoat delaminating.

If overcoating is delayed notably beyond 7 days after the basecoat was 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 window or as near to it as possible

Clean-Up:

Thermoguard Fire Varnish **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 Fire Varnish **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.

Thermoguard assess projects requiring 30 minutes Fire Resistance on an individual basis, referring to the TRADA Char Rate Tables and calculated residual timber to ascertain whether they could issue a Fire Certificate for the project. 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.

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

