IGNIWOOD

Fire retardant and intumescent products



DESCRIPTION

It is a system that is indicated for the treatment and protection of wooden structural artefacts (e.g. beams, floors) whose fire resistance must be increased. In case of fires ranging from temperatures of $200/250\,^{\circ}$ c, the paint on the treated surface develops a layer of foam (intumescence) which is very compact and of considerable thickness which decreases significantly the natural rate of carbonization of wood.

The intumescent system consists of the single component water based *Igniwood Protettivo* and solvent-based protective finish *Igniwood Finitura*. The wood can be painted with *Igniwood Fondo*

PERFORMANCE DATA

	Class EN13300	Method	Value
Gloss level	Matt	EN ISO 2813	15-25
Dirty retention	low	UNI 10792	$\Delta L = 3.5$
Viscosity Specific weight		Brookfield S05 4rpm 20rpm ISO 2811-1	19000-21000 mPa·s 11000-13000 mPa·s IgniWood Protettivo 1270-1370 g/l IgniWood Finitura:
Drying time		CAP - PF2	805-865 g/l IgniWood protettivo Recoatable 4–6h; fully 24h
Solid by weight		CAP - PF25	IgniWood Finitura: fully 16h Igniwood Protettivo 61-65% Igniwood Finitura 43- 47%

SHELF LIFE

1 year minimum, stored in its unopened original can at temperatures between +5°C and +30°C.

COLOR RANGE

Igniwood Protettivo: transparent.
Igniwood Finitura: transparent.

Due to requests of pigmented finishing, it is overcoatable with *Igniwood Color* (tucano

sample books)

TYPICAL USE

On structural wood such as beams, floors and carpentry in general whose fire resistance must be increased.

Before proceeding with the application of paints, make sure the wood is clean and free from grease or resin stains and that the humidity level is between 8 and 10%. The product is very sensitive to moisture that can cause coating. Do not proceed with the application at temperatures below $+10\,^\circ$ C, or with a relative humidity greater than 65% or in case of fog or rain. In cases in which the product has been stored at low temperatures it is advisable to bring the temperature up to at least $+15\,^\circ$ C. The above application, water-based impregnating agent for wood (Igniwood Fondo) does not present any particular problems of adhesion provided that the quantity applied

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does not form a surface film, which would render precarious the adhesion of the flame retardant cycle.

It is recommended to wait at least 2-3 days before overcoating the impregnanting agent with Igniwood Protettivo, to allow complete drying. In case of different impregnating agents, before proceeding to the processing, it is recommended to perform applications on small surfaces to verify the compatibility of Igniwood Protettivo with the prospective impregnating agent. Overcoating between layers of Igniwood Protettivo may occur at intervals of 4-6 hours, and overcoating of the finishing layer must be carried out 24 hours after the last base coat.

We would like to remind you that greater thickness of product applied or different environmental conditions may cause a lengthening of the drying times indicated, as the evaporation of water is slowed down. Adequate ventilation aids the evaporation of water and guarantees good drying.

NB: The information given in this data sheet is based on an application of 140 (Igniwood Protettivo) / 75 (Igniwood finitura) g/m2 of wet paint, at a temperature of 23 ° C and Relative Humidity of 65%. Thickness of paint and environmental data (temperature and humidity) can cause changes in drying times.

Equipment cleaning can be done with hot water for Igniwood Protettivo and Acquaragia VD 100 (Turpentine) for Igniwood Finitura. The painted areas must not be handled with bare hands to avoid possible formation of spots on the surface.

TOOLS

Spray: airless or air coat no filters with 0.031-0.033 inch nozzles and outlet pressure of 170-240 bar.

Brush: proceed with "short strokes" in order to allow a correct application and highlight less any brush marks; apply the product up to opalescence loss and development of complete transparency. In order to improve the wettability of the wooden support and the distension of the base you can moisten the surface with a damp cloth.

THINNING

Igniwood Protettivo: brush 7-10% by weight, airless / air coat 5-7% by weight with mains water taking care to add it very slowly and by controlling the temperature of the product and the temperature of the dilution water which should not be less than + 10 $^{\circ}$ C. Alternatively, you can arrange to raise the temperature of the base by "bain-marie"

It is recommended to slowly mix the product both before and during use so as to ensure a homogeneous consistency and avoid excessive air entrapment. Igniwood *Finitura*: 0-6% by volume with *Acquaragia* VD 100(turpentine).

COVERAGE

Igniwood Protettivo: 2.5 m²/kg (consumption 400 g/m²) Igniwood Finitura 10 m²/kg (consumption 100 g/m²)

The resistance value is obtainable according to early opinion on the existing structure.

Igniwood Protettivo: brush 8.3-10 m²/kg (consumption 100-120 g/m²)

Airless/air coat 5-7.5 m²/kg (consumption 133-200 g/m²)

Igniwood Finitura: 10-20 m²/kg (consumption 50-100 g/m²)

APPLY

+15°C +30°C

COATING SYSTEM

Wooden artefacts that have been sandblasted with 150 grit sandpaper.

- If necessary apply Igniwood Fondo as a single layer with a consumption of 100-120g/mg
- 2. After 6-8 days, apply *Igniwood Protettivo* directly on the artefact in two/three layers with a consumption of 400g/m² wait 4-6 hours between one layer and the other.
- 3. After 24 hours apply one layer of Igniwood Finitura with a consumption of 100

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 g/m^2 .

Maintenance

Periodically check the integrity of the film, in case of damage, restore the protective cycle on the damaged part

SPECIFICATION ITEM

Single component, transparent intumescent system. To be applied on wooden structural artefacts (e.g. beams, floors) whose fire resistance must be increased, with a consumption of 500 g/m^2 .

INSTRUCTION

To carry out the work in a proper way, it is needed to strictly follow the instructions for the preparation of the surfaces contained in the CAP Arreghini Books. This technical information is intended as a rough guide. However, because of the enormous variety of media and application conditions, it is essential to check the suitability of the product and test the effectiveness on a sample. The specification data and technical information have been calculated at $+23^{\circ}$ C with relative ambient humidity of 65%. In different conditions the data and the time intervals between the two phases of the above reported coating system can vary.