FIREPRO
FIRE PROTECTIVE BUILDING PRODUCTS

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CI/SfB
C640 DATASHEET - AUG08

Product specifications can change. Contact us to ensure you have our latest datasheet

FIREPRO C640 CLEAR INTUMESCENT COATING FOR TIMBER

DESCRIPTION
A clear intumescent coating for internal use designed to protect timber and timber based products from the effects of fire.
During a fire the coating reacts to form a thick carbon layer which insulates against heat transfer, delays spread of flame and reduces smoke. Firepro C640 is applied as one or more coats of base material and either one or two coats of the protective top seal which has a satin finish. Quantity of base material depends upon the level of fire protection required. Only one coat of top seal is normally required, two coats of topseal should be used in areas of high humidity and high wear.

APPLICATION
Application is by brush, roller or spray. See separate Application Notes for details. The coating system should be applied to clean surfaces, free from any contamination. For pre-coated surfaces see Application Notes.

USES
Firepro C640, when applied to timber panelling and similar timber products, delays ignitability, spread of flame and reduces smoke, assisting people to escape from a burning building.
Firepro C640 also increases the fire resistance of timber and therefore reduces requirements for sacrificial timber to achieve fire resistance ratings.

HISTORICAL BUILDINGS
Firepro C640 is particularly useful for protecting historical buildings from loss by fire whilst maintaining the original internal finish.

EARLY FIRE HAZARD INDICES
When tested to AS1530 Part 3, Firepro C640 gave the following Early Fire Hazard Indices when applied at:

Application Rate 1: one coat of basecoat at 200 gm/m²
one coat of topseal at 85 gm/m²
Application Rate 2: one coat of basecoat at 130 gm/m²
one coat of topseal at 85 gm/m²

	Spread of Flame	*Smoke Developed*	*Test*
Firepro C640 on Tri-Board (Application Rate 1)	0	4	A.P.L. 2119
Firepro C640 on Particle Board (Application Rate 1)	0	5	A.P.L. 9254
Firepro C640 on Timber Panels (Application Rate 1)	0	5	A.P.L. 9166
Firepro C640 on Particle Board (Application Rate 2)	6	5	A.P.L. 9335

19.7 MINUTES FIRE RESISTANCE FOR TIMBER
Structural timber and panels, etc, can be given significantly improved fire resistance by application of the C640 system.
When fire tested to BS476.22 1987 and AS1530.4 1997 for 30 minutes a Pinus Radiata panel coated on one side with 800 gm/m² of C640 Base Coat and 85 gm/m² of C640 Top Sealant showed a reduction of 11.8mm of timber burned away compared to an uncoated panel. A beam coated on all sides should therefore reduce sacrificial timber requirements on Pinus Radiata by 23.6mm (11.8 x 2). Applying the convention of allowing 0.6mm of Radiata timber being burned per minute, Fire Resistance is increased by 19.7 Minutes.