

Avikote WB 600 G

Intumescent Waterborne Internal Fireproofing for Steel Work
Fire resistance up to 60 minutes

Product Description

Avikote WB 600 G Intumescent Basecoat is a water-based, white, thin film intumescent coating for the protection of internal structural steelwork.

Usage / Purpose

Avikote WB 600 G can provide up to 60 minutes fire resistance

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Avikote WB 600 G can be applied to a smooth matte finish. A compatible top-seal can be applied if a decorative finish is required.

Color

White

Packaging

Supplied in 25kg pail

Environmental Considerations

Very low VOC. Contains no substances of very high concern.

Availability

Only available via Arabian Vermiculite Industries Contractors or direct from AVI (see contact details below for more information).

Usage Guidelines

Surface Preparation & Priming

- Avikote WB 600 G should be applied onto a clean, undamaged, dry and primed steel surface.
- Certain types of primers can cause char adhesion problems in a fire. In particular, thermoplastic primers must be avoided.
- Please consult with your local AVI representative for a list of recommended primers.
- Avikote WB 600 G should not be applied directly to galvanized surfaces or zinc rich primer.
- The primer must be applied in accordance with the manufacturer's instructions.
- AVI should be consulted for technical advice when zinc rich primers or the overcoating of existing paints are specified for use.

Application Conditions

- Avikote WB 600 G is recommended for application and use on dry protected structural steel only.

- If the basecoat is allowed to get wet, it is likely to be damaged - blistering and wrinkling may occur.
- Avikote WB 600 G should only be applied when the air and steel temperatures are above 5°C. Relative humidity should be below 80% for successful application. Steel surface temperature should be a minimum of 3°C above the dew point.
- Ensure the steel is dry and free from contact with rain or condensation during the application and drying of Avikote WB 600 G.

Application Equipment

Airless spray equipment is recommended and should match these guidelines:

Operating Pressure:	2500-3500 psi (175-210 kg/cm ²)
Tip Size:	17-21 thou
Fan Angle:	20°-30°
Hose Diameter:	10 mm (3/8") (internal diameter)
Hose Length:	Max. 60 meters, in-line filters should not be normally used.

Mixing

Avikote WB 600 G is supplied ready-for-use and must not be thinned but should be mechanically stirred prior to use.

Application

AIRLESS SPRAYING

- Avikote WB 600 G may be applied up to a maximum wet film thickness (WFT) of 1000 microns in a single spray coat comprising of several quick passes. Achieving maximum loadings will depend on site conditions.
- The vast majority of 60 minute loadings can be applied in one coat.

BRUSH/ROLLER APPLICATION

- For brush application use a "laying on" technique to avoid heavy brush marking.
- Maximum wet film per coat when applied using a brush or roller is 600 micron. A short piled roller will produce a light textured finish.
- During application, measure the wet film thickness frequently with the WFT gauge provided to ensure the correct thickness is being applied.
- To use the gauge, insert the teeth into the wet basecoat. The last tooth to be coated indicates the wet film thickness achieved.
- In the event of over or under applications, adjustments to the loading rates of subsequent coats will be required.

Technical Data

Property	Result
Composition	A very low VOC, water-based formulation
Certification	BS 476 Part 21:1987
Building Classification	C1 and C2 environments
Properties (Typical Values)	
Specific Gravity	1.38 ±0.02
Volume Solids	70% ±3%
VOC	6 g/l
Viscosity	150-200 Poise (Spindle 6 @ 20rpm)
Theoretical Coverage	1 kg per m ² based on applied 500 microns DFT
Storage	Store in secure, dry warehouse conditions between +5°C and +35°C
Shelf Life	6 months when stored as recommended in original unopened container

Drying Times

	Temperature		
WFT	10°C	20°C	30°C
200 microns	3 h	2 h	1 h
500 microns	4 h	3 h	2 h
1000 microns	6 h	4 h	3 h

These are times for a typical mid-range humidity and good airflow. Higher humidity, poor airflow or overnight condensation will all lengthen these times.

Do not overcoat if the surface is not touch dry. Check web-flange joints.

Application Advice

The following instructions are for on-site application only. For off-site application, refer to AVI. Ensure that:

- The primer is compatible with Avikote WB 600 G and has been applied correctly.
- The overcoating period for the primer has not been exceeded.
- The correct primer is used for galvanized steel.
- All damage to the primer has been repaired and re-primed.
- Site and weather conditions are within specification.
- Avikote WB 600 G has been stored correctly.
- Surface is clean, dry and free from contamination.
- Correct spray equipment is available, if appropriate.
- Application instructions have been read prior to commencement of work.

- Ensure different basecoats are not applied on the same section of steel.
- Equipment should be clean and free from contaminants or dried material.
- Wet film gauges are available for use.

Cleaning

Spray equipment can be cleaned using water only.

Top Seal Requirements

Once DFT's have been achieved as specified, a top seal can be applied. Please consult your local AVI representative for a list of recommended top seal products. Ensure that Avikote WB 600 G is completely dry before applying top seal.

Maintenance & Repair

Damaged areas should be abraded back to a sound surface. The surface should then be clean and dry before re-applying. Once repaired, top seal could be re-applied. Refer to AVI Maintenance Instructions.

Specification

An AVI representative will provide a specification for each project. AVI accepts no responsibility for defect arising from failure to follow the specification.

Health & Safety Precautions

Material Safety Datasheet is available upon request.