



Micashield Installation Manual

(DM651)



Product Description

Dupré Minerals Micashield DM651 is a stable, water based dispersion, manufactured by the carefully controlled chemical exfoliation of specially selected vermiculite ore. The subsequent high aspect ratio of the Micashield DM651 dispersion offers a temperature resistant coating up to 1100°C. Micashield DM651 can be applied to interior timber substrates to act as a fire resistant thin film coating.

1. Product Specification

1.1 Certification to EN13501-1 (third party accreditation via Exova Warringtonfire):

- Euro Class B-s1-d0
- Class '0' for BS476 Parts 6 & 7 in the Blue Painted Board test

1.2 Packaging:

- 1000 litre IBC
- 120 litre Mauser

1.3 Storage:

- Store between 5°C and 25°C where at all possible
- Do not freeze
- Store away from UV sunlight and external temperature variations

1.4 Shelf life:

- 36 months from date of manufacture

1.5 Handling:

- Avoid contact with eyes, skin and clothing using appropriate PPE as specified in MSDS sheet

1.6 Appearance:

- Micashield DM651 is golden brown in colour. Bespoke colours available on request (dependant on MOQ's)

1.7 Environmental:

- Micashield DM651 is an inert product that has no detrimental effect on the environment. No precautions need to be taken when disposing of waste material; however the use of appropriate PPE is recommended.



2. Preparation of substrate

- Surface should be clean, dry and free from contaminants
- Micashield DM651 is a one part aqueous system and requires no primer or top coats
- Only apply in temperatures between 5°C and 25°C with humidity no more than 75%
- Do not apply to a frozen surface

3. Application

- Micashield DM651 is supplied ready to use and should not be thinned
- Stir thoroughly prior to use
- To conform to certification standards a WFT(Wet Film Thickness) of 500 μ m should be applied onto a fully prepared substrate in a cool, dry environment
- A WFT of 500 μ m will typically have a DFT of 125 μ m

3.1 Application Techniques

- Airless Spray:

Using an airless spray machine, hold the spray gun approximately 12 inches from the substrate. The gun should be pointed straight; do not tilt at an angle

When spraying, move the gun along the surface of the substrate, do not fan from a stationary position, this will cause an uneven coat

Use the overlapping technique to ensure an even coating. We recommend a 50% overlap

A nozzle tip size of 0.031 inch minimum is recommended for best application

Spray application is recommended wherever possible. For best finish, two coats at a WFT of 250 μ m are recommended, although a 500 μ m thickness can be applied in one coat when spraying horizontally.

- Brushing:

Using a textured finish brush, apply Micashield DM651 to the surface using slow, even strokes and working in one direction.

Allow to dry for specified time and measure DFT.

Apply additional coats if required. Brush application will offer a textured finish.



- Rolling:

Use a standard painter's roller and apply to the surface in a controlled manner, rolling in one direction

Allow to dry for specified time

Measure for DFT and apply additional coats if required

3.2 Considerations

- Where joins or visible gaps are present in pre fabricated structures (such as roof trusses), these gaps should be sealed with Micashield heat resistant caulking. Micashield DM651 should then be applied over the dried caulking
- Where metal fixings are already present, a suitable intumescent should be applied to the surface of the metal to ensure fire protection of the entire substrate

4. Drying

- Drying time based on a 500µm coat (WFT) is 24 hours
- A minimum of 24 hours should be left between any additional coats
- If over coating for decorative purposes, allow at least 48 hours drying time
- Do not tamper with the Micashield coating in any way when applying the overcoat
- When over coating always use water based paints

5. After Care

- If the surface of the substrate becomes damaged (i.e. cracked or scratched) or if any seals/ fixings are loosened, Micashield DM651 should be reapplied to these areas.

6. Coverage

Wet Film Thickness (mm)	Wet Film Weight (g/m ²)	Coverage (m ² /l)
0.25	250	4
0.50	500	2



7. Protection Period

- **Interior** Indefinite, providing the above application technique has been followed and the coating is not damaged or tampered with

8. Disclaimer

- The information contained within is, to the best of our knowledge, true and accurate, but any recommendations or suggestions; which may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.