



## VERMITEX® 'AF' and 'DX'

PRODUCT INFORMATION



Spray-on fire-resistant coatings for steel and concrete, inside and out.

### What Are Vermitex® 'AF' and 'DX'?

Vermitex® 'AF' is a gypsum-vermiculite coating for interior steel, concrete and other substrates, which provides passive fire protection for four hours.

Vermitex® 'DX' is a cement-vermiculite coating for exterior steel, concrete and other substrates, which also protects against fire for four hours.

Both products are non-combustible and easy to apply, and do not contain asbestos or other fibres. They are factory blended to ensure quality and cost-effective coatings that can be applied with a spray gun, generally without the need for mechanical reinforcement.

### How Do They Work?

Vermitex® 'AF' and 'DX' are lightweight coatings engineered from expanded vermiculite of appropriate sizing, and inorganic binders. During the mixing process, the air-entraining product generates copious amounts of micro-dispersed air bubbles. This ensures a high resistance to fire and minimal thermal conductivity.

### Are They Hard to Apply?

No. Both coatings can be applied to a thickness of 20 mm in one application.

Multiple coatings will achieve a smooth and textured finish. However, new coatings should only be applied over partially set coatings. If this is not possible, the

VERMITEX® 'AF' AND 'DX'



last coating surface should be textured or scratched to encourage adhesion.

When applied in well-ventilated areas to a thickness of 25mm, the coatings will dry in two to three weeks. They may also be painted over with suitable sealers and paints as required.

#### Want to Know More?

For more information on Vermitex® 'AF' and 'DX' and our complete range of products for the construction, industrial and agricultural sectors, contact LAF Group by telephone on (02) 9642 4745, or Freecall 1800 629 305, by facsimile on (02) 9742 5164, or by email: [sales@lafgroup.com](mailto:sales@lafgroup.com).

# VERMITEX® 'AF' and 'DX'



## Production

VermiteX® 'AF' and 'DX' are manufactured under factory-controlled conditions to ISO 9001-2000 Standard, delivered to site in 'batch' form, and mixed to the required consistency before application.

## Packaging

VermiteX® 'AF' and 'DX' are packaged in 50 litre paper sacks.

## Application

Before application, make sure the substrate is free from mill scale, heavy rust, oil, excessive dust or any other substance that may impair adhesion.

The initial coat will set in four to six hours, with a required coating interval of between two and eight hours. Up to 20 mm can be applied at one time.

When applied in well-ventilated areas to a thickness of 25 mm, the coatings will dry in two to three weeks. Ambient temperature should not be allowed to drop below 4° C for the week following application.

New coatings should only be applied over partially set coatings. If this is not possible, the last coating surface should be textured or scratched to encourage adhesion.

When applying to primed or unprimed structural steel without mesh reinforcement, a bond coat such as VermiteX® '7' should be applied to between 50 and 75 per cent of the area. This will enhance the adhesion process and reduce slippage during application.

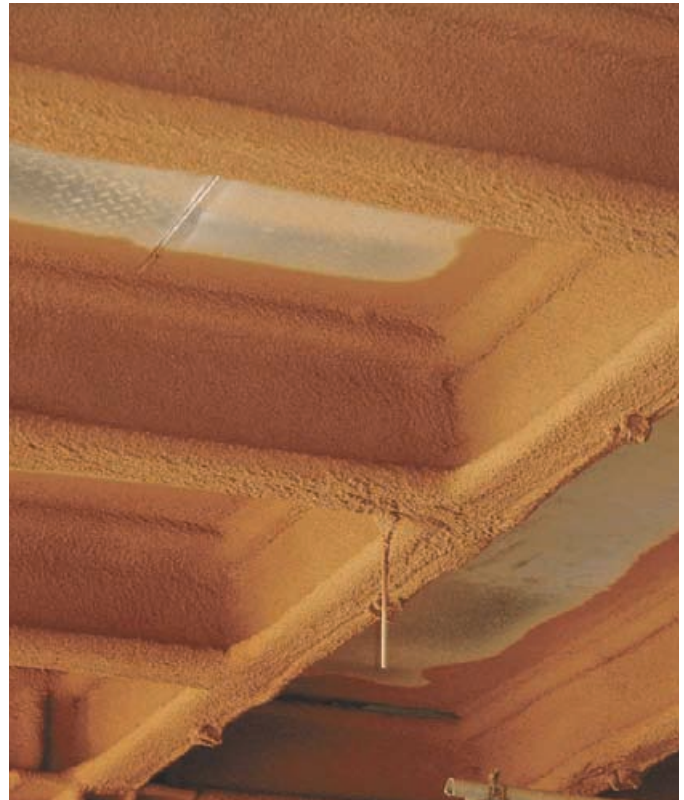
Where primers are required, alkali-resistant zinc-rich primers are recommended.

VermiteX® 'AF' and 'DX' are not rust preventatives. Being porous, they will allow moisture through to the substrate. If concerned about moisture levels, prime the substrate with an approved rust-preventative primer.

Chemicals that have an impact on cement or plaster will also impact VermiteX® 'AF' and 'DX'. Accordingly, they should be topcoated with suitable sealers and paints for protection.

## Coverage

One 50 litre bag of VermiteX® 'AF' or 'DX' will cover approximately 1m<sup>2</sup> at a nominal thickness of 50 mm. Type of equipment, overspray and waste will have an effect on bag yield and it is recommended that 10 to 15 per cent waste be allowed for coverage calculations.



## Thickness Range

Hp/A Value (m-1)	47.1 to 282.6	55 to 439.6
Corresponding ESA/M (m <sup>2</sup> /Tonne)	6 to 36	17 to 56
	Thickness (mm)	
VermiteX® 'AF' and 'DX' thickness for 60/- FRL:	8-11 mm	12-18 mm
VermiteX® 'AF' and 'DX' thickness for 90/- FRL:	8-17 mm	12-24 mm
VermiteX® 'AF' and 'DX' thickness for 120/- FRL:	11-22 mm	12-31 mm
VermiteX® 'AF' and 'DX' thickness for 180/- FRL:	21-34 mm	19-43 mm
VermiteX® 'AF' and 'DX' thickness for 240/- FRL:	30-45 mm	30-56 mm

## Density

Dry density: 320-375 kg/m<sup>3</sup>

## Testing

VermiteX® 'AF' and 'DX' have a FRL of 30 minutes to four hours inclusive, with thermal conductivity of 0.127 W/m.K ± 10 per cent.

VermiteX® 'AF' and 'DX' have been successfully tested in accordance with Standards AS 1530.3, AS 1530.4, BS 476 20 & 21, and assessed to ASTM E119.

The CSIRO has referenced, analysed and assessed the test data for compliance with other International Standards.



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**Test Data**

Vermitex® 'AF' and 'DX' Thickness Table Tested to AS 1530.4 & BS 476, Part 20 Appendix D & Part 21; assessed as complying with ASTM E119

Hp/A m-1	Fire Resistance Period (minutes) Three Sided Exposure					Fire Resistance Period (minutes) Four Sided Exposure				
	60	90	120	180	240	60	90	120	180	240
47.1	8	8	11	21	30	N/A	N/A	N/A	N/A	N/A
55	8	9	14	24	33	12	12	12	19	30
62.8	8	10	15	25	35	12	12	12	22	34
70.7	8	11	16	26	36	12	12	13	25	36
78.5	8	12	17	27	37	12	12	15	27	38
86.4	8	12	17	28	38	12	12	17	29	40
94.2	8	13	18	28	38	12	12	18	30	42
102.1	8	13	19	29	39	12	13	19	31	43
109.9	8	14	19	29	40	12	14	20	31	44
117.8	9	14	19	30	41	12	15	21	33	45
125.6	9	14	20	30	41	12	16	22	34	46
133.5	9	15	20	31	41	12	17	23	35	47
141.3	9	15	20	31	42	12	17	23	35	48
149.2	10	15	20	31	42	12	18	24	36	48
157	10	15	21	31	42	13	18	24	37	49
164.9	10	15	21	32	42	13	19	25	37	49
172.7	10	16	21	32	43	13	19	25	37	50
180.6	10	16	21	32	43	13	19	26	38	50
188.4	10	16	21	32	43	14	20	26	38	51
196.3	10	16	21	32	43	14	20	26	39	51
204.1	11	16	22	32	43	14	20	27	39	51
212	11	16	22	33	44	14	21	27	39	52
219.8	11	16	22	33	44	15	21	27	39	52
227.7	11	16	22	33	44	15	21	27	40	52
235.5	11	16	22	33	44	15	21	28	40	52
243.4	11	17	22	33	44	15	21	28	40	53
251.2	11	17	22	33	44	15	22	28	40	53
259.1	11	17	22	33	44	16	22	28	41	53
266.9	11	17	22	33	44	16	22	28	41	53
274.8	11	17	22	33	44	16	22	28	41	54
282.6	11	17	22	34	45	16	22	29	41	54
298.3	====	Refer 4sided	Results ==>			16	23	29	41	54
306.3	====	====	====	====	==>	16	23	29	42	54
314	====	====	====	====	==>	17	23	29	42	54
329.7	====	====	====	====	==>	17	23	29	42	55
337.6	====	====	====	====	==>	17	23	30	42	55
345.4	====	Refer 4sided	results ==>			17	23	30	42	55
353.3	====	====	====	====	==>	17	23	30	42	55
369	====	====	====	====	==>	17	24	30	43	55
376.8	====	====	====	====	==>	17	24	30	43	55
384.7	====	====	====	====	==>	18	24	30	43	55
392.5	====	Refer 4sided	results ==>			18	24	30	43	55
400.4	====	====	====	====	==>	18	24	30	43	56
416.1	====	====	====	====	==>	18	24	30	43	56
423.9	====	====	====	====	==>	18	24	31	43	56
431.8	====	====	====	====	==>	18	24	31	43	56
439.6	====	Refer 4sided	results ==>			18	24	31	43	56



**Health**

Being gypsum-vermiculite and cement-vermiculite blends, Vermitex® 'AF' and 'DX' contain no asbestos and present no known health hazard before, during or after application. Normal precautions for gypsum and cement products apply, including dust mask, eye protection and covering of sensitive skin.

**Contact**

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