

Spiralite

Air erosion



BACKGROUND

When specifying Spiralite for use in areas such as return air plenum consideration may be given to the extent to which the system can be eroded by constant air movement.

In order to provide a useful indicator, two tests were conducted by Fulmer Yarsley Limited during February and March 1989.

CRITERIA

Spiralite, tissue face exposed, was tested in accordance with American Standard ASTM E859-8 with wind speeds of 6 and 12 metres per second. It is our understanding that there is no British Standard for testing nor prescribed acceptance level for air erosion.

RESULTS OF THE TESTS

Sample	Air Velocity m/s	Weight of eroded material in g/sq ft of sample			
		After 1 hour	After 6 hours	After 24 hours	After 30 hours
B83686/1	6	Not measured	0.068	0.081	Not measured
B83686/2	12	0.049	0.096	0.130	0.133

When tested at 12 m/s the material which eroded in the 24 hours after purging weighed 0.037 g/sq ft.

When tested at 6 m/s the material which eroded in the 18 hours after purging weighed 0.0139 g/sq ft.

APPLICATION OF SPIRALITE

1. Spiralite can be used in areas where there is concern over air erosion provided the specified criteria is within that achieved in the tests.
2. The tissue or foil face of Spiralite should always form the outer face i.e. the face subject to erosion.
3. Should there be further concern over the migration of fibres exposed cut edges could be sealed with a fire retardant PVA primer, or covered with foil tape.

REFERENCE

Fulmer Yarsley Reports D83686/1 & 2.

The information contained in Cryotherm data sheets is believed correct at the time of publication. Whilst we will endeavour to keep our publications up to date, readers will appreciate that between publications there may be pertinent changes in the law, or other developments affecting the accuracy of the information provided.

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