

State Key Laboratory of Green Building Materials

Test Report

Ref. No.: LJZ2016H027

1. Sample name

MIG-ESP

2. Test item

Anti-condensation test

3. Test method and principle

Test environment and condition: 36% relative humidity, 21°C temperature.

Test duration: 14.01 – 15.01.2017

Volume of test chamber: 1 m³

Test principle: According to HG/T 4560-2013 “Test method for the anti-condensation performance of paints”

Sample preparation: Weigh 20g sample and apply it evenly on the surface of a conical object with diameter of 160mm and height of 180mm. Leave to dry for 7 days.

Test procedure:

- 1) Place the prepared cone sample in the environmental chamber. Connect the cone to the circulating water bath with a pipeline. Place a scale directly below the cone, and place the condensation collector on the scale.
- 2) Set the temperature of the circulating water bath, the temperature and relative humidity of the environmental chamber according to prescribed standards.
- 3) Start the test. Record data at 120 min dew point.
- 4) The first drop of condensation water that drips into the condensation collector is recorded as initial dew point.
- 5) The mass of the condensation collector at the end of the test minus the mass of the condensation collector at the beginning of the test is recorded as the amount of dew.

4. Test results

See table below for test results.

Test category	Test environment		Test results	
	Temperature and humidity in environmental chamber	Circulating water bath Temperature (°C)	Initial dew point (min)	Amount of dew (g)
State I	25 °C, 70% RH	15	----	0
State II	25 °C, 95% RH	5	24	14.35

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