Certificate of Test

Title:

JOTUN UAE LLC

Jotashield Tex Ultra

Determination of Static Crack Bridging Ability

Certificate of Test No: **8850**

Client's Name & Address:

Mr Saji Mathew
Jotun UAE LLC
Al Quoz Industrial Area
PO Box 3671
Dubai
United Arab Emirates

Our Ref:	**1.64.18/KJS**
Job No:	**T525-3HE9**
Your Ref:	**Email dated 25/04/07**
Date:	**03 July 2007**
Date Sample(s) Received:	**27 April 2007**
Sample(s) Received From:	**Jotun UAE LLC**

Sample No(s): **143976**

Tested By: ..... **D J Thompson**

Authorised By: ..... **S R Moxon**

Job Title: **Manager, Testing & Contracting**

For

Taylor Woodrow Technology

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Taylor Woodrow

1. SAMPLE DESCRIPTION AND ANALYSIS REQUIRED

Taylor Woodrow Technology received one tin of Jotashield Tex Ultra (sample no. 143976). No Certificate of sampling was received. The coating was given a unique sample number for reference.

The static crack bridging ability of the coating system was to be determined in general accordance with BS EN 1062-7, static crack bridging test, and In House Test Procedures.

2. METHOD

2.1 Coating Application

The coating system was brush applied to six Taylor Woodrow standard concrete slices (of approximate surface area of 40cm²). Any blow holes in the cut surfaces had previously been filled with cement paste, ground smooth and left to air cure.

A weighing procedure was used to achieve the coverage rate required. One coat of Jotun Siloxane Acrylic Primer was applied as a flood coat and allowed to dry for 4 hours. Then, two coats of Jotashield Tex Ultra were applied, each at a rate of 450g/m^2, with a minimum drying period of 4 hours between coats. Each coat was applied at 90° to the previous. The coated sample was allowed to cure for 2-3 days in the laboratory, and then conditioned at 23±2°C and 60±5% relative humidity for a minimum period of four weeks prior to testing.

2.2 Determination of Crack Bridging Ability

As a crack propagator, the rear of each test specimen was cut to within 2mm of the front face at the centre of the specimens. Plastic plates (approximately 40mm wide) were adhered to the front of the coated sample, leaving approximately 1cm free either side of the centre of the specimen. A crack was then initiated from the rear of the specimen by gently widening the slot cut in the rear of the sample. This produced a microscopic crack in the concrete up to the underside of the coating.

Each test specimen was then placed in an Instron tensile testing instrument, model no. 1195, and tested under tension until the first defect was noted in the coating. The amount of extension of the crack was then measured using the extensiometer of the testing machine. A defect was classed as a pin hole or opened stretch mark. The outside edges of the sample were not examined for defects, due to edge effects that may occur.

The tensile tester cross head movement rate was set at 0.5mm/min. All testing was undertaken at 23±2°C and ambient humidity conditions. All six specimens were tested.

2.3 Dry Film Thickness

The dry film thickness of one of the specimens was determined by slicing through the coating and measuring the thickness using a stereo microscope with an eyepiece measuring graticule.

3. RESULTS

The maximum crack bridging ability of Jotashield Tex Ultra has been determined as 2.6mm.

The results of the analyses are detailed in Table 1 below.

CRACK BRIDGING ABILITY OF JOTASHIELD TEX ULTRA

Table 1

TW Ref	EXTENSION WHEN DEFECT FIRST NOTED (mm)	FAILURE MODE
143976/1	2.6	Pin hole failure
143976/2	1.6	Pin hole failure
143976/3	1.1	Pin hole failure
143976/4	1.7	Pin hole failure
143976/5	1.2	Pin hole failure
143976/6	1.6	Pin hole failure

Date tested: 5 June 2007
Dry film thickness of coating of 143976/2: 364 µm = 0.36mm

END OF CERTIFICATE