FACULTY OF ENGINEERING
CHULALONGKORN UNIVERSITY
FIRE SAFETY RESEARCH CENTER

TYPE OF TEST : DETERMINATION OF THE FIRE RESISTANCE OF NON-LOADBEARING ELEMENTS OF CONSTRUCTION

TEST SPECIMEN : **ROLLING SHUTTER DOOR**

The specimen is a doorset consisting of a rolling shutter door and a steel door frame. The dimensions of the rolling shutter door is 2400 mm x 1000 mm x 1.6 mm. The shutter door is constructed of No.16 shutter slats with 1.6-mm thick Zinc electro galvanized coating. The specimen was mounted in a 15 cm thick reinforced concrete wall, which was installed on the 3 m x 3 m testing frame. The rolling shutter door was locked with the door frame by a lockset. The details of the specimen are shown in Appendix C. The specimen was provided and installed by the client.

CLIENT : **SUPA RICH CO., LTD.**

27 Ramintra Soi48, Ramintra Road, Kannayao
Kannayao, Bangkok 10230, Thailand

DATE OF TEST : July 1, 2016

TEST MACHINE : Large-scale vertical furnace (Fire Tester III) at the Fire Safety Research Center (FSRC), Department of Civil Engineering, Chulalongkorn University (Thailand). The furnace is capable of producing a standard temperature-time relationship according to BS 476 Part 20: 1987.

TEST METHOD : The testing procedures follow the British Standard BS 476: Fire tests on building materials and structures

BS 476 Part 20: 1987: Method for determination of the fire resistance of elements of construction (general principles)

BS 476 Part 22: 1987: Methods for determination of the fire resistance of non-loadbearing elements of construction Section 6: Determination of the fire resistance of fully insulated doorsets and shutter assemblies.

TEST RESULTS : The non-loadbearing element of construction described above has the fire resistance of each criterion for the period stated:

(The test results are good only for the specimen tested.)

Criteria	Fire Resistance (hr:min)	Remarks
Insulation	0:03	The average temperature of the unexposed face of the specimen exceeded 140°C above its initial value of 36°C.
Integrity	2:05	The test was terminated by the client without passage of flame or gases hot enough to ignite the cotton pad.

Date: July 15, 2016

Tested by: .....
(Associate Prof. Dr. Jaroon Rungamornrat)

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(Associate Prof. Dr. Thanyawat Pothisiri)

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(Prof. Dr.Teerapong Senjuntichai)
Head of Civil Engineering Department

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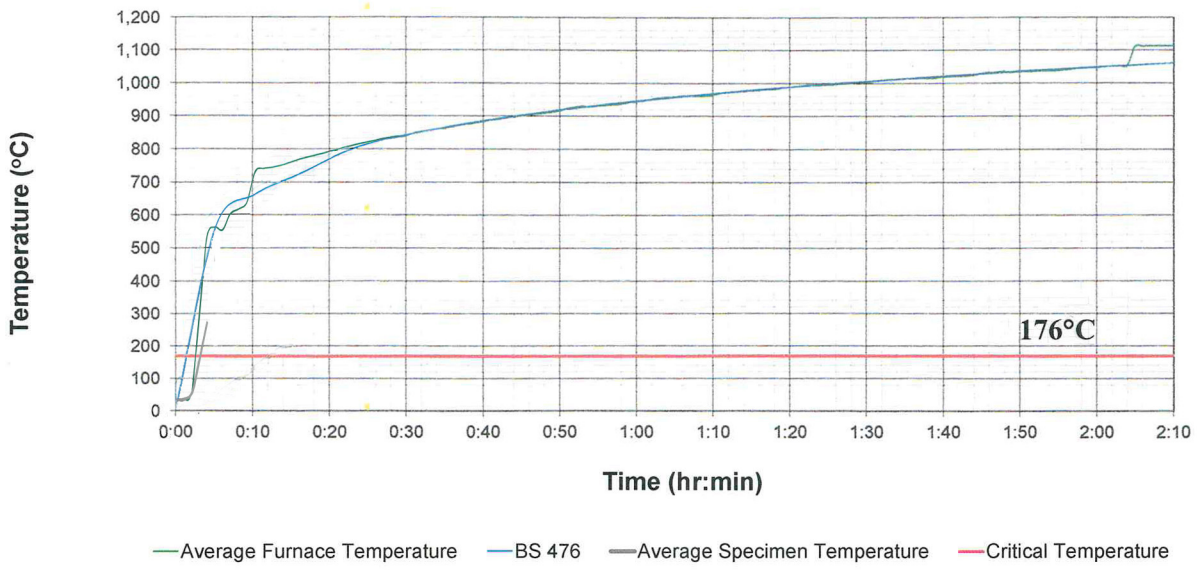
FURNACE TEMPERATURE



(Mr. Sirichai Pethrung)
Authorized Testing Officer