FACULTY OF ENGINEERING
CHULALONGKORN UNIVERSITY
FIRE SAFETY RESEARCH CENTER

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

TEST SPECIMEN : **EKOBLOK LIGHT WEIGHT CONCRETE BLOCK**

The specimen is a 3x3 m wall consisting of 390x190x75 mm EKOBLOKS connected with each other by 10 mm thick mortar. The wall is covered with 10 mm thick mortar on both sides. The details of the specimen are presented in Appendix C. The specimen was provided and installed by the client.

CLIENT : **ECO MAT CO., LTD.**

DATE OF TEST : May 3, 2006

TEST MACHINE : Large-scale vertical furnace (Fire Tester III) at the Fire Safety Research Center, Department of Civil Engineering, Chulalongkorn University. The furnace is capable of producing a standard temperature-time relationship according to several fire resistance standards including 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 5: Determination of the fire resistance of partitions.

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	3:15	The maximum temperature of the unexposed face of the specimen exceeded 180 °C above its initial value of 37 °C.
Integrity	4:00	The test was terminated after 4:00 hrs. No visible sign of damage or leak of the block wall and no passage of flame or gases hot enough to ignite the cotton pad.

Date: August 18, 2006

Tested by .....

(Dr. Suchol Likitlersuang)

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(Assistant Prof. Dr. Supoj Chintanapakdee)
On Behalf of Head of Civil Engineering Department

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(Assistant Prof. Dr. Thanyawat Pothisiri)