

DEPARTMENT OF CIVIL ENGINEERING  
FACULTY OF ENGINEER  
KING MONGKUT'S INSTITUTE OF TECHNOLOGY

TYPE OF TEST : FIRE ENDURANCE TEST FOR FIRE DAMPER

TEST SPECIMEN : FIRE DAMPER TYPE : FD  
The Specimen is 390 mm. Width and 593 mm.  
Height with 3 blades. The material is galvanize steel

BRAND : STREAM AIR

CLIENT : P C J INDUSTRIES Co.,Ltd.

DATE OF TEST : October, 31 , 2001

TEST EQUIPMENT : Large – scale furnace at Ceramic Laboratory.  
Department of Industrial Design. Faculty of  
Architecture, KMITL.

TEST METHOD : SOME PART OF UL 555

TEST RESULTS : The elements of Fire Damper still workable

Integrity 195 minutes

Note:

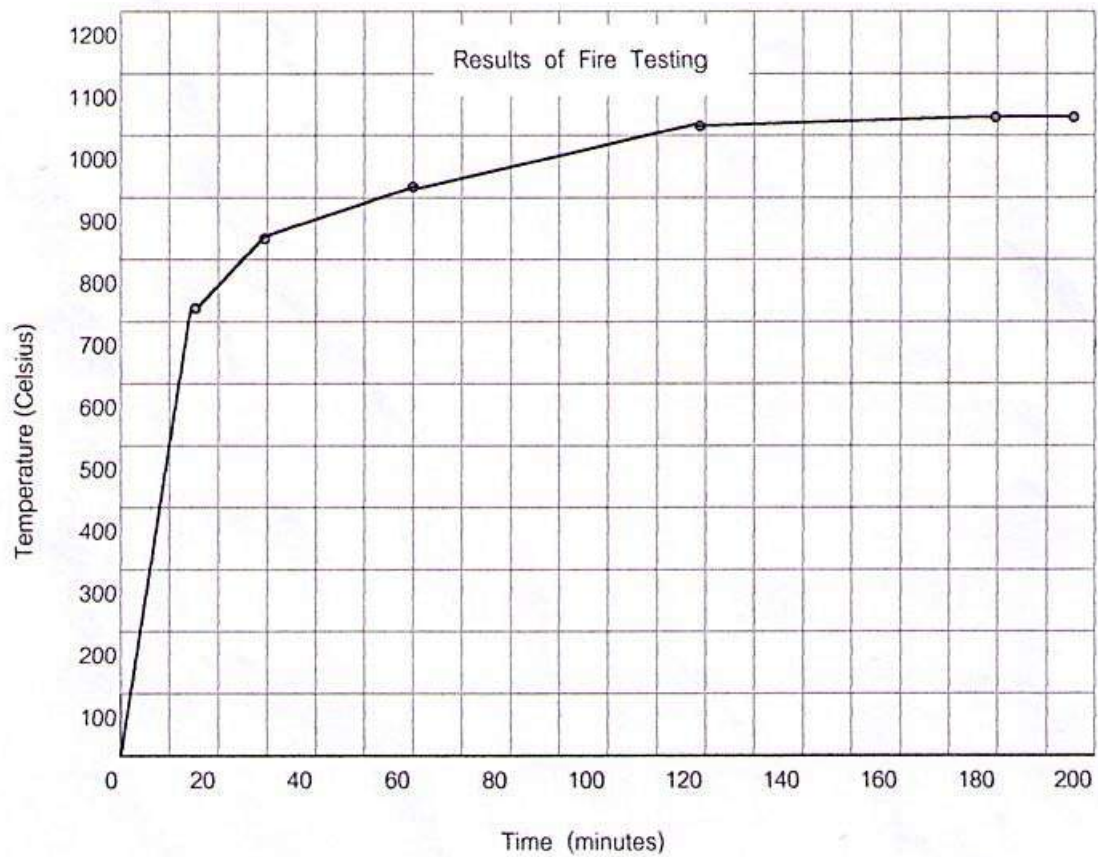
1. CERTIFICATION APPLIES TO TEST SAMPLE ONLY.
2. NO ERASURE OR ALTERATIONS.



Tested By Manit Buppachart  
Engineer By Supoj Srinil

*dm*  
*Supoj Srinil*

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Tested By Mani Buppachart

Engineer By Supoj Srinil

*Supoj Srinil*



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LARDKRABANG BANGKOK THAILAND.

TYPE OF TEST : Air Leakage Test and Fire Endurance Test for Rectangular Fire / Smoke Damper

TEST SPECIMEN : Rectangular Fire / Smoke Damper, Type : FSD  
The Specimen is 300 mm. Width and 500 mm. Height with 3 blades. The material is galvanized steel sheet.

BRAND : STREAM AIR

CLIENT : PCJ INDUSTRIES CO., LTD.

DATE OF TEST : 21/06/2004

TEST MACHINES : Wind Turnel (AEROTECH )  
Tilting Multitube Manometer

TEST METHOD : SOME PART OF UL 555 and UL 555S

TEST RESULTS : Integrity 180 minutes  
Conformed to UL555, 3 Hours Fire Rating, and  
Leakage 7.49 CFM/ft<sup>2</sup> at 1 inche water gauge  
Leakage 18.62 CFM/ft<sup>2</sup> at 4 inches water gauge  
Conformed to UL555S, Class II

REMARK :-

- 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.
- 2) NO ERASURE OR ALTERATIONS.

APPROVED BY :



MR. LAEMTHONG LAOKHONGTHAVORN)  
Head of Civil Engineering Laboratory





DEPARTMENT OF CIVIL ENGINEERING  
FACULTY OF ENGINEERING, KING MONGKUT 'S INSTITUTE OF TECHNOLOGY  
LARDKRABANG BANGKOK THAILAND. TEL. 0 - 2326 - 4216

Project : RETANGULAR FIRE/SMOKE DAMPER

Ref. No. : 47745

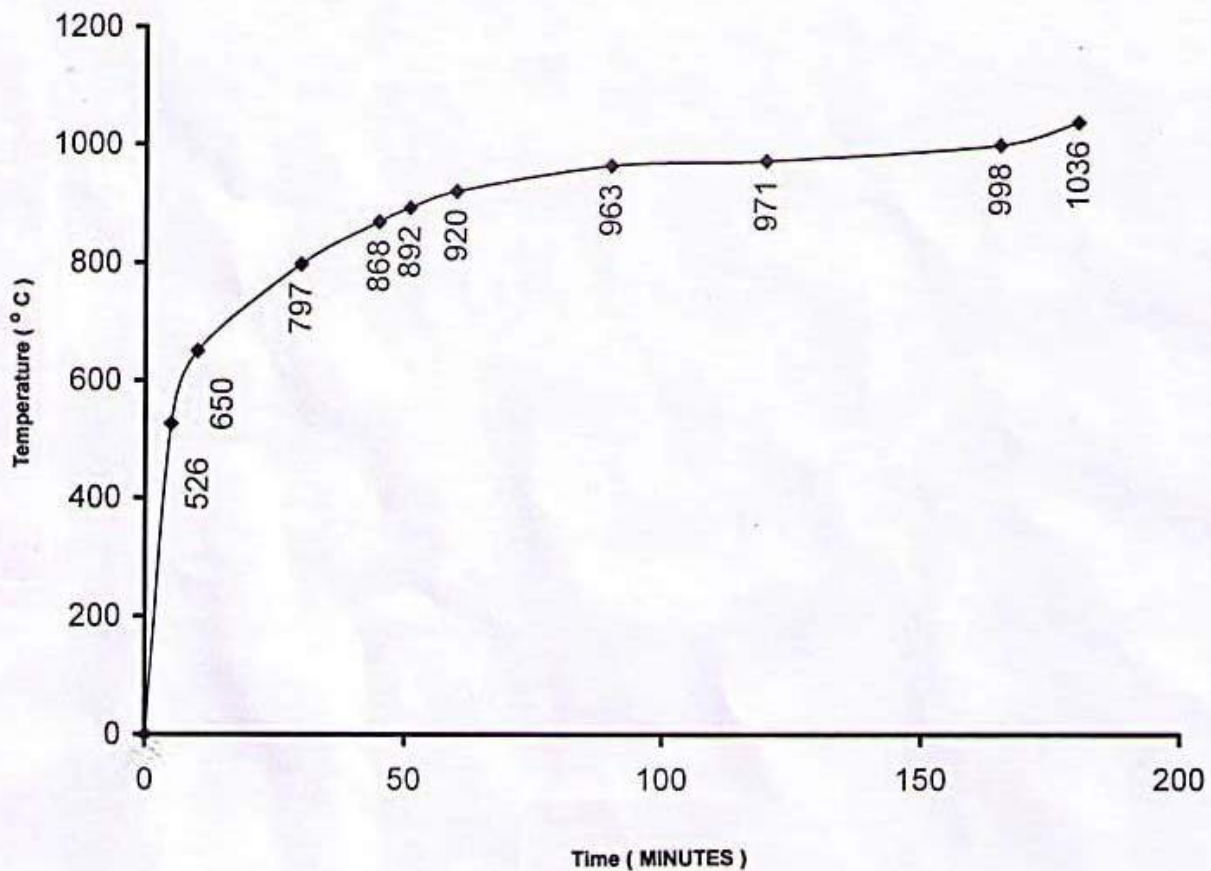
" STREAM AIR" Type : FSD

Sample From : PCJ INDUSTRIES CO., LTD.

Submitted Date : 22/07/2004

Method of testing: Some Part of UL555

Date : 21/06/2004



REMARKS :-

Note : 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

APPROVED BY :

2) NO ERASURE OR ALTERATIONS.

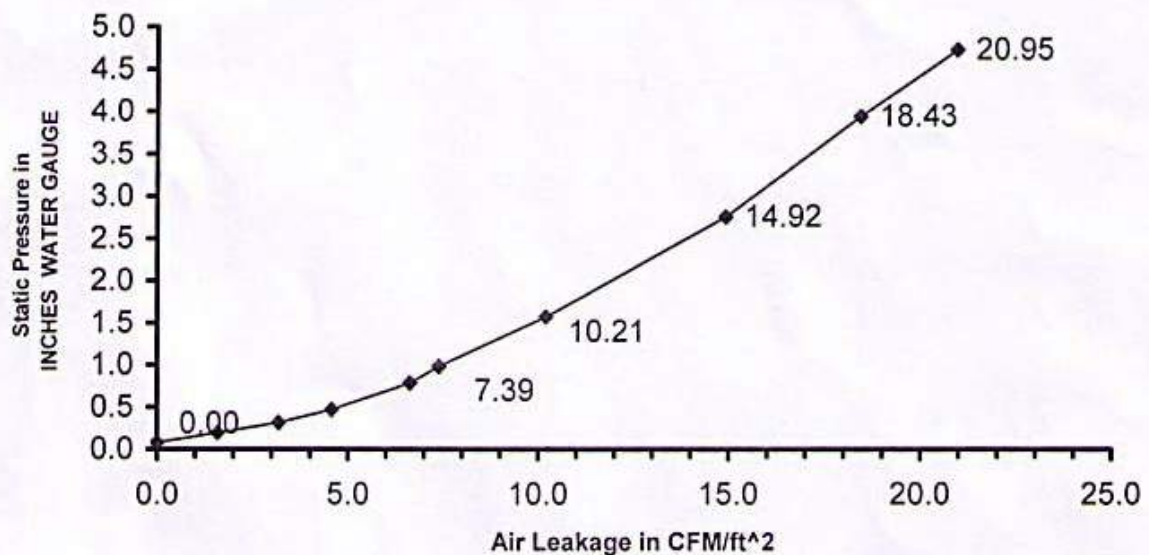
  
MR. LAEMTHONG LAOKHONGTHAVORN  
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Project :	RETANGULAR FIRE/SMOKE DAMPER	Ref. No. :	47745
	" STREAM AIR" Type : FSD		
Sample From :	PCJ INDUSTRIES CO., LTD.	Submitted Date :	22/07/2004
Method of testing:	Some Part of UL555S	Date :	21/06/2004

Air Leakage - DAMPER Type:FSD



REMARKS :-

Note : 1) CERTIFICATION APPLIES TO TEST SAMPLES ONLY.

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