

### 日本防火技術者協会ニュース

特定非営利活動法人日本防火技術者協会

第4巻 第4号(通巻第14号)(1/2)

2007年12月20日

#### NPO 法人日本防火技術者協会 平成 20 年度通常総会予告

日時:平成20年2月1日(金) 13:30 ~ 14:00

場所:東京理科大学森戸記念館

**議題内容**《予定》

1) 平成 19 年度事業報告

2) 平成 20 年度活動計画

3) 会計報告、予算計画

4) 監査報告 5) その他



SFPE・J ニュース (SFPE 日本支部 SFPE の活動 第18号)

#### SFPE日本支部 2008年度通常総会開催案内

日時:平成20年2月1日(金)

14:00 ~ 14:30 場所:東京理科大学森戸記念館

**議題内容**《予定》

1) 2007 年度事業報告 2) 2008 度活動計画

3) その他

#### シンポジウム開催案内 「近隣アジア諸国との連携を探る」

日時:平成20年2月1日(金) 14:30 ~ 17:00

場所:東京理科大学森戸記念館

**講演内容**《予定》 近隣アジア諸国 SFPE 支部の現状と

交流 関沢 愛(SFPE 日本支部) 中国での性能的設計事例の紹介 2.

油野健志(ARUP JAPAN) 台北駅の防災計画他の台湾における 性能的防火安全設計事例の紹介

簡 賢文(SFPE 台湾支部長)

7th International Conference on Performance-Based Codes and Fire Safety Design Methods

第7回性能基準と火災安全設計 法に関する国際会議

Auckland, New Zealand

#### April 16-18, 2008

第7回性能基準と火災安全設計法に関す る国際会議は、2008年4月16~18 日にニュージーランドのオークランドで 開催されます。

#### Registration Fees:

Advance Registration Fees (Must be recieved by 7 March 2008)

\$825 US Dollars for SFPE/CIB/SFS Members

\$980 US Dollars for Non-Members

Late Registration Fees (Received after 7 March 2008)

\$925 US Dollars for SFPE/CIB/SFS Members

\$1,050 US Dollars for Non-Members

#### **Gala Dinner Ticket**

1 Ticket included with Registration Fees - FREE Additional Tickets are \$100 U.S. Dollars

詳細は、SFPE ホームページに掲載され ています。公式案内の pdf ファイルを巻末 に添付します。

#### <u>ケーススタディ作業は</u> <u>順調に進行中</u>

ケーススタディの今年の課題は、階 段が一つしかない高層集合住宅です。 バルコニーや、周回廊下の設置で手堅 くまとめる方向もありましたが、それ ではアピール度が低いとの意見もあ り、三層ごとに区画された吹抜をコミ ュニティーの核としてそれが非常時 には避難拠点にもなると言う高いハ ードルを掲げて挑戦しています。1月 末の原稿締め切りに向けてこれから が正念場となりますのでよろしくご 支援をお願いします。

東京大学・消防防災科学技術寄付講座

#### 公開セミナー開催案内

東京大学消防防災科学技術寄附講座の 第3回公開セミナーが東京大学で開催さ れます。

URL: http://www.fse.t.u-tokyo.ac.jp に詳細 主催:東京大学消防防災科学技術寄附講座 開催日時:平成20年1月21日(月)

13:30~17:00(開場 13:00)

会場: 東京大学山上会館

(本郷キャンパス内三四郎池の近く)

主題: 大規模災害時における危機管理

プログラム: 13:30 - 13:40

(1)開会の挨拶と主題解説

東京大学消防防災科学技術寄付講座

関沢 愛

13:40 - 14:40

(2)「大規模災害時における自治体の危機 管理」

Blog 防災・危機管理トレーニング主宰 (消防大学校客員教授) 日野 宗門 14:40 - 15:40

(3)「企業における危機管理」

三菱地所都市計画事業室副室長 水口 雅晴 16:00 - 17:00

(4)パネルディスカッション

(3名の講師と会場)

参加費:無料

定 員: 先着 100 名

申込締切:平成20年1月17日(木)

申込方法:以下の項目を記入して下記申込

先に FAX, あるいは E-mail にて申込み 1)氏名 2)所属 3)連絡先(勤務先 住所・電話及び FAX・E-mail)

FAX (03) 5841 - 7327

E-mail: takahashi@fse.t.u-tokyo.ac.jp

(高橋あて)

#### 講演会のご案内

東京理科大学・21 世紀COEプログラ ムのシンポジウムが下記の日程で開催予 定です。詳細は、別途お知らせいたします。

主 催 東京理科大学

21世紀COEプログラム

協 賛 日本防火技術者協会他

時: 平成 20 年 3 月 10・11 日

両日とも 9:00~17:00

主 題:(第一日目)招待講演 火災安全科学における卓越した 研究拠点とそのグローバルネッ

トワークの構築

(第二日目)一般学術講演

場 所:グランドプリンスホテル赤坂

Web:http://www.rs.noda.tus.ac.jp/coe-fire

#### 第19回安全計画シンポジウム 開催案内

主催:日本建築学会・安全計画小委員会

日時:平成20年3月12日(水) 14:00 ~ 17:00

会場:建築会館会議室 主題:建築物の想定外災害に対応した安全

計画のあり方 - 地震・火災に対す る人命安全を中心として -

プログラム:

(1)主旨説明:掛川秀史(清水建設)

事務局住所:〒107-0052 東京都港区赤坂 3 丁目 11 番 15 号 赤坂桔梗ビル ㈱ERS 内

発行人:日本防火技術者協会 理事長 笠原 勲 編集者:同協会・理事会 広報担当 堀田博文

問合せ先 E-mail: <u>kasahara@otokan.co.jp</u> <u>fukui@nikken.co.jp</u> <u>Hhotta1@aol.com</u>



### 日本防火技術者協会ニュース

第4巻 第4号(通巻第14号)(2/2) 2007年12月20日

特定非営利活動法人日本防火技術者協会

#### (2)主題解説

- ・近年の主な災害事例に基づく想定外災害 の考え方:八木真爾(佐藤総合計画)
- ・火災に対する人命安全対策の想定条件: 萩原一郎(建築研究所)
- ・地震に対する人命安全対策の想定条件:和田章(東京工大)
- ・想定外の事態に備えるためのリスク軽減 手法の考え方:吉村英祐(大阪工大)

(3)討論・質疑 定員:50名

参加費:会員 2000 円,会員外 3000 円 申込:氏名、所属、TEL、FAX、E-mail を明記のうえ, E-mail にて下記まで 建築学会事務局 森田 morita@aij.or.jp

#### 講演討論会 「製品設計と火災の実態」 開催案内

主催:日本火災学会

日時:平成20年1月23日(水)

13:00 ~ 16:30

場所:文京シビックホール(小ホール) 参加費:無料(ただしテキスト代1,000円) 演題1「原子力施設の残余リスクとその 社会的受容」東京理科大学 森田昌宏 演題2「リチウムイオン電池と安全性」

(社)電池工業会 伊勢忠司 演題3「電池設備や製品に起因する火災と その防止への取り組み事例の紹介」 デンパール工業㈱ 古本哲男

演題4「ガス器具の火災防止対策」

東京ガス(株) 青柳恵子

討論

交通:東京メトロ丸の内線・南北線: 後楽園駅徒歩1分:詳細は火災学会 ホームページをご覧ください。

http://www.soc.nii.ac.jp/kasai/

# Journal of Fire Protection Engineering Vol.17 No.4 NOVEMBER 2007

Speech Intelligibility Measurements in an Office Building.(事務所ビルにおける音声明瞭度測定),

J. P. Woycheese

Transfer of Architectural Data from the IFC Building Product Model to a Fire Simulation Software Tool. (IFC 建物プロダクトモデルから火災シミュレーションソフトツールへ建築データの変換),

M. Spearpoint.

Performance-based Fire Safety Design of Reinforced Concrete Beams, (鉄筋コンクリート梁の性能的火災安全設計).

V. K. R. Kodur and M. Dwaikat.

### FIRE PROTECTION Engineering No.36 FALL 2007

Roundtable Discussion on Energy and New Fire Protection Challenges. (エネルギーと新たな防火工学の挑戦に関する円卓会議)

Experts discuss emerging Alternative energy sources and their impact on fire protection engineers, regulators, owners and consumers(代替エネルギー源による防火技術者、規制当局者、オーナーおよびエンドユーザーへの影響を専門家が語る)

Carl F. Baldassarra, P. E., FSFPE.

Risk Assessment in the Oil and Gas Energy Industry. (石油・ガス産業におけるリスクアセスメント)

Steps for assessing fire risk with an emphasis on identifying hazards, determining likelihood and defining risk tolerance. (ハザードの特定、発生頻度の予測、許容リスク量の定義というステップを通じて火災リスク評価を行う方法)

John A. Alderman, P. E., and William

Implementation of a Performance-Based Standard for Fire Protection for Nuclear Power Plants. (原子力発電所の防火のための性能基準の導入)

Highlights of NFPA 805, a consensus standard developed to manage fire risk at nuclear power plants. (NFPA805 - 原子力発電所における火災リスク運用のために開発された規準の概要)

Harold T. Barrelt, P. E..

Fire Protection/Life Safety in a Sustainable Design World, (持続可能な設計の枠組みにおける防火・人命安全)

How to address fire/life safety concerns while incorporating sustainable design elements into a project.(プロジェクトに持続可能性コンセプトを組み込む場合に生ずる火災および人命安全上の懸念にどのように向き合うべきか?)

Ronald J. Mahlman, P. E..

lt's Not Your Father's Fire Alarm Code Anymore. (もはや頑固オヤジのよ うな火災警報基準ではない)

The evolution of fire alarm systems over the last century.(20世紀における火災警報システムの進化.)

NEMA.

#### 新入会員

新たに入会された個人会員5名の 方々を記載しました。(敬称略) 〔会員〕

天野賢志〔㈱損保ジャパン・リスクマネジメント〕 皿井也保子〔 - 〕

高橋祥直 〔日本 ERI (株)〕 荻原龍三 〔(株)ゼファー〕

水上貴之 〔TOTO パスクリエイト(株)〕

[合計 109 名]

[ 学生会員 ] [ 1 名 ] [ 1 名 ] [ 賛助会員 ] [ 合計 5 団体 ] (計 7 口 )

#### 理事会等の開催結果

理事会を以下の日に実施しました。 10月19日(金) 11月15日(木)

#### ホームページ開設中

NPO 法人日本防火技術者協会のホームページを開設中。

URL は、<u>http://www.jafpe.or.jp</u> です

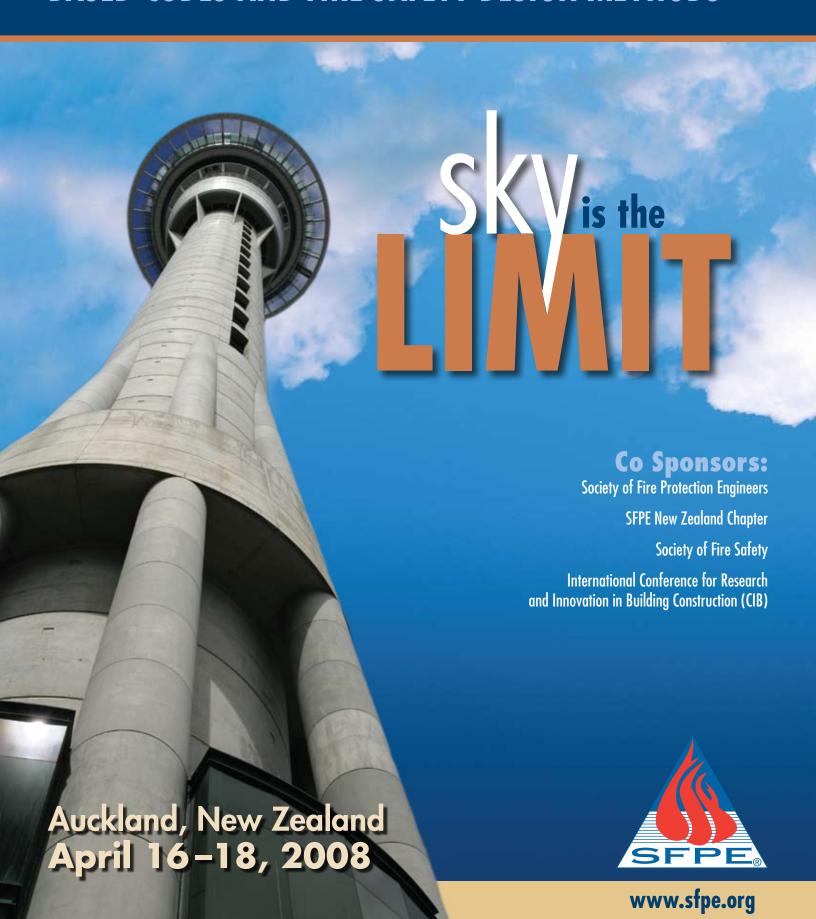
SFPE本部のホームページもご利用下さい。 URL は、<u>http://www.sfpe.org/</u> です。

事務局住所:〒107-0052 東京都港区赤坂 3 丁目 11 番 15 号 赤坂桔梗ビル ㈱ERS 内

発行人:日本防火技術者協会 理事長 笠原 勲

編集者:同協会・理事会 広報担当 堀田博文 問合せ先 E-mail: <u>kasahara@otokan.co.jp</u> <u>fukui@nikken.co.jp</u> <u>Hhotta1@aol.com</u>

# 7<sup>TH</sup> INTERNATIONAL CONFERENCE ON PERFORMANCE-BASED CODES AND FIRE SAFETY DESIGN METHODS



### **ABOUT THE CONFERENCE**

Since the first conference on performance-based codes and fire safety design methods was held in 1996, many countries have developed, or are in the process of developing, performance-based codes and design methods. However, use of these approaches has generally been limited to high-end projects, and the percentage of projects where performance-based design is used varies among countries.

This conference will present the state-of-the-art in performance-based code approaches and engineering design methods. Papers will be presented on newly emerging technologies, as well as perspectives on approaches that have worked well and approaches that have not worked as well as originally desired. The conference will be held in New Zealand, which was one of the first countries to adopt a purely performance based Building Code.

Over the last twelve years, this conference has earned a reputation among the fire protection engineering community as the preeminent event for information on the leading-edge technology in the areas of performance-based codes and engineering design methods.

### **PROGRAM COMMITTEES**

#### **Program Committee**

Richard Bukowski, National Institute of Standards and Technology, USA David Charters, Building Research Establishment LTD, UK Neil Gravestock, Marsh, LTD, New Zealand Morgan Hurley, Society of Fire Protection Engineers, USA Peter Johnson, ARUP Fire, Australia

Pobert länssen Lund University Swede

Robert Jönsson, Lund University, Sweden

Joël Kruppa, CTICM, France

Ai Sekizawa, National Research Institute of Fire and Disaster, Japan

Michael Spearpoint, University of Canterbury, New Zealand

Beth Tubbs, International Code Council, USA

### **Organizing Committee**

Julie Gordon, Society of Fire Protection Engineers, USA

### Wednesday, April 16, 2008

#### **Performance-Based Codes**

0900 - 0915 Welcome

0915 - 0940 Using Risk as a Basis for Establishing Tolerable Performance in Performance-Based

Building Regulation, B. Meacham

0940 - 1005 Codes for Existing Buildings: Different Approaches for Different Countries, D. Bergeron

1005 – 1055 Parallel Sessions

#### Session 1

Review of the Japanese Performance-Based Code — Recommendations by the Research Committee on Building Legislation in AlJ, N. Takeichi, K. Matsumoto, and W. Gojo

Performance Based-Codes and their Role in the Scottish Building Standards System, P. Stollard

1055 - 1130 Break

1130 – 1220 Parallel Sessions

#### Session 1

Performance Codes and Design in the US: An International Code Council (ICC) Perspective, **B. Tubbs and R. Okawa** 

Performance Based Design in Norway — Room for Improvement Based on 10 Years of Experience, V. Stenstad and W. Bjorkmann

1220 - 1400 Lunch

1400 –1515 Parallel Sessions

#### Session 1

Research in Support of Performance-Based Solutions in the National Construction Codes of Canada, **D. Bergeron** 

Proposed Framework for Performance Based Fire Engineering Design in the Next Generation New Zealand Building Code: Specification of the Design Fire, C. Fleischman

Proposed Framework for Performance Based Fire Engineering Design in the Next Generation New Zealand Building Code: Behavioural Characteristics, Acceptance Criteria and Performance, N. Saunders and A. Moule

#### Session 2

The Fire Engineering Brief Process in Performance Based Fire Engineering — Is it Working?, M. Feeney and J. Schulz

The New Zealand Building Act 2004 and the Involvement of the New Zealand Fire Service, A. Merry and M. Spearpoint

#### Session 2

The Application of Performance Based Fire Engineering in New Zealand, G. Thomas, S. Davis, and M. Feeney

Implications of New Research for Code Writers, Fire Engineers and Manufacturers in the Performance Based Environment, I. Thomas and D. Bruck

#### Session 2

Performance Based Design — Putting it Together On Site, J. Clarke and J. Schulz Buildings for All — Fire Safety for All?, B. Mostue

Performance-Based Design for Fire Safety in China, D. Gemeny, F. Li, and M. Reiss





### Wednesday, April 16, 2008 (continued)

1540 – 1515 Break

1515 – 1630 Parallel Sessions

#### Session 1

Proposed Framework for Performance Based Fire Engineering Design in the Next Generation New Zealand Building Code: Specification of Fire Scenarios, C. Wade

Proposed Framework for Performance Based Fire Engineering Design in the Next Generation New Zealand Building Code: Systems Performance, Sensitivity and Uncertainty, **P. Beever** 

Benchmarking Life Safety for the Proposed Fire Performance Framework in the Next Generation New Zealand Building Code, D. Lloyd and C. Fleischmann

#### Session 2

Performance Based Designed without Performance Based Codes? — Practice Used in Poland, T. Cisek, M. Skaznik, and M. Cisek

Fire Safety of High Rise Staged Occupancy Buildings, J. Barnett

Super-Tall Building Design: Use of Performance-Based Requirements to Provide Design Flexibility and an Understanding of Building Performance, A. Vanney and D. Choi

### Thursday, April 17, 2008

#### **Fire Safety Design Methods**

0900 - 0925	Emergen	cv Earess from	Buildinas	R. Bukowski

0925 - 0950 The Effects of Using Passenger Lifts and Escalators for the Evacuation of Building Occupants in Fire

and Other Emergencies in High Rise Buildings and Underground Complexes, D. Charters, D. Smith,

R. Chitty, and J. Frazer-Mitchell

0950 - 1015 The Influence of Fire Department Intervention for the Fire Safety of High-Rise Buildings, B. Tómasson,

B. Karlsson, J. Bengtsson, and D. Porsteinsson

1015 – 1040 Risk-Based Determination of Design Fires for Performance-Based Evacuation Safety Designs

of Buildings, T. Tanaka

1040 - 1115 Break

1115 – 1230 Parallel Sessions

#### Session 1

Performance of Means of Egress: Conducting the Research Needed to Establish Realistic Expectations Taking into Account Demographic Changes and Other Factors, J. Pauls

The Evacuation Module of Fire Dynamics Simulator: FDS+EVAC, T. Korhonen, S. Hostikka, S. Heliövaara, and H. Ehtamo

A Performance-Based Evaluation of an Alternate Method for Protecting High-Rise Stair Enclosures, M. Ferreira

#### Session 2

Design Fires for Vehicles in Road Tunnels, M. Cheong, M. Spearpoint, and C. Fleischmann Road Tunnel Fire Safety — Approach to Fire Scenarios, P. Johnson, C. Gildersleeve, and P. Williams

The Study of Fire Safety Design and Developing Trends of Taiwan's Road Tunnel Based on Safety Management for the Hsuehshan Tunnel, S. Chien, B. Shih, S. Ke, and H. Hsieh





### Thursday, April 17, 2008 (continued)

1230 – 1400	Lunch
1400 – 1425	An Analysis of the Target Safety Level Implied in Fire Resistance Design Method for Localized Fires in the Building Standards Law of Japan, A. Natori, K. Harada, and T. Wakamatsu
1425 - 1450	Redefining Fire Safety in Swedish High-Rise Buildings, F. Nystedt and T. Rantatalo
1450 – 1515	Required Safe Egress Time: Data and Modeling, J. Averill and P. Reneke
1515 - 1700	Parallel Sessions

#### Session

Fire Brigade Intervention Model in Australia — Understanding and Applying the Concepts, A. Alexandrovski and D. Boverman

The Validity and Applicability of Fire Models Used to Predict the Mass Flow of Smoke Within the Built Environment, I. Sanderson, T. Kilpatrick, and J. Torero

A Middle Ground Approach to Structural Fire Resistance Analysis, C. Hofmeister

#### Session 2

Methodology for Risk Based Fire Resistance Design of Structural Members, M. Nilsson, M. Ödén, and S. Jeansson

Fire Safety Design Principles for Life-Safety and Load-Bearing Structures — Fundamental Differences in Controlling Fire Risk, J. Lundin

Enhanced Structural Fire Protection for a Tall Building Against a Catastrophic Fire — Probabilistic Evaluation of Performance and Economic Value, G. Ramachandran

1800 Conference Gala Dinner

### Friday, April 18, 2008

#### **Case Studies**

0900 - 0915	Introduction
0915 – 1000	New Zealand Case Study — Richard Brand, Beca Carter Hollings and Ferner, LTD, et al.
1000 - 1045	Hong Long Case Study — W. K. Chow, Hong Kong Polytechnic University, et al.
1045 – 1115	Break
1115 – 1200	Swedish Case Study, Johan Lundin, WSP Fire and Risk, et al.
1200 – 1245	Australian Case Study — Ian Thomas, Victoria University, et al.
1245 – 1400	Lunch
1400 – 1445	American Case Study — William Koffel, Koffel Associates, et al.
1445 – 1515	Break
1515 – 1600	Japanese Case Study — Kasahara et al.
1600 – 1625	${\it Single Means of Escape from \ High-rise \ Apartment \ Buildings-The \ SME \ Project, \ T. \ Enright \ and \ J. \ Gardiner}$





#### **Conference Gala Dinner**

The conference gala dinner will take place on Thursday 17 April 2008 starting at 1800 hours in the Rangitoto Ballroom of the Langham Hotel Auckland. One conference gala dinner ticket will be included with each registration. Additional tickets are available at \$100 U.S. dollars per person.

### **REGISTRATION**

#### There are three easy ways to register:

- 1. Register Online: Register online on SFPE's secure web site: www.sfpe.org. Follow the easy online directions.
- 2. Register by Fax: Complete the registration form in this brochure and fax it to SFPE at +1.301.718.2242.
- 3. Register by Mail: Complete the registration form in this brochure and mail to: "7<sup>th</sup> International Conference on Performance-Based Codes and Fire Safety Design Methods," c/o Society of Fire Protection Engineers, 7315 Wisconsin Avenue, Suite 620E, Bethesda, MD 20814, USA.

Payment MUST accompany the registration form, and a receipt will be sent as confirmation via U.S. postal mail. We accept American Express, Visa or MasterCard payments, and all cheques must be made payable in U.S. dollars to "SFPE."

#### Advance Registration is available through 7 March 2008.

Late Registration is available from 8 March 2008 until 31 March 2008.

After 31 March 2008, registration will be available on-site only. On-site registration will be offered on-site Wednesday 16 April 2008 from 0730 to 1700 at the Langham Hotel Auckland.

#### **Special Requirements**

If you have any special requirements due to disability or special dietary needs, such as: vegetarian, pork, shell fish, etc., please contact SFPE Headquarters at +1.301.718.2910 ext. 104, e-mail at jgordon@sfpe.org or indicate your requirements on the Conference Registration Form.

#### HOTEL

#### Official SFPE Conference Hotel - Langham Hotel Auckland

Address: 83 Symonds Street, Auckland 1140, New Zealand

Phone: +64 9 379 5132 Fax: +64 9 377 9367 www.langhamhotels.com

The hotel is centrally located in the vibrant Auckland City, and is close to key motorway access points, and within walking distance of parks, fashion houses, cafes, bars, the Auckland War Memorial Museum, the Auckland Art Gallery and the waterfront.

The SFPE room rate is \$185.00 NZ + GST for a superior room and \$215.00 NZ + GST for an executive room. Reservations must be made by **Friday**, **February 15**, **2008** in order to receive the SFPE room rate and to be assured room availability. Individuals are responsible for making their own reservations. When making your reservations, please state that you are part of the **SFPE** group.

### **CONFERENCE REGISTRATION FORM**

Please complete this form and return it to:

### **7<sup>TH</sup> INTERNATIONAL CONFERENCE ON PERFORMANCE-BASED CODES AND FIRE SAFETY DESIGN METHODS**

**Society of Fire Protection Engineers** 

7315 Wisconsin Avenue | Suite 620E | Bethesda, MD 20814, USA | p: +1.301.718.2910 | f: +1.301.718.2242 | education@sfpe.org | www.sfpe.org

Name (first)	(initial)		(lost)		
<u>Organization</u>		Title			
Address					
City/Town	Prov	/State	Postal Code		
Country					
Phone		Fax			
E-mail					
Nickname					
Special Requirements					
(dietary or accessibility)					
REGISTRATION FEES		MEMBER	RINFORMATION		
Advance Registration Fees (Must be received by 7 March 20	08)	This section mu	This section must be completed to receive member discount:		
□ \$825 US dollars for SFPE/CIB/SFS Members	\$	□ SFPF Mem	☐ SFPE Member *My member number is		
□ \$950 US dollars for Non-Members	\$	□ CIB or □	•		
			mber number to receive discount		
Late Registration Fees (received after 7 March 2008)		□ Non-mem	her		
☐ \$925 US dollars for SFPE/CIB/SFS Members	\$		uci		
□ \$1,050 US dollars for Non-Members	\$	METHOD	O OF PAYMENT		
Gala Dinner Ticket			losed (made payable to SFPE)		
□ 1 Ticket included with registration fees	\$ FREE		d (please check one)		
□ Additional Tickets: Qty: x \$100 U.S. Dollars	\$ <u></u>		an Express 🗅 MasterCard 🗅 Visa		
Additional fickols. My x \$100 0.5. Dollars	<b>y</b>				
		Card Number			
TOTAL	\$	Exp. Date			
		· ·			
		Name on Card			

Signature

Payment MUST accompany registration form.

## BASED CODES AND FIRE SAFETY DESIGN METHODS 7TH INTERNATIONAL CONFERENCE ON PERFORMANCE-





April 16-18, 2008

(SID) noitourianal Conference for Research and Innovation in Building Construction (CIB)

Co Sponsors: Society of Fire Protection Engineers, SFPE New Zealand Chapter, Society of Fire Safety,

Auckland, New Zealand April 16 –18, 2008