LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah	:	Towards a competitive traditional market through infrastructure performance and redefinition categories: A case in Semarang City		
Jumlah Penulis	:	3 Orang (Ferry H, **Ismiyati**, Himawan I)		
Status Pengusul	:	Penulis kedua		
Identitas Prosiding	:	a. Judul Prosiding	:	Matec Web Conference Volume 195, 2018 The 4th International Conference on Rehabilitation and Maintenance in Civil Engineering (ICRMCE 2018), Pages 1-6
		b. ISBN/ISSN	:	2261-236X
		c. Thn Terbit, Tempat Pelaks.	:	Tahun 2018, Solo Baru, 11-12 July 2018
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Towards a competitive traditional market through infrastructure performance and redefinition categories : A case in Semarang city

(Conference Paper) (Open Access)

Hermawan, F. ✉, Ismiyati, I., Indarto, H.

Department of Civil Engineering, Diponegoro University, Prof. Sudharto, SH Street, Tembalang, 50275, Indonesia

Abstract

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The revitalization of the Indonesian Traditional Market has prolonged problems, becoming a never-ending story, particularly in public building standards in the last decade. A competitive traditional market is public need, where the affordable prices and infrastructure are the central consideration. This research aims to figure out the current condition of the Indonesian Traditional Market and the needs of future policy towards a competitive environment of the marketplace in a metropolitan city context. However, Western culture has been mixed into the current management of the Indonesian Traditional Market . The insight of the ideal traditional market for the metropolitan city , as well as Semarang , is the standard from Indonesian public market guidance and a lesson learned from other countries. This research was conducted between 2014-2017. A case study method was applied, using semistructured interviews, document investigation of Detailed Engineering Design (DED) and field observation of registered traditional markets in Semarang . The results will determine the current implementation of Traditional Market standards in Semarang . The infrastructure performance and redefinition category among marketplaces are suggested as a consideration toward the competitive traditional market on public building policy. © The Authors, published by EDP Sciences, 2018.

SciVal Topic Prominence

Topic: Finland | Humor | Regional identity

Prominence percentile: 46.245

Indexed keywords

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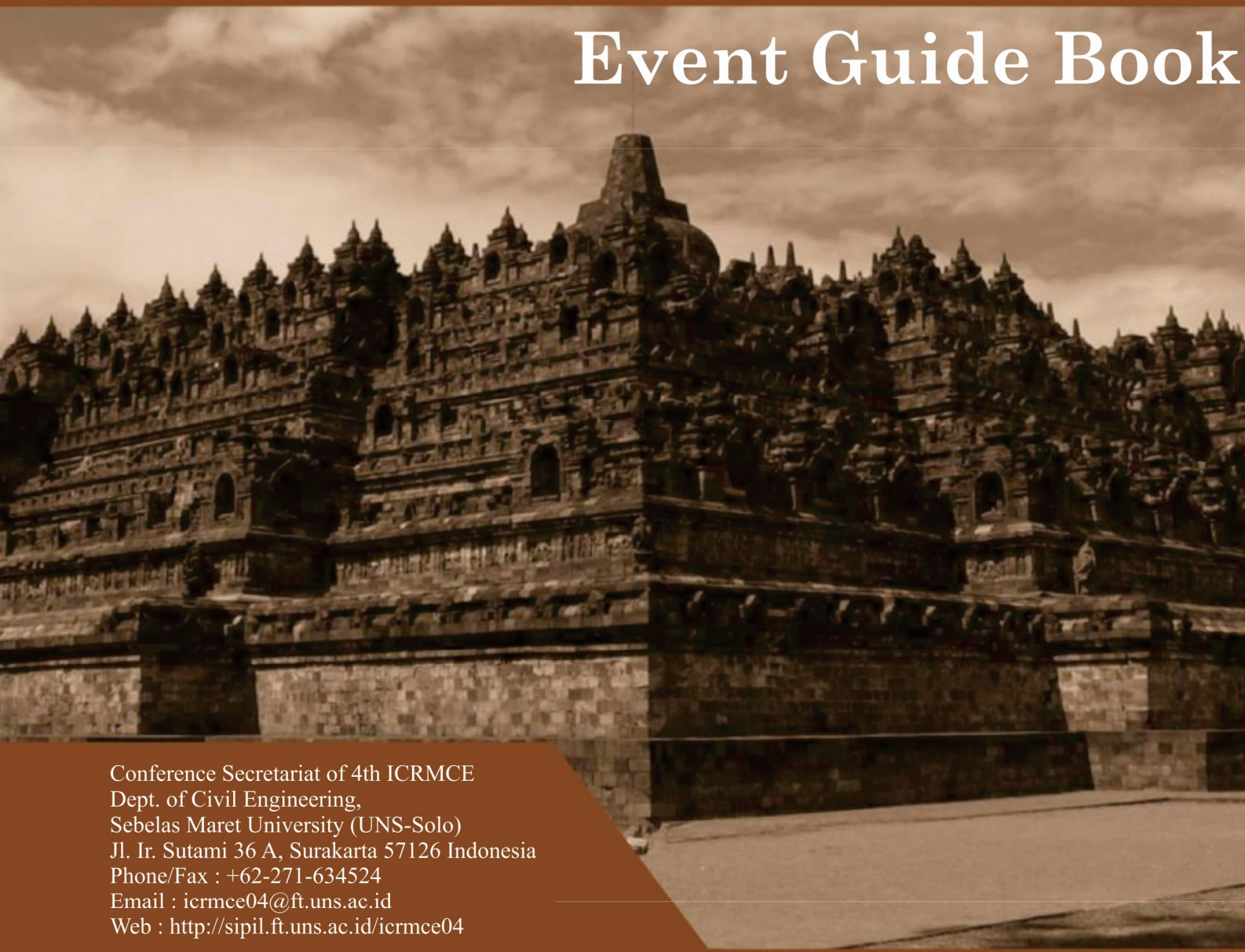

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more ... (http://seeds.office.hiroshima-u.ac.jp/profile/en.82b745276185148e520e17560c007669.html)

Masyhur Irsyam
Bandung Institute of Technology (ITB), Indonesia
more... (http://www.pri.itb.ac.id/web/geotechnics/masyhur-irsyam/)

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A mini symposium will be convened by FIB-Indonesia, a group of concrete scientists and engineers in Indonesia, in conjunction with the 4th International Conference on Rehabilitant and Maintenance in Civil Engineering held by collaboration of several university in Indonesia and worldwide. The theme of the mini symposium will be on Concrete Structures; Past Achievement, Current Issues and Future Development. It addresses the legacy, the state of the arts and practices of concrete structures as well as the challenge concrete industry is facing in the future. more... (http://sipil.ft.uns.ac.id/icrmce04/index.php/minis/view)

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The 4th International Conference on Rehabilitation and Maintenance in Civil Engineering (ICRMCE 2018)

Solo Baru, Indonesia, July 11-12, 2018
P. Hajek, A.L. Han, S. Kristiawan, W.T. Chan, M.b. Ismail, B.S. Gan, R. Sriravindrarajah and B.A. Hidayat (Eds.)

- Construction Materials

Advanced high-performance concrete structures – challenge for sustainable and resilient future

Petr Hajek[1,*]

[1]Czech Technical University in Prague, Faculty of Civil Engineering, 166 29 Prague 6, Thakurova 7, Czech Republic

Abstract. Development and recent changes in natural and socio-economic environment requires new technical solutions for construction of new and reconstruction and modernization of existing structures. Structures and all built environment should be better prepared for new conditions – they should be sustainable and resilient. Concrete is building material with high potential for new technical solutions resulting in needed environmental impact reduction and consequent social and economic improvements. The paper presents potential contribution of concrete industry, advanced high-performance concrete and concrete structures to Sustainability Development Goals specified in UN 2030 Agenda for Sustainable Development and presents basic principles of implementation of sustainability approach into design of concrete structures and particularly to fib Model Code 2020.

1 Introduction

1.1 World is changing

Considering scale line - one year for entire life of the Earth - the human civilization exists only last 90 seconds and RC structures are used in last one second. Earth existed long before humans developed on the Earth and will exist long after the conditions on the Earth will not be suitable for human life. Sustainability is about preservation of environmental, social and economic conditions on our planet in the form which will enable survival of humans on the Earth as long as possible [1]. The question raised in this paper is how concrete, as the second most used material after water and the most used construction material, can help in this process.

Changing of the climate on the Earth is innate and everlasting process; environmental conditions are continuously changing due to continental drift followed by volcanic, seismic effects and due to man-made impacts. Human life conditions for life are modified – and as a consequence biodiversity is irrecoverably changed. This process was in previous periods very slow, enabling consecutive adaptation of life forms (incl. humans) to changing

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Waterproofing practices in Australia for building construction

Rasiah Sriravindrarajah[1,*] and *Elizebeth* Tran[1]

[1]CBIR, School of Civil and Environmental Engineering, University of Technology Sydney, Australia

Abstract. Waterproofing is an essential component in building construction to maintain the integrity of buildings with reduced maintenance cost. A comprehensive waterproofing system is an integrated combination of factors, and includes product selection, membrane detail, substrate preparation, design, installation and maintenance. It is designed to work under different environmental conditions, substrates and applications. Proper understanding of the issues related to waterproofing membrane systems is important to minimise the waterproofing failures in both commercial and residential buildings. This paper aims to discuss Standards and Codes; membrane systems and performance, waterproofing practices, design and installation techniques, inspection and testing and quality assurance adopted by the waterproofing industry in Australia.

1 Introduction

Waterproofing is a fundamental and vital construction activity to maintain the integrity of both commercial and residential buildings over its service life. It minimises the post-completion problems mainly caused by water damages such as mould growth and rusting. A comprehensive waterproofing system is an integrated combination of factors, includes product selection, membrane detail, drainage design, substrate preparation, design, installation, quality assurance and maintenance. The advancements in technology have led to the development of various waterproofing membrane systems, namely liquid, sheet and spray-applied membranes. Each of these systems has its advantages and disadvantages. This paper aims to discuss Standards and Codes; membrane systems and performance, waterproofing practices, design and installation techniques, inspection and testing and quality assurance adopted by the waterproofing industry in Australia.

2 Standards and building codes in Australia

AS3740 [1] (Waterproofing of domestic wet areas) and AS4654.1/2 [2, 3] (Waterproofing membrane systems for exterior use) are current Australian standards used by the building and construction industry in Australia. AS4654.1 [2] lists the conditions and requirements that membranes will be subjected to test its durability. This includes time, humidity, water

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Microscopic investigation on concrete cured internally by using porous ceramic roof-tile waste aggregate

Azusa Shigeta[1], *Yuko* Ogawa[1], and *Kenji* Kawai[1*]

[1]Department of Civil and Environmental Engineering Graduate School of Engineering, Hiroshima University, 1-4-1 Kagamiyama, Higashi-Hiroshima, Hiroshima, Japan

Abstract. Porous ceramic roof-tile waste aggregate (PCA), which is a recycled material, is an effective internal curing material for concrete. Part of the aggregate is replaced with saturated internal curing material to supply internal water into the cement paste continuously. Internal water is effective to promote the hydration of cement paste, especially in concrete with a low water-to-cement ratio because external curing water cannot easily reach inside the concrete. It has been reported that PCA leads to an increase in compressive strength and the reduction of autogenous shrinkage of concrete. However, the effects of PCA in previous researches are different with regards to the experimental conditions and have not been evaluated sufficiently. Therefore, the present study aims to investigate the effect of internal water supplied from PCA microscopically. In the experimental program, a compressive strength test was conducted for 6 types of concrete with a W/C of 0.35. The microhardness around the aggregate in the concrete was also measured to investigate the extent of the influence of the internal water supply. The results showed the possibility that microhardness of ITZ around PCA is improved by internal curing water supply and the compressive strength of concrete is also improved by using PCA.

1 Introduction

Generally, curing is conducted for concrete immediately after casting in a humid environment in order to promote the hydration of cement paste. However, external curing water cannot reach the inside of concrete sufficiently, especially in concrete with a low water to cement ratio (W/C) because the surface part of such a type of concrete is dense. To compensate for such a problem, internal water curing is effective to promote hydration. Internal curing is a curing method in which part of the aggregate is replaced with saturated internal curing material to supply internal water into the cement paste continuously. In concrete, capillary water is consumed for hydration of

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Strength development of cement-treated sand using different cement types cured at different temperatures

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Abstract. This study aimed to investigate the strength development of cement-treated sand using different cement types: ordinary Portland cement (OPC), high early strength Portland cement (HPC), and moderate heat Portland cement (MPC) cured at different temperatures. The cement-treated sand specimens were prepared with 8% of cement content and cured under sealed conditions at 20°C and 40°C, and mortar specimens were also prepared for reference. The results showed that the compressive strength of cement-treated sand increased in order of MPC, OPC, and HPC under high curing temperatures. It was interesting that the compressive strength of the specimens using HPC was much larger than that of the specimen using OPC and MPC under 20°C due to the larger amount of chemically bound water. Additionally, it was revealed that under high curing temperatures, the pozzolanic reaction was accelerated in the cement-treated sand; this may be caused by the high proportions of sand in the mixtures.
Keywords: Cement-Treated Sand, Compressive Strength, Cement Types, Curing Temperatures, Cement Hydration, Pozzolanic Reaction.

1 Introduction

Cement-treated soils have been applied popularly for soft soil improvement, especially for the deep mixing method. It is known that the compressive strength of cement-treated soils is considered an important indicator to characterize soil behavior [1-3]. The strength development of cement-treated soils is governed by many factors such as conditions of soil, mixing, and curing [4]. In terms of curing conditions, the curing temperature is an important factor that affects the strength development of cement-treated sand. With regards to the deep mixing method, large columns of cement-treated soils are usually used. A previous study on the temperature history of field deep mixing columns revealed that the

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A comparative analysis of the quality of concrete blocks produced from coconut fibre, oil palm empty fruit bunch, and rice husk as filler material 01019

Mohammad Lutfi, Muh Yamin, Mujibu Rahman and Elisa Ginsel Popang

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Jonbi Jonbi, Resti Nur Arini, Basori Anwar and Mohamad Ali Fulazzaky

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Muh. Yamin, Rudito, Andi Lisnawati and Mohammad Lutfi

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Ari Widayanti, Ria Asih Aryani Soemitro, Hitapriya Suprayitno and Januarti Jaya Ekaputri

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One-way translational magnetic mass damper model for structural response control against dynamic loadings

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Abstract. Structural responses should be reduced to minimize the consequent structural damage caused by dynamic excitation. The one-way translational magnetic mass damper model is developed as a new type of damper for the purpose of structural response control. The damper utilizes the concept of repulsive force between magnets with same poles to create a magnetic force to stabilize or bring the structure back to its original position. The dynamic performance of the structure was tested using a harmonic shaking table. In this study, the three parameters used are excitation speeds: 2.5V (low), 6.0V (medium) and 8.5V (high); strength of magnets: weak (N35), medium (N45) and strong (N52); and the mass in the damper: 40 g, 101 g and 162 g. The correlations of the parameters towards the structural displacement are verified in the testing. The displacement is highly reduced up to 100% at the first level and 85.2% at the fifth level. The most optimum structural response control was attained when a strong magnetic strength and mass of 162 g are used. When tested with three excitation speeds; 2.5V, 6.0V and 8.5V, the damper with this setting provides the optimum damping effect towards the structure in terms of displacement.

1 Introduction

Dynamic loading is an external force exerted in certain amounts on a structure upholding them. The occurrence of dynamic loading or synonymously known as dynamic excitation

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