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DEPARTMENT OF ARCHITECTURE AND BUILDING
DEPARTMENT OF STRUCTURAL ENGINEERING

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ABSTRACTS

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ABSTRAKTI

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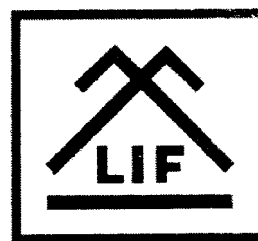
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	Content	iii
	I Building materials	1
Latvia	Olga Finoženok, Ramunė Žurauskienė, Rimvydas Žurauskas. THE INFLUENCE OF VARIOUS SIZE CRUSHED CONCRETE WASTE	2
Latvia	Viktors Mironovs, Jānis Bronka, Aleksandrs Korjamins, Jānis Kazjanovs. IRON CONTAINING WASTE MATERIALS AND POSSIBILITIES OF THEIR APPLICATION IN MANUFACTURING THE HEAVY CONCRETE.....	3
	Andina Sprince, Leonīds Pakrastiņš, Aleksandrs Korjamins. EXPERIMENTAL STUDY CREEP OF NEW CONCRETE MIXTURES	4
Latvia	Diāna Bajāre, Aleksandrs Korjamins, Jānis Kazjonovs. APPLICATION OF ALUMINIUM DROSS AND GLASS WASTE FOR THE PRODUCTION OF EXPANDED CLAY AGGREGATE.....	5
	Raitis Brencis, Juris Skujāns, Uldis Iljins, Ilmārs Preikšs. RESEARCH OF HEMP'S FIBROUS REINFORCEMENT EFFECT TO BENDING STRENGTH AND SOUND ABSORPTION OF FOAM GYPSUM.....	6
	Jānis Justs, Diāna Bajāre, Genādijs Šahmenko, Aleksandrs Korjamins. ULTRA HIGH PERFORMANCE CONCRETE HARDENING UNDER PRESSURE.....	7
	Raimondas Sadzevicius, Feliksas Mikuckis, Dainius Ramukevicius. DEFECTS' ANALYSIS OF REINFORCED CONCRETE SLABS FOR EARTH DAM SLOPE PROTECTION	8
	Diāna Bajāre, Jānis Justs, Ģirts Baumanis. OBTAINING COMPOSITION OF GEOPOLYMERS FROM LOCAL INDUSTRIAL WASTES	9
	Mārtiņš Zaumanis, Juris Smirnovs. ANALYSIS OF THE POSSIBILITIES FOR THE USE OF WARM MIX ASPHALT IN LATVIA	10
	Vincas Gurskis, Karolis Bunevicius, Rytis Skominas. RESEARCH OF THE TRADITIONAL AND NONTRADITIONAL ADMIXTURES ON MORTAR AND CONCRETE	11
	Pēteris Šķēls, Edmunds Šķēle, Kaspars Bondars, Thomas Ingeman-Nielsen, Anders Stuhr Jørgensen. QUICKLIME (CaO) STABILIZATION OF FINE-GRAINED MARINE SEDIMENTS IN LOW TEMPERATURE AREAS	12
	Riina Miljan, Martti-Jaan Miljan, Matis Miljan. SUSTAINABLE BUILDING USING NATURAL MATERIALS	13
	Kristina Akermann, Jaan Miljan, Kristo Karja. MODERN EARTHEN ARCHITECTURE IN ESTONIA.....	14
	Dalia Kasperiuonaitė, Juozas Navickas. THERMOPHYSICAL PROPERTIES OF SAMPLES MADE OF SAPROPEL AND CLAYEY SOIL	15

EXPERIMENTAL STUDY ON CREEP OF NEW CONCRETE MIXTURES

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The aim of this study was to experimentally investigate the creep behavior of new concrete compositions in order to evaluate the possibility of using glass powder and small clay particles as active additives in concrete replacing cement. Three concrete mixes were designed and prepared, then several 160x40x40mm specimens of each batch were made and tested. Specimens were subjected to a uniform compression load kept constant over a long period of time in a constant room temperature and with a constant level of moisture (see Fig.1). Specimens were hardened in two extreme environments: in one case there was 100% humidity provided by protecting the specimens from desiccation and in the other case specimens were air-dried and protected from any moisture. Compression strength and modulus of elasticity of 7 and 28 days old samples was determined and compared with those of standard concrete.

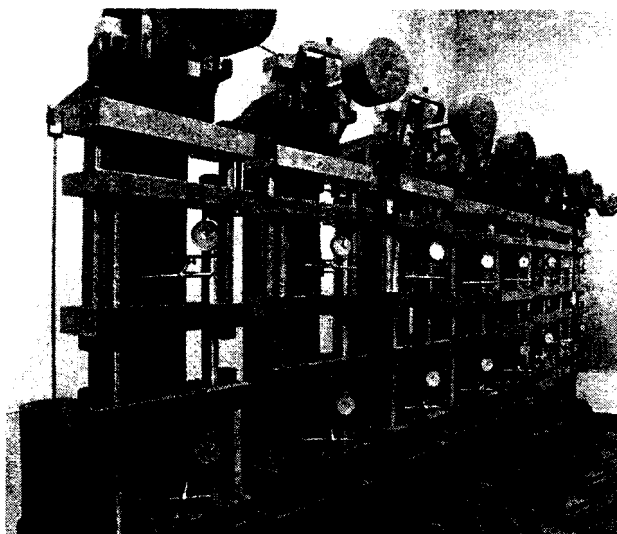


Fig. 1. Creep test frames