

The effect of climate change on freeze-thaw durability of concrete structures in Finland

Tuulettuvien yläpohjien lämpö- ja kosteustekninen toiminta nykyisessä ja tulevaisuuden ilmastossa

Julkisivujen ja parvekkeiden talvikorjaus 2018

Eriste- ja levyrappaus 2016, by 57

Tuulettuvat julkisivut 2016, by 64

Liikennetekniikan perusteet
Opetusmoniste

Pyöräväylien tiedot ja laatutaso

WIN-WINTER - Tie- ja katuverkon talvihoidon tutkimusohjelma. Esiselvitys
Raportti tuloksista

WIN-WINTER - Nordic winter road maintenance research program. Preliminary study
Project report

ÄKK Loppuraportti
rakennusten ääniolosuhteiden käyttäjälähtöinen kehittäminen

Lähtökohtia tie- ja rataverkon peruspalvelutason määrittämiselle
Translated title of the contribution: : Basis for defining the basic service level of road and rail network

Kipsilevytuulensuojallisten puurunkoisten ulkoseinärakenteiden rakennusfysikaalinen toiminta

Ilmakehän pitkäaaltainen säteily rakennusfysikaalisissa laskentatarkasteluissa

Koulujen ja päiväkotien sisäilman lämpötilan, suhteellisen kosteuden ja hiilidioksidipitoisuuden mittaukset COMBI-hankkeessa

Rakennuksen ulkovaipan yli vaikuttavien paine-erojen määrittäminen rakennusfysikaalisia laskentatarkasteluja varten

Puurunkoisten ulkoseinien liitosten lämpö- ja kosteustekninen toiminta

COMBI-hankkeen paine-eromittausten yhteenveto

Huokoisten puukuitu- ja kipsilevytuulensuojalevyjen homehtumisherkyys

COMBI-hankkeen suositukset korkeatasoisten ja kosteusturvallisten palvelurakennusten toteuttamiseksi - COMBI 8

Kapasitiivisten kosteusantureiden käyttäytyminen betoniseinien ja kipsivalulattioiden kuivumisen seurannassa

Betonin kosteustekniset materiaaliominaisuudet ja mittausmenetelmän kehittäminen

Puuelementtien välisen sauman tiivistys kumitiivisteellä

Paine-erot Pirkanmaan ja Helsingin julkisissa palvelurakennuksissa

Maanvastaisten seinien lämpö- ja kosteustekninen toiminta

Kosteusvaurioiden vakavuus kuntien rakennuksissa

Puukerrostalon työmaavaiheen lämpö- ja kosteusolosuhteiden mittaukset

Puukerrostalorakentamisen kosteudenhallinta

Julkisivujen ja parvekkeiden talvikorjausohje

ÄKK-hankkeen suositukset tulevaisuuden ääneneristysmääräyksiä koskien

Puuvälipohjien akustiset ominaisuudet

Menetelmä parvekelasien ääneneristävyyden mitoittamiseksi liikennemelualueilla

Puurunkoisten tuuletettujen yläpohjien kosteustekninen toiminta

Lasitetun parvekkeen lämpötilan ja lämpöhäviöiden laskenta

Raudotteiden korroosionopeuden määrittäminen betonijulkisivussa korkean aikaresoluution säädätan avulla

Uudessa COMBI-hankkeessa tutkitaan energiatehokkaan palvelurakentamisen haasteita ja ratkaisuja

Koko Julkisivua peittävän lasijulkisivun vaikutus Etelä-Ruotsissa sijaitsevan rakennuksen energiatehokkuuteen
Translated title of the contribution: : The impact of the added façade glazing on the building energy consumption in the southern Sweden

Acoustics of vanished 19th century concert halls in Helsinki

Auralization of vanished 19th century concert halls in Helsinki

Reply to the discussion by koutsoftas on "evaluation of sample quality from different sampling methods in finnish soft sensitive clays"¹

Editorial to "The best papers from the 32nd International Symposium on Automation and Robotics in Construction and Mining (ISARC 2015)"

Societal impact as Cost-Benefit Analysis
Comparative analysis of two research infrastructures

Second-order analysis of prestressed concrete columns

Alkali-silica reaction in finnish swimming pools

Performance of Variable Partial Factor approach in a slope design

Buckling length assessment with finite element approach

Fatigue loading tests of concrete railway sleepers

Solar Panel Breakage During Heavy Rain Caused by Thermal Stress

The effect of climate change on the amount of wind driven rain on concrete facades

Bus Transportation Accessibility - Does It Impact Housing Values?

Validation of the method to evaluate the corrosion propagation stage by hygrothermal simulation

The target reliability of the eurocodes

Structural analysis of tubular truss in fire

BIM based schedule control for precast concrete supply chain

A slotted patch antenna for wireless strain sensing

Crack propagation measurement using a battery-free slotted patch antenna sensor

Integration of BIM and automation in high-rise building construction

Structural behaviour of long integral abutment bridges

Passive frequency doubling antenna sensor for wireless strain sensing

Wireless crack sensing using an RFID-based folded patch antenna

Shear buckling and resistance of thin-walled steel plate at non-uniform elevated temperatures

Sensing resolution and measurement range of a passive wireless strain sensor

Project feedback as a tool for learning

Two models for hydraulic cylinders in flexible multibody simulations

Practical experiences from several moisture performance assessments

Nano-structured optical fibers made of glass-ceramics, and phase separated and metallic particle-containing glasses

Urban social housing resilience to excess summer heat

Uncertainty in the early phase of a municipal building refurbishment project-A case study in Finland

People's current mobility costs and willingness to pay for Mobility as a Service offerings

Hot-box measurements to investigate the internal convection of highly insulated loose-fill insulation roof structures

Heat protective properties of enclosure structure from thin-wall profiles with foamed concrete

Utilizing mixed-mineralogy ferroan magnesite tailings as the source of magnesium oxide in magnesium potassium phosphate cement

Modeling of hygrothermal behavior for green facade's concrete wall exposed to nordic climate using artificial intelligence and global sensitivity analysis

Impacts of multiple refurbishment strategies on hygrothermal behaviour of basement walls

Recycling lithium mine tailings in the production of low temperature (700–900°C) ceramics
Effect of ladle slag and sodium compounds on the processing and final properties

Variation of CPTu-based transformation models for undrained shear strength of Finnish clays

Behaviour of riveted stringer-to-floorbeam connections in cyclic load tests to failure

Parametric study on temperature distribution of square hollow section joints

Assessing population vulnerability towards summer energy poverty
Case studies of Madrid and London

Initial axial stiffness of welded RHS T joints

A life cycle assessment of two residential buildings using two different LCA database-software combinations
Recognizing uniformities and inconsistencies

Evaluating retrofit options in a historical city center
Relevance of bio-based insulation and the need to consider complex urban form in decision-making

Remote diagnostics application software for remote handling equipment

Modelling the stressed skin effect by using shell elements with meta-material model

Behavior of capacitive humidity sensors in monitoring the drying of concrete walls

Calculation method to determine capillary properties of building materials with automatic free water intake test

Comparison between calculated and billed building energy consumption values of schools and daycare centers

Thermal and moisture properties of calcium silicate insulation boards

Moment-rotation behavior of welded tubular high strength steel T joint

Condensation at the exterior surface of windows

Radon, fungal spores and MVOCs reduction in crawl space house
A case study and crawl space development by hygrothermal modelling

Investigating the kinetics and biofuel properties of *Alstonia congensis* and *Ceiba pentandra* via torrefaction

An approach to combining related notifications in large-scale building management systems with a rehabilitation facility case study

Characterization of elastic constants of anisotropic composites in compression using digital image correlation

Utilizing the innovation potential of suppliers in construction projects

Techno-economic evaluation of integrating torrefaction with anaerobic digestion

Cold-formed RHS T joints with initial geometrical imperfections

Core Project Team As a Management Entity for Construction Projects

Initial in-plane rotational stiffness of welded RHS T joints with axial force in main member

The effect of steel grade on weight and cost of warren-type welded tubular trusses

Relationships among Civil Engineering Students' Approaches to Learning, Perceptions of the Teaching-Learning Environment, and Study Success

A generic method to optimize a redundant serial robotic manipulator's structure

Carbon dioxide permeability of building materials and their impact on bedroom ventilation need

The effect of matrix type on ageing of thick vinyl ester glass-fibre-reinforced laminates

Output power variation of different PV array configurations during irradiance transitions caused by moving clouds

Effect of energy measures on the values of energy efficiency indicators in Finnish daycare and school buildings

Overheating in English dwellings
comparing modelled and monitored large-scale datasets

The corrosion rate in reinforced concrete facades exposed to outdoor environment

Designers' performance evaluation in construction projects

Multicriteria selection in concept design of a divertor remote maintenance port in the EU DEMO reactor using an AHP participative approach

Instrumentation and fe analysis of a large-span culvert built under a railway, in Finland

Consideration of energy consumption, energy costs, and space occupancy in Finnish daycare centres and school buildings

Stress relaxation in tempered glass caused by heat soak testing

Energy saving and indoor climate effects of an added glazed facade to a brick wall building
Case study

Effects of strain rate and confining pressure on the compressive behavior of Kuru granite

Energy saving in working hydraulics of long booms in heavy working vehicles

Mapping indoor overheating and air pollution risk modification across Great Britain
A modelling study

Pre-use phase LCA of a multi-story residential building
Can greenhouse gas emissions be used as a more general environmental performance indicator?

Effects of added glazing on Balcony indoor temperatures
Field measurements

Surrogate modeling for initial rotational stiffness of welded tubular joints

Improving the thermal performance of concrete-sandwich envelopes in relation to the moisture behaviour of building structures in boreal conditions

Airtightness of residential buildings in Finland

Assessing uncertainty in housing stock infiltration rates and associated heat loss
English and UK case studies

Impact of building usage and occupancy on energy consumption in Finnish daycare and school buildings

Analysis of thermo-active pile structures and their performance under groundwater flow conditions

Divertor remote handling for DEMO
Concept design and preliminary FMECA studies

Role and nature of systemic innovations in construction and real estate sector

Understanding fundamental and practical ingredients of construction project data management

Measured energy consumption of educational buildings in a Finnish city

The assessment of constructability
BIM cases

Debonding and impact damage in stainless steel fibre metal laminates prior to metal fracture

Experimental study on the behavior of wear resistant steels under high velocity single particle impacts

Evaluation of thermo-mechanical behaviour of composite energy piles during heating/cooling operations

Commissioning for nearly zero-energy building projects

Stretching risk management standards
Multi-organizational perspectives

The impact of occupancy patterns, occupant-controlled ventilation and shading on indoor overheating risk in domestic environments

The relative importance of input weather data for indoor overheating risk assessment in dwellings

Using probabilistic sampling-based sensitivity analyses for indoor air quality modelling

Passive wireless antenna sensor for strain and crack sensing - Electromagnetic modeling, simulation, and testing

Implementation of a direct procedure for critical point computations using preconditioned iterative solvers

Financial viability of energy-efficiency measures in a new detached house design in Finland

Cost optimal and nearly zero (nZEB) energy performance calculations for residential buildings with REHVA definition for nZEB national implementation

Briefing
Initial findings from the urba project

Precision refurbishment of buildings
A façade refurbishment case study

Computational design concept analysis
A Nordic comparison of four apartment buildings

Strategy formation in construction firms