BARRISOL[®] SYDNEY



presents

ACOUSTIC SEMINAR

Acoustic Seminar presented by german acoustician Dr. Christian Nocke with key focus on micro-perforated materials including Barrisol acoustic finishes.

Barrisol Sydney Showroom 449 Harris Street, Ultimo

1st November 2011 4:30 - 5:30pm

RSVP until 28th October 2011

Drinks and snacks provided.



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Properties and applications of micro-perforated materials

Dr. Christian Nocke Akustikbüro Oldenburg, Oldenburg, Germany www.akustikbuero-oldenburg.de

> Disclosures Barrisol

The theory background of micro-perforated sound-absorbing panels was first described by D.-Y. Maa in 1975. Since Maa's seminal contribution, many variations of micro-perforated sound absorbing materials have been introduced. Micro-perforations have been applied to metal, wood, plastics and many other materials. In 2001, a nearly invisible micro-perforation was applied to stretched membrane material, yielding high sound absorption performance, while not being an overtly obvious sound absorbing material. Stretch membranes are custom manufactured to any panel size, offering an acoustic solution for rooms not restricted by fixed prefabricated panel sizes. In his presentation, Dr. Nocke will outline the theoretical background of micro-perforated materials and the application of these to stretch membrane materials. He will also detail the sound absorption coefficient results of various laboratory based tests with micro-perforated stretch membranes he has conducted (with & without additional acoustic materials) and finally present some examples of room acoustics before and after the installation of micro-perforated ceiling and wall membranes.



Federation Square, 7000 square meters, Barrisol Lumiere translucent

OFFICE. SPACE. ACOUSTICS.

COLOGNE // OCTOBER 19+20, 2011 // KONRAD-ADENAUER-SAAL CONGRESS CENTRE NORTH KOELNMESSE

Vita

Dr. Christian Nocke



- Born in 1967 in Osnabrück
- Studied physics in Marburg and Oldenburg
- 1995: Diploma in the field of technical acoustics
- 1995: Doctoral scholarship from German National Academic Foundation; research associate at Fraunhofer Institute for Building Physics
- 2000: Dissertation *In-situ Messung der akustischen* (Wand-)Impedanz ("In-situ measurement of the acoustic (wall) impedance)
- 2001 Founded Akustikbüros Oldenburg
- Executive officer at the Deutsche Gesellschaft f
 ür Akustik DEGA e.V. (German Acoustical Society) office in Oldenburg
- 2002 to present publically certified expert for noise imission, building and room acoustics
- 2004: Founded Höfker Nocke Bückle Partnerschaft Physiker und Ingenieure (Höfker Nocke Bückle Partnership – Physicists and Engineers) with locations in Bochum, Oldenburg and Backnang
- Teaching assignments in Oldenburg und Bochum
- Research positions in England (Prof. Attenborough) and China (Prof. Maa)
- Training events for various manufacturers around the world

Memberships:

- ASA Acoustical Society of America,
- NCAC National Council of Acoustical Consultants,
- VBD Verband der Bausachverständigen Deutschlands e.V. (Association of German Building Surveyors)
- Schweizer Gesellschaft für Akustik SGA/SSA (Swiss Acoustical Society SGA/SSA)