

The Green Roof Highlight of the year



International Green Roof Congress

The globalised green roof market of the future: trends and challenges

Topics

Why Green Roofs

- Green roofs in the ecological and economic field of tension (-> sustainable urban development, energy and cost saving potential, storm water management)

Science and Research

- Green roof basics: substrates, plant selection, water retention
- Standards and quality criteria: The FLL Green Roof Guidelines

Green Roof Technology

- Innovative and reliable green roof build-ups
- Sources of error and how to avoid them: Insider tips for planning, implementation and maintenance of green roofs

Global Green Roof Architecture

- Presentation of outstanding green roof projects (e.g. Financial District Banco de Santander, Madrid / Church of Latter-day Saints, Conf. Center Salt Lake City / DaimlerChrysler Areal at the Potsdamer Platz, Berlin)
- The current situation of the green roof market in Europe, Asia and North America

Simultaneous Translation

Host



Sponsor



Co-hosts



EUROPEAN LANDSCAPE CONTRACTORS ASSOCIATION



14 - 15 September 2004
Nürtingen near Stuttgart
Germany



Speakers

- Dr. Paolo Abram (I)**
Italian Green Roof Association (A.I.V.E.P.)
- Dr. Franz Alt (D)**
TV Editor and Ecopolitical Author, Baden-Baden
- Roland Appl (D)**
Technical Director ZinCo, Unterensingen
- Maria José Barrio (E)**
Product Manager Green Roofs, Madrid
- Dr. David J. Beattie (USA)**
Center of Green Roof Research, Pennsylvania State University
- Behnisch, Behnisch & Partner (D)**
International Architect's Office, Stuttgart, Los Angeles
- Dr. Nigel Dunnett (UK)**
University of Sheffield
- Klaus-Jürgen Evert (D)**
Dept. of Garden and Cemetery Services, Stuttgart
- Prof. Dr. Maximilian Gege (D)**
CEO B.A.U.M. e.V., Hamburg
- G. Mark Gibb (USA)**
Executive Director Northern Virginia Regional Commission
- Martin Jauch (D)**
Research Institute for Horticulture, Weißenstephan
- Hans-Jörg Kiesewetter (D)**
Green Roof Company ProNatur, Metzingen
- Prof. Dr. Manfred Köhler (D)**
University of Applied Sciences, Neubrandenburg
- Klaus W. König (D)**
Board-Member of the German Association for Rainwater Reuse (fbr)
- Bernd W. Krupka (D)**
Landscape Architect, Surveyor for Green Roofs, Bad Pyrmont
- Prof. Gilbert Lösken (D)**
Head of the FLL Task Force „Green Roofs“
- Dr. Bettina Menne (I)**
WHO section Europe
- Kurt Michels (D)**
Roofing Vocational School, Mayen
- Prof. Dr. Klaus Neumann (D)**
Vice President FLL
- Daniel Roehr (D)**
Landscape Architect, Berlin
- Prof. Dr. Stephan Roth-Kleyer (D)**
University of Applied Sciences, Wiesbaden
- Tassilo Schwarz (D)**
Bavarian Regional Institute for Viticulture and Horticulture, Veitshöchheim
- Aart Veerman (NL)**
Association for Green Roofs and Facades (DGS)
- Susan K. Weiler (USA)**
Landscape Architect, ASLA

Invitation



Ladies and Gentlemen,

autumn 2004 brings about an outstanding international green roof event in Germany, the homeland of green roof research and industries. The **International Green Roof Congress** in Stuttgart/Nürtingen (14-15 September 2004) offers a platform for green roof experts from all over the world in a quality and composition never seen before. More than 25 speakers (architects, scientists, planners, municipal delegates etc.) will discuss trends and challenges of the future green roof market.

The two-day congress is supported by well known German landscaping, roofing and environmental lobby groups (DDV, IGRA, BGL, ELCA, ZVDH, B.A.U.M.). One of the hosts is the „FLL“ (Landscape Development and Landscape Construction Research Society) which publishes internationally acknowledged guidelines and standards for green roof technique and installation.

Scientists from all major German green roof research institutes (Prof. Stephan Roth-Kleyer, Geisenheim / Dipl. Ing. Martin Jauch, Weihenstephan / Prof. Gilbert Lösken, Hannover / Prof. Manfred Köhler, Neubrandenburg / LOR Tassilo Schwarz, Veitshöchheim) and green roof specialists from Europe, Northern America and Asia will share their experiences with the participants. In order to promote an international spreading of green roof knowledge the presentations of the German speakers will be translated simultaneously into English and Japanese.

The International Green Roof Congress will provide an unparalleled opportunity to receive information about all current green roof topics in a direct and condensed way and to establish new contacts.

The first congress day will represent discussions on the political, ecological and economic framework of green roofs. The presentations will deal with the integration of green roofs in international concepts of sustainable urban development (Klaus-Jürgen Evert, Germany; Dr. Paolo Abram, Italy and G. Mark Gibb, USA) and future oriented energy policies (Dr. Franz Alt, Prof. Maximilian Gege, B.A.U.M.).

A special **highlight** is the presentation of Prof. Gilbert Lösken (Head of the FLL task force „Green Roofs“) who will introduce the new Guideline for the Planning, Implementation and Maintenance of Green Roofs. In times of climate change, the international WHO study on the health impacts of heat waves for the urban population gets special relevance. In addition, modern storm water management technologies (Klaus W. König, fbr) and current results of green roof studies in Germany, UK and the USA (substrates, plant selection, microclimate on green roofs) will be presented.

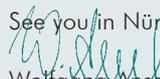
The second day will put special emphasis to green roof installation and green roof architecture. Reliability and durability of green roofs are the platform for the sustainable development of the green roof market. Roland Appl (Technical Director, ZinCo) and Kurt Michels (Roofing Expert) will take a stand on different green roof build-ups and root-resistant waterproofings. Potential sources of error and practical tips to avoid them will be presented by landscape architect and green roof surveyor Bernd W. Krupka. Questions of logistics

which are often underestimated while planning and calculating a green roof will be discussed afterwards. The afternoon session will feature global green roof architecture. International landscape architects and green roof experts will introduce outstanding green roof projects: e.g the „Church of Latter-day Saints Conference Center“, Salt Lake City (Green roof award of excellence 2003, Susan K. Weiler), the „Potsdamer Platz“, Berlin (combination of green roof and rain water collection, Daniel Roehr) and the „Financial district Banco de Santander“, Madrid (largest green roof worldwide, ~1 000 000 sq ft², under construction).

The subsequent social programme on 16 September 2004 rounds off two informative congress days and includes the following options: A green roof tour to sloped, barrel and large sized extensive green roofs in the region of Stuttgart. Based on long-standing municipal support programmes Stuttgart is one of the green roof „capitals“ in Germany. Alternatively participants of the congress can visit the world's greatest comprehensive trade show for urban green and open spaces in Nuremberg.

On behalf of the hosts and the congress sponsor ZinCo I would like to invite you to attend this spectacular green roof event in Germany.

See you in Nürtingen in September 2004


Wolfgang Ansel

Congress Manager

Social Programme 16 September 2004



1.) Green Roof Tour: 09.00-16.00

Green roof tour to outstanding projects in the region of Stuttgart:

- extensive green roofs
- intensive green roof „gardens“
- green roofs and solar power facilities
- sloped and barrel green roofs

GaLaBau2004

2.) Trade Show GaLaBau 2004, Nuremberg: 07.30-19.30

Visit the 16th International Trade Show for Urban Green and Open Spaces in Nuremberg. This Trade Show is a very important trend exhibition, which displays the latest developments in the garden and landscaping trade.

<http://www.galabau.info-web.de>



International Green Roof Congress

14 - 15 September 2004
Congress Hall K3N, Nürtingen
near Stuttgart, Germany
Simultaneous Translation



1st Day / 14 September 2004

08.00 - 09.00

Registration, Welcome Desk

09.00 - 09.10

Reception and introduction of the congress programme

Moderator: Hans Peter Michel, SWR

09.10 - 09.50

Welcoming speeches of the hosts

SESSION 1: WHY GREEN ROOFS?

09.50 - 10.20

Future oriented technologies:
Green roofs and solar power

Dr. Franz Alt, Editor and Solar Expert

10.20 - 11.00

Communication and Refreshment Break

11.00 - 11.30

Green roofs and sustainable energy strategies

Prof. Dr. Maximilian Gege,
CEO B.A.U.M., Hamburg

11.30 - 12.00

Heat waves in European cities

Dr. Bettina Menne, WHO, section Europe

12.00 - 12.30

Green roof contribution to storm water management

Klaus W. König, German Association for Rainwater Reuse

12.30 - 13.40

Lunch Break

Trade show, Poster Session

13.40 - 14.30

Municipal incentives for green roofs:

in Germany (Stuttgart)

Klaus-Jürgen Evert,
Dept. of Garden and Cemetery, Stuttgart

in Italy (Bozen)

Dr. Paolo Abram,
Italian Green Roof Association (A.I.V.E.P.)

14.30 - 15.00

International transfer of green roof knowledge and expertise: **Germany-USA**

G. Mark Gibb, Executive Director Northern Virginia Regional Commission

SESSION 2: SCIENCE AND RESEARCH

15.00 - 15.30

The FLL Green Roof Guidelines in Germany

Prof. Gilbert Lösken, Head of the FLL Task Group „Green Roofs“

15.30 - 16.10

Communication and Refreshment Break

16.10 - 17.00

Plants for extensive und intensive green roofs

in Germany

Tassilo Schwarz, Bavarian Institute for Viticulture and Horticulture, Veitshöchheim

in the UK

Dr. Nigel Dunnett, University of Sheffield

17.00 - 17.30

The effect of green roofs on the urban climate

Prof. Dr. Manfred Köhler, University of Applied Sciences, Neubrandenburg

17.30 - 18.00

Water balance and run-off conditions on green roofs

Prof. Dr. Stephan Roth-Kleyer, University of Applied Sciences, Wiesbaden

18.00 - 19.00

Poster Session, Trade Show

19.00 - 22.00

Get Together

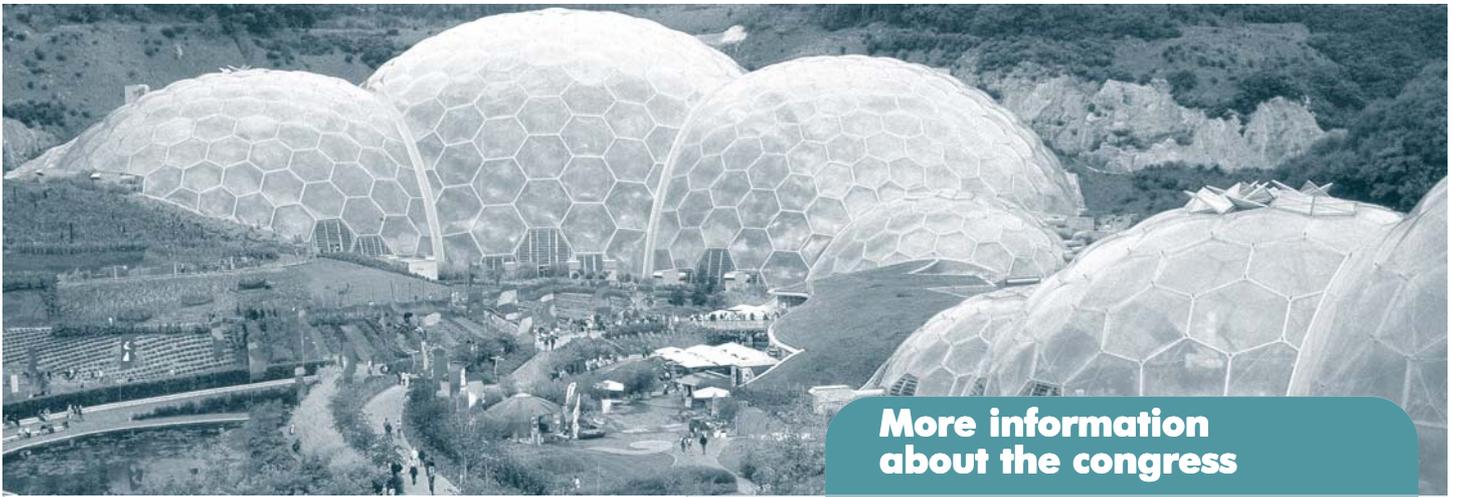
20.30 - 21.00

Keynote-Presentation

Green roofs as a challenge for the green trades

Prof. Dr. Klaus Neumann
Vice president FLL





2nd Day/ 15 September 2004

**More information
about the congress**

www.greenroofworld.com

09.00 - 09.10

**Introduction of the congress programme
of the second day**

Moderator: Hans Peter Michel, SWR

**CONTINUATION SESSION 2:
SCIENCE AND RESEARCH**

09.10 - 09.40

Testing green roof substrates

Martin Jauch, Research Institute for Horticulture,
Weihenstephan

09.40 - 10.10

Green roof research in the USA

Dr. David J. Beattie, Pennsylvania State University

**SESSION 3:
GREEN ROOF TECHNIQUE**

10.10 - 10.40

Root-resistant waterproofing

Kurt Michels, Roofing Vocational School, Mayen

10.40 - 11.20

Communication and Refreshment Break

11.20 - 11.50

**Innovative and reliable green roof
build-ups**

Roland Appl, Technical Director ZinCo

11.50 - 12.20

**Logistic solutions on site and
practical experiences**

Hans-Jörg Kiesewetter, Company ProNatur, Metzingen

12.20 - 12.50

**Potential sources of error and how to
avoid them**

Bernd W. Krupka, Landscape Architect and
Green Roof Surveyor

12.50 - 14.00

Lunch Break

Trade Show, Poster Session



SESSION 4:

GREEN ARCHITECTURE WORLDWIDE

14.00 - 14.20

Financial District Banco de Santander, Madrid

Maria José Barrio, Product Manager Green Roofs,
Madrid

14.20 - 14.40

DaimlerChrysler, Potsdamer Platz, Berlin

Daniel Roehr, Landscape Architect, Berlin

14.40 - 15.00

Genzyme-Project, Cambridge, USA

Behnisch, Behnisch & Partner, Architect's Office
Stuttgart, Los Angeles

15.00 - 15.20

Church of Latter-day Saints Conference Center

Susan K. Weiler, Landscape Architect, ASLA, USA

15.20 - 15.40

Psychiatric Hospital, Helsingör

Bjarke Ingels/ Angela Beck-Møller, Denmark

15.40 - 16.20

Communication and Refreshment Break

16.20 - 16.50

**Efficient utilisation of limited urban space
in the Netherlands**

Aart Veerman, Association for Green Roofs and
Facades (DGS), Netherlands

16.50 - 18.00

**The green roof market in Asia,
Europe and North-America**

Tsuneo Tajima, Japan
Mariusz Zembrzowski, Poland
Ho Wan Weng, Singapore
Ian Johnston, UK
Steve Skinner, USA

18.00 - 19.00

Poster Session, Trade show

19.00 - 22.00

Get Together



Speakers' Profiles

1st Day

SESSION 1: WHY GREEN ROOFS?

Dr. Franz Alt (D)

Editor and author; since 1992 leader of the future department of a German broadcasting company (SWR)
Dr. Franz Alt is a very committed and enthusiastic promoter of sustainable energy sources in Germany. His ecopolitical work has been recognised by many awards (e.g. Bambi, Adolf Grimme, Umwelt Online etc.). As a renowned solar expert he will present the special synergetic advantages of **solar power facilities on landscaped roofs** (e.g. installation, energy production).

Prof. Dr. Maximilian Gege (D)

CEO B.A.U.M. e.V., Hamburg, numerous national and international environmental awards
For 20 years B.A.U.M. supports environmental management, sustainable development and environmental awareness in Germany. As global climate change and the reduction of greenhouse gases are the major environmental challenges of the 21st century, the current focus of B.A.U.M. is on the utilisation of sustainable technologies and „clean“ sources of energy. Every year more than 600 million sq ft² of flat roofs have to be refurbished. Very often these roofs are only poorly insulated. Green roofs can play an important role within CO₂-reduction strategies as they can be regarded as additional **thermal insulation**, thus reducing the use of primary energy.

Dr. Bettina Menne (I)

Medical officer, WHO (World Health Organisation), European Centre for Environment and Health, Rome
The disastrous effects of the **summer heat wave 2003** (more than 20 000 deaths in Europe) did not fall into oblivion. The WHO Regional Committee for Europe has launched an extensive examination concerning the negative health impacts of global climate change. The following questions are of major interest: What individual measures can be taken by the urban population to prevent and manage the effects of heat waves and how can sustainable urban development contribute to solve the problem?

Klaus W. König (D)

Architect, member of the „fbr“-board (German association of rainwater and grey water reuse), author of specialised books
Klaus W. König is an outstanding expert on rainwater management and re-utilisation. Apart from his work as a consultant to planning offices and municipalities he is also a very popular speaker at national and international conferences (e.g. UNO, global water forum Den Haag and Kyoto). As storm water taxes and the danger of high water increased significantly within the last decade rainwater utilisation has become an important ecological and economic factor. Klaus W. König will show different possibilities to integrate **green roofs in modern storm water management systems** (rainwater storage in cisterns and seepage) and present the special advantages of these combinations.

Klaus-Jürgen Evert (D)

Deputy chief officer, garden and cemetery department, Stuttgart
With regard to **municipal support programmes** the city of Stuttgart has done pioneering work in Germany. Starting in the mid-eighties a broad range of different instruments (e.g. determination in local development plans, green roof awards, direct financial support, landscaping of municipal buildings) have been used to establish green roofs in urban development. Up to now approx. 1,5 million sq ft² of green roofs have been installed. The successful programme was copied by many communities in the surrounding and also gained a lot of interest in other countries (cp. Mark G. Gibb).

Dr. Paolo Abram (I)

Expert and technical adviser for roof greenery; founder member of the Italian Green Roof Association (A.I.V.E.P.)
Dr. Abram has developed a special mathematical model for the integration of sealing factors and compensation measures (e.g. green roofs) within **local development plans**. The municipality of Bozen (Italy) has used this model for several years and gained a lot of valuable experiences.

G. Mark Gibb (USA)

Executive Director of the Northern Virginia Regional Commission
Within the last five years the „Northern Virginia Regional Commission“ and the „Verband Region Stuttgart“ have carried out an intense **exchange of information about „best practices“** for environmental, human and economic concerns. In this context the long-standing German experiences in the field of green roofs (cp. Klaus-Jürgen Evert) have served to establish green roof support programmes in the USA. Three of the local jurisdiction in the Northern Virginia Region are now actively encouraging green roofs as part of new office construction in the most densely populated areas.

SESSION 2: SCIENCE AND RESEARCH

Prof. Gilbert Lösken (D)

Department of Landscape Architecture and Environmental Development, University of Hannover, head of the FLL task force „green roofs“
The „FLL“ (Landscape Development and Landscape Construction Research Society) is responsible for the development and publication of Green Roofs Guidelines in Germany. One of the basic documents is the **Guideline for Planning, Implementation and Maintenance of Green Roofs** which was first released in 1990 and just updated in 2002. This Guideline is not only a „bestseller“ within the German green roof trade. Inquiries from the Netherlands, Hungary, Denmark, Japan and the USA are proving the great interest in the settlement of international standards. Prof. Lösken will present the key criteria of the FLL guideline and discuss the possibilities to transfer the German regulations and long-lasting experiences to conditions in foreign countries and climates.

Tassilo Schwarz (D)

Scientific assistant at the Bavarian Regional Institute for Viticulture and Horticulture in Veitshöchheim
Tassilo Schwarz is highly acclaimed for expert knowledge of **plant selection criteria on green roofs** in Germany. Together with Dr. Walter Kolb he has published many scientific papers and books. Subject of his presentation is basic information about the extreme environmental conditions for plants on roofs (climate, water resources, drought resistance of different plant species etc.) and plant selection from natural habitats.

Dr. Nigel Dunnett (UK)

Senior lecturer in the Department of Landscape, University of Sheffield, author of the book „Planting Green Roofs and Living Walls“
Dr. Dunnett has done a lot of research with regard to naturalistic and ecologically informed planting of gardens and urban spaces. At the International Green Roof Congress in Nürtingen he will take a stand about **plant selection criteria on green roofs in the UK**.

Prof. Dr. Manfred Köhler (D)

Landscape architect, BDLA, University of Applied Sciences, Neubrandenburg
Prof. Dr. Manfred Köhler is a green roof „cosmopolitan“. He is working with research groups in Spain, Brasil, Mexico, Singapore and the USA. The **„urban heat island effect“** is a well-known problem of urban agglomerations in the tropic climates and North America. In times of climate change and continually sealing of urban areas this question gets more and more important in Europe too (cp. session 1, Dr. Bettina Menne). Green roofs are offering a high potential for the improvement of the urban climate and the reduction of the „urban heat island effect“, that has not been exhausted up to now.

Prof. Dr. Stephan Roth-Kleyer (D)

Director of the Institute for Landscape Construction at the Geisenheim Research Facility; lecturer at the University of Applied Sciences in Wiesbaden
The Green Roof Guidelines of the FLL are containing detailed regulations with regard to the **water balances and run-off conditions of green roofs**. These specifications form the platform for several municipal green roof support programmes in Germany (e.g. the support programme of the federal state of North-Rhine-Westphalia). Prof. Dr. Roth-Kleyer will present standard methods to determine the water retention capacity of green roofs and discuss problems and key factors which have to be considered.

Prof. Dr. Klaus Neumann (D)

Associate professor for landscape conservation at the University of Applied Sciences in Berlin, landscape architect, BDLA and Vice-president of the FLL
How about the green roof market of the future? What are the **challenges, opportunities and risks for the green trades?** Will the ecological green roof idea become an integral module of sustainable and environmentally-responsible urban development in a globalised world? Prof. Dr. Klaus Neumann will discuss these and further questions in his visionary presentation at the 14 September (evening „Get Together“) with the audience.



Speakers' Profiles

2nd Day

CONTINUATION SESSION 2: SCIENCE AND RESEARCH

Martin Jauch (D)

Scientific assistant at the Research Institute for Horticulture in Weihenstephan; well-versed green roof investigator

In order to ensure the durable functionality of landscaped roofs and to meet the partial opposite demands of the vegetation and the building technique **green roof substrates** have to be chosen carefully. That's why the FLL has defined basic requirements to the substrate characteristics for extensive and intensive green roofs vegetation. However experience and scientific experiments have shown that substrates which fulfil the FLL instructions sometimes fail to support the desired roof vegetation. Possible reasons are discussed in this presentation.

Dr. David J. Beattie (USA)

Director of the Center for Green Roof Research at the Pennsylvania State University Presently, green roof marketing efforts in North America exceed the research knowledge and technical base, especially about the interaction of plants and media. The result is often poorly installed roofs. Therefore, educating green roof professionals – roofers, landscape contractors, and architects – is of primary importance. In addition, developing **standards for green roof installation in North America** is also a priority. This presentation will discuss the state of the industry and focus on the development of educational programmes and standards for green roof installation in North America.

SESSION 3: GREEN ROOF TECHNIQUE

Kurt Michels (D)

Lecturer at the Roofing Vocational School in Mayen, member of the FLL task force „green roofs“

The **root-resistant waterproofing** is a pre-requisite of durable and secure green roofs. For this purpose the FLL has developed a special testing method which is based on long term trials with **root-aggressive** plants in standardised test containers. Currently more than 70 waterproofings, made of different materials (bitumen, plastic, elastomer, etc.) have passed the test successfully.

Roland Appl (D)

Technical Director ZinCo GmbH, Unterensingen, member of the FLL task force „green roofs“

How has a green roof system to be designed to guarantee the protection of the waterproofing, the drainage of excess water and the supply of the plants with substrate, water and nutrients in a sufficient way. Roland Appl will discuss and present the special advantages and problems of a broad range of techniques including one-layer, multi-layer and thermal insulating green roof build-ups.

Hans-Jörg Kiesewetter (D)

Green roof contractor, ProNatur, Metzingen

Questions of logistics are playing a decisive role for the planning and installation of green roofs. This implies the calculation of the material requirements, the delivery form, the transfer of the materials to the building site/roof and the scheduling of the complete building project. Hans-Jörg Kiesewetter will reveal possible weak spots within the **logistic chain** by presenting concrete examples.

Bernd W. Krupka (D)

Landscape architect and green roof surveyor, former leader of the FLL working group „green roofs“, recognised writer of specialised books, Bad Pyrmont

The knowledge of the potential **sources of failure** and the consequent observance of guidelines and instructions helps to avoid lacks and damages on green roofs. In addition the installation of high quality material by an experienced staff is another precondition for reliable and durable green roofs. Bernd W. Krupka will present the most frequently problems (e.g. gappy vegetation layer, damage caused by wind or water erosion, pest infestation, water loggings, lacks in the substrate layer and the green roof build-up) and practical strategies for planners and green roof contractors to avoid these problems.

SESSION 4: GREEN ARCHITECTURE WORLDWIDE

Maria José Barrio (E)

Product manager green roofs, Madrid

The **Financial District Banco Santander** is the largest green roof under construction worldwide. Extensive green roofs areas and intensive green roof gardens will be installed on more than 1 000 000 sq ft? (-> 500 000 sq ft? are already finished). Apart from the vast size of the green roof the planning and design of the landscaped areas is a real architectural „highlight“.

Daniel Roehr (D)

Freelance landscape architect, Berlin, profound experience in private gardens, green roofs and protection of historic buildings

The **DaimlerChrysler building** at the „Potsdamer Platz“ in Berlin is a striking example that landscaped roofs and rainwater storage and utilisation are no mutually exclusive technologies (cp. Klaus W. König, session 1). The combination of these two environment-friendly technologies in a modern and innovative architectural concept leads to various synergetic effects (-> urban climate, irrigation, recreational use of the intensive green roof garden) and saves more than 20 million litres of drinking water every year.

Behnisch, Behnisch & Partner (D)

Famous, innovative architecture company (Stuttgart, Los Angeles), many national and international awards (e.g. Headquarters for the North German State Clearing Bank)

The **Genzyme Center** was finished last year and is one of the greenest and most environmentally-responsible office buildings ever built in the United States. The environmental design of the building considers the following points: sustainable site development, water and energy-savings, materials selection and indoor environmental quality. The „living“ vegetative roof is an integral component of the sustainable concept improving storm water management and the local climatic conditions.

Susan K. Weiler (USA)

Well-known American landscape architect (Olin Partnership), member of the American Society of Landscape Architects (ASLA), lecturer at the Temple University and the University of Pennsylvania

The **Church of Jesus of Latter-Day Saints Conference Center** (Salt Lake City, USA) is one of the outstanding green roof projects of the last years. The religious building received various prizes (e.g. American Society of Landscape Architects Merit Award and Sustainable Communities Green Roof Award) and attracts through its architecture and its multi-leveled green roof. The design incorporates elements of water, stone, trees and a roof garden of firs, pines and meadowland. The planting involved over a thousand volunteers that carried the native plants to the roof of the building.

Aart Veerman (NL)

Commercial director of Van der Tol b.v. (landscaping company, 150 employee), president of the Dutch Green Roofs and Facades Association (DGS)

Like in all other highly industrialised countries, urbanisation and the limited resources of building land are very important problems for urban planning departments in the Netherlands. At the same time the sealing and development of the landscape are reducing the living comfort of the urban population in a dramatic way. Green roofs are playing an important role in Aart Veerman's presentation about the **multiple utilisation of urban space** in the Netherlands as they can offer additional areas for recreation and leisure activities.

Fax-Registration:

++49 30/47 47 67 93

- Yes, I will attend the **International Green Roof Congress** on 14 and 15 September 2004 (registration fee: Euro 790,- plus 16% VAT*)

(*Services: Int. Green Roof Congress participation, simultaneous translation German, English, Japanese, congress catering, relevant bus shuttles congress venue - hotel (see accommodation), congress proceedings, two evening Get Togethers)

Yes, I would like to attend the **subsequent social programme** on 16 September:

- Green Roof Tour**, incl. Lunch (Euro 80, plus 16% VAT)
or alternatively
- Trade show GaLaBau 2004** in Nuremberg, bus shuttle, ticket (Euro 60, plus 16% VAT)

My address details:

Full Name

Title/Company/Organisation

Address/Street

ZIP Code/City

Country

Phone/Fax

E-Mail

Date

Signature / Company Stamp

How to register:

By Fax: ++49 30 / 47 47 67 93
By Phone: ++49 30 / 47 47 67 89
By E-Mail: info@greenroofworld.com
Online: <http://www.greenroofworld.com>
By Post: International Green Roof Congress
Congress Office
Postfach 20 25
72610 Nürtingen / Germany



Venue:
Congress Hall K3N
Heiligenkreuzstrasse 4
72622 Nürtingen
<http://www.k3n.de>



Hotel accommodation

The following hotels are located near the congress venue and hold a special room contingent for congress participants until mid August. Registration fees include a bus shuttle from the hotel to the convention hall in the morning and evening.

- Please make a reservation on my behalf for 3 nights in the hotel ticked below. Arrival 13.09., Departure 16.09.04.
- I do not need accommodation.

Hotels (addresses, rates per night, incl. breakfast)

Mövenpick Hotel Stuttgart-Airport****

Flughafenrandstrasse 7, 70629 Stuttgart
Tel. ++49 711-79070 / Fax: ++49 711-793585

- Single 135,- Euro/night, incl. tax
 Double 164,- Euro/night, incl. tax

Best-Western Hotel Am Schlossberg****

Europastrasse 13, 72622 Nürtingen
Tel. ++49 7022-704-0 / Fax: ++49 7022-704-343

- Single 96,- Euro/night, incl. tax
 Double 123,- Euro/night, incl. tax

Hotel am Schinderbuckel***

Bonländer Hauptstrasse 145, 70794 Stuttgart/Filderstadt
Tel. ++49 711-7781-0 / Fax: ++49 711-7781-555

- Single 81,- Euro/night, incl. tax
 Double 95,- Euro/night, incl. tax

Hotel Pflum***

Steinengrabenstrasse 6, 72622 Nürtingen
Tel. ++49 7022-928-0 / Fax: ++49 7022-928-150

- Single 61,- Euro/night, incl. tax
 Double 73,- Euro/night, incl. tax

Registration and cancellation conditions

Registration fees for the two-day congress: Euro 790, plus 16% German VAT. Confirmation of registration and invoice will be sent within two weeks after receipt of your complete registration form. Administration and cancellation fees: Cancellation charge from 24 July-27 August 2004: 50% of the total amount invoiced plus 16% VAT. Cancellation charge after 28 August 2004: 100% of the total amount invoiced plus 16% VAT. In case you are unable to come due to unforeseen reasons substitute registration is possible. The administration fee for change of reservation is Euro 50,- plus 16% VAT. The congress information is subject to alterations and printing errors.

Travel information

By car:

Motorway A8 (E52), Stuttgart-Munich
Exit „Wendlingen“

By aircraft:

Airport Stuttgart
Taxi from Airport to Nürtingen: approx. Euro 25-30
Metro („S-Bahn“)/Bus: approx. 35 min., (S2 /Bus 74)
Public transport network online: <http://www.vvs.de>

By rail:

Main Station Stuttgart
Regional express train to Nürtingen (R1, R8, R73): approx. 30 min