

**modern modular building**

- revolutionary simple
- resourceful efficient
- regenerative clean



**all around profitable**

**OASIS 1 – Spa & Wellbeing Center**







## OASIS 1 at Brandon House Hotel, New Ross, Ireland

OASIS 1 is a lifestyle building sculpture with flexible usage possibilities. OASIS is covered with a high tech surface membrane that serves as roof and façade, as well as projection screen for changing light effects. OASIS 1 works as stand-alone building or as an extension of existing structures. The LiteHouseOne Creative Team conceives individual interior concepts on client's demand implemented on four levels.

Autumn 2006 was the starting moment for the first OASIS 1 project worldwide. Paddy Quinn, building contractor and hotel owner ordered the OASIS 1 as a Spa & Wellbeing Center for his existing Brandon House Hotel, New Ross, Ireland. The foundation works started in February 2007 followed by the main support structure in pre-manufactured timber elements by HARING AG (CH) which has been assembled within only

one week by the end of April. Inspired by the Celtic Heritage theme, the LiteHouseOne Creative Director Gunter Thurner worked out an individual interior and garden concept.

OASIS 1 has been handed over to the owner – turnkey and fully operational – mid September 2007.







## Interior and Design

### Celtic Interior

Inspired by the Celtic heritage of the region our Creative Director Gunter Thurner has created the individual "Celtic Design". According to the client (Mr. Paddy Quinn) desire, OASIS 1 has been set into a Celtic themed garden, which Thurner enriched with a natural stone stele, a water creek, a rose circle, a meditation path and an organic formed exterior pool.

The elements earth, water, fire, air separate OASIS 1 into four different worlds of experience. The guiding motive in the ground floor is the "Crystal". The finishes on sauna, steam bath and experience showers are composed with "Stucco Veneziano" which seems to be like real marmoreal. Next to the hydro pool a composition of three polished basalt steles with special light effects and SWAROVSKI crystals playfully and mystically establish the "Crystal Theme".

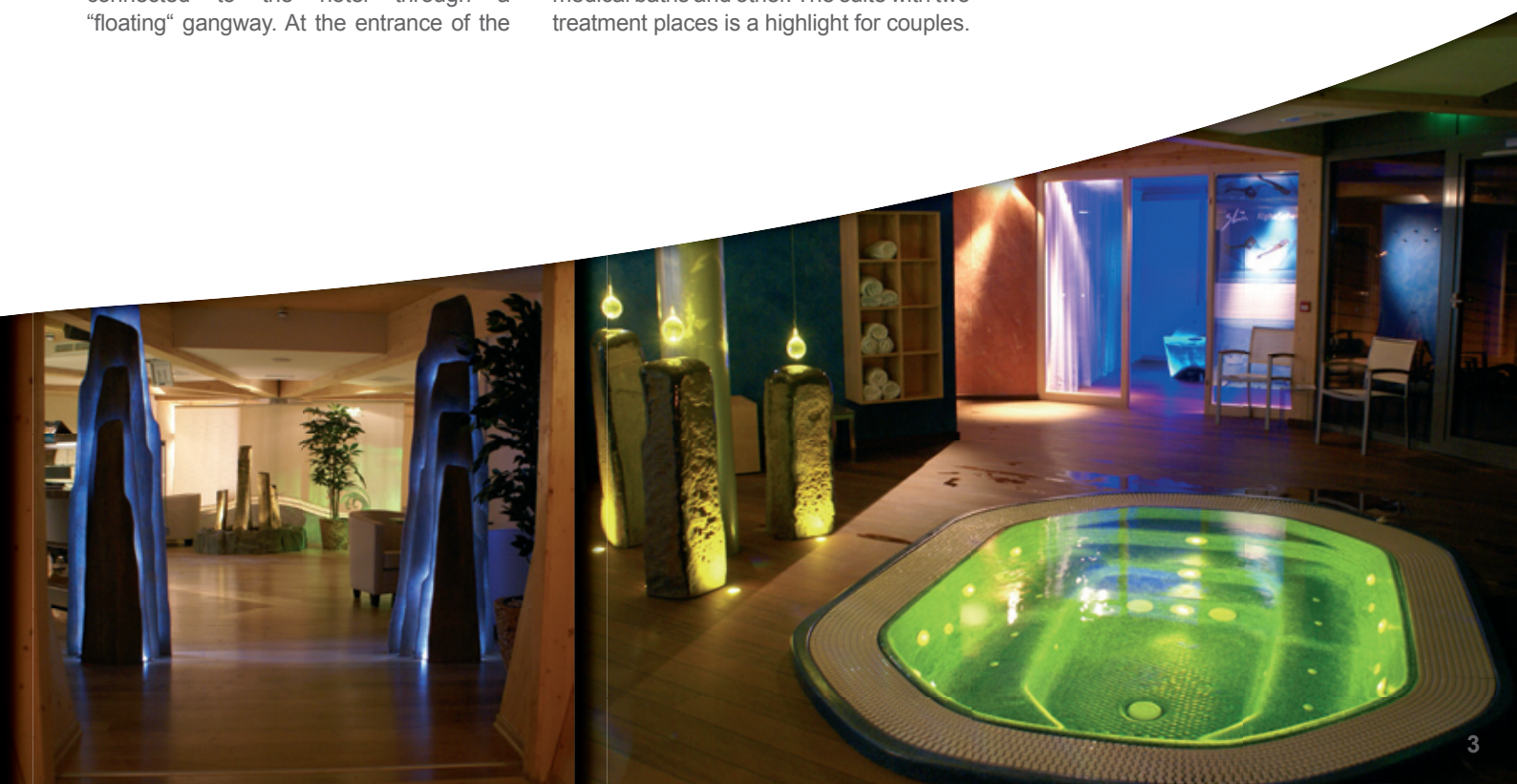
In the first floor OASIS 1 is directly connected to the hotel through a "floating" gangway. At the entrance of the

gangway the guests are welcomed with the slogan "Solas Croi" (Gaelic: "enlightened heart") as well as a symbolized seed corn in its different phases: the seed at the beginning, then nourished by water, germinating, the seedling and finally the tree. This level is dedicated to the element water, which Thurner sets in scene with a water relief and a fountain with basalt columns. In this floor is situated: foyer, bistro, consulting area and changing room.

The theme in the second floor is dedicated to the element fire (wood) which Thurner themes with a Celtic Druids Forest. The forest is created with minimalistic trees, which are formed by boards of ancient American oak trees and moving light and shadow effects behind big stylized leaves. Romantically integrated into this forest the client finds a course for foot reflex massage, the VIA SENSUS from ProConHealth KG, which is a perfect preparation for different services in the seven treatment rooms, with a great choice of massages, medical baths and other. The suite with two treatment places is a highlight for couples.

The Sky-Dome with its 5m glass roof in the top floor allows a free view into the Irish sky and offers an unique atmosphere for relax. With an interactive „Light Theatre“, 5 sand pendulums and a slowly moving double helix, the guests joyfully can relax and let go.

You will find further impressions on: [www.brandonhousehotel.ie](http://www.brandonhousehotel.ie)



# Architecture

## OASIS 1 – Spa & Wellbeing Center

The following floor illustrations represents the OASIS 1 Concept as the Spa & Wellbeing Center, especially developed for the Brandon House Hotel in New Ross, Ireland. The architectural task consisted in the requirement to design the OASIS 1 equally as Hotel and Day Spa, to complement the existing Health Club with Swimming Pool and Fitness Center and integrates it in the operating schedule of the Hotel.

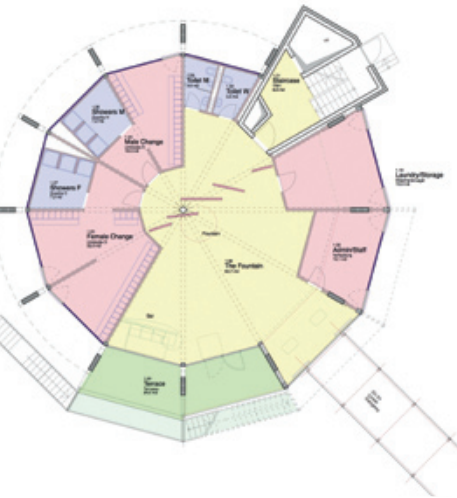
- Spa Level (Ground Fl.) with Sauna, Water World and Garden Experience
- Therapy Level (2<sup>nd</sup> Fl.) with Via Sensus, seven Treatment Rooms and Wellbeing Suite
- Relaxing Level (Roof Fl.) with Loungers, Light Theatre, Sky Dome and Sun Deck
- Building Equipment Level (Basement) houses the entire Water and Electrical Installations and the Heat Pump and Heat Recovery Units from the renewable geo-thermal energy

The circulations, with short and clearly defined ways for guests, minimal routes for the operator and reduced distances for the technical staff – one of the most difficult tasks in every project – have been solved in a conclusive way:

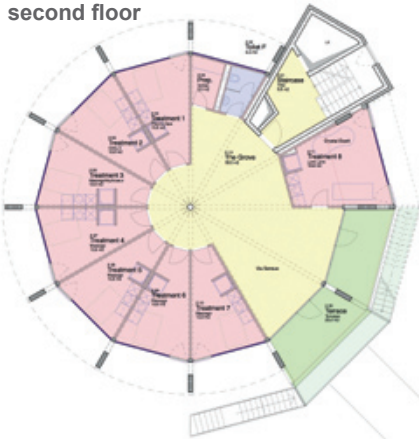
- The Lobby is with the bar and the Bistro, Counselling area and the Spa manager Office, the communication hub and starting point to the Locker Rooms, Staircase and Terraces
- The Staircase contains the Lift for the disabled and the utility shaft
- All Sun Decks of the four Levels are linked together through the “Boulevard Stairs”

A remarkable whole architectural concept emerged in the reverse sense of the slogan “form follows function” starting from the idea of a sphere shape structure.

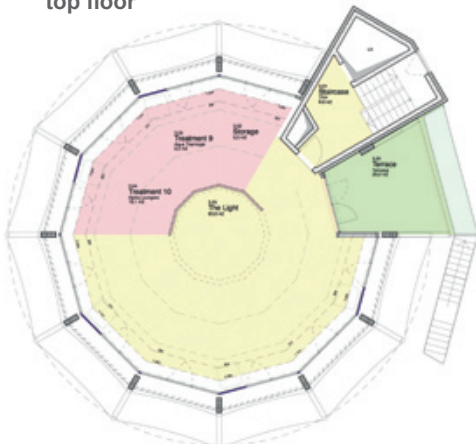
first floor



second floor



top floor

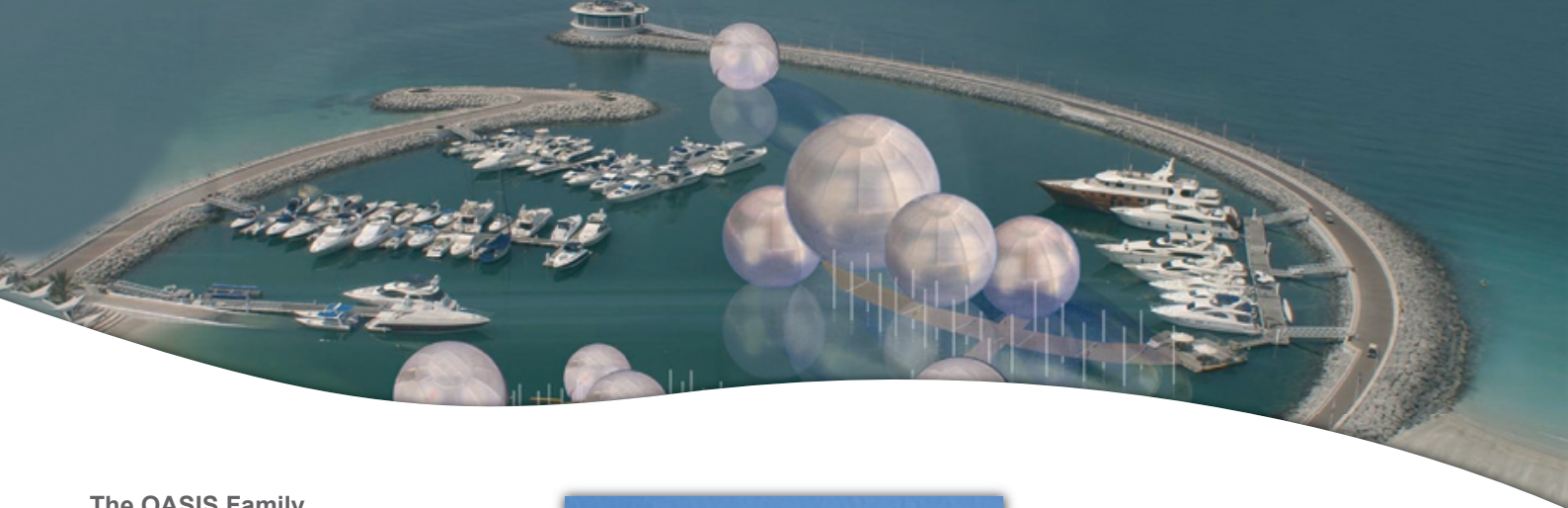


The clearly laid out correlation of the functional areas divides the OASIS 1 in the:

- Entrance Level (1<sup>st</sup> Fl.) with Locker Rooms, Bistro, Counselling and Administration







## The OASIS Family

OASIS 1 with a total area of nearly 1000 sqm on four levels plus basement is the flagship of the OASIS Family.

OASIS M has three levels with about the half of the area and a tightened operational concept, also with the function of a Spa & Wellbeing

Obviously both products, as well as the smaller ones, can be used for other purposes: i.e. exclusive Office Building, Lifestyle Restaurant, Art Gallery, luxury Villa, etc.



OASIS S – Spa & Wellbeing Suite is conceived as a sculptural building in hotel parks. It offers to a hotel guest couple the extravagance of a lifestyle suite to dine and sleep, to relax and enjoy a private spa with individual private treatments.

With OASIS SL – Living House, LiteHouse-One offers also an alternative for a private use as a Wellbeing House.

The different OASIS types combined into an ensemble can lead to attractive architectural solutions. With LULU VILLAGE – a “floating Pearl Village” in an artificial bay – our creative team achieved a spectacular design.

## Clean Energy System

### Challenge

It is a commonly known fact that, through the advanced shortage caused mainly by the increasing demand in the developing countries, the price of oil will increase up to 4 to 5 time within the near future.

Leading researchers expect that with the continuing exploitation of the fossil fuel the resource will come to an end within 30 to 50 years. The burning of the fossil fuel is by far the main cause for the global warming.

The whole humankind and especially the industrially developed nations face the challenge, not only to cover their own energy demands from sustainable ecological resources, but also to act responsibly in developing alternative energy resources and implementing them worldwide.

### Clean Energy System

The LiteHouseOne Research Team set out the goal to develop buildings with decidedly lower energy consumption and this to be covered from regenerative energy sources. The result of a co-operation with the building equipment engineers Prof. Klaus Daniels from HL-Technik and Thomas Steinberger from SKM-HAUSTECHNIK - Munich, the chief developer from GAP-SOLUTION, Johann Aschauer – Linz, Austria and other specialists of manufacturing companies can be seen in the Variable Clean Energy System.

The following passive and active components will be implemented according to the climatic and functional requirements and to the energy resources available:

- Solar Façade System – “insulate with light”
- Highly efficient Thermal Insulation, i.e. Vacuum Panels

- Heat pump for using the ground-water energy
- Decentralized active Ventilation with Heat Recovery
- Photovoltaic panels
- Solar Collectors
- Solar Cooling System (Absorption Chiller unit)
- Near-Surface Geothermal System for heating and cooling
- Sunscreen Elements (reduction of the cooling load)
- Wind rotor system

### Results

Thanks to the excellent thermal insulation, solar energy gains and the implementation of Regenerative Energy Sources for heating, cooling and electricity production there will be no requirement for Oil, Gas or Coal based Heating Systems and for electrical Air Conditioning.

The running energy costs will be permanently cut to a minimum and the dependence of the fossil fuels will be a thing of the past.



# Implementation

## Construction

The sphere shape, which is the geometry of OASIS 1, is structurally divided in 12 segments. The main bearing structure consists of 12 vertical curved glue-lam beams, each connected with the central column through radial beams, disposed on three levels. All slabs in the three levels are divided in 12 segments and consist – as the partition walls too – of pre-manufactured elements.

This innovative flexible structure has been developed in collaboration with our structural engineers Dieter Herrschmann and Werner GELTINGER from Schliersee in Bavaria.

The entire main and secondary bearing structures was manufactured with high precision by our major supplier HÄRING AG (CH) and assembled within 2 ½ weeks. On this is to mention, that the dimensional tolerance of the 18m diameter structure is less than 7mm!

Thanks to this structural concept OASIS 1 offers a maximum flexibility of the space: without constraints from walls and slabs, the

Client can eliminate all walls and if request, connect the levels vertically by cutting out the slab segments!

Upon Client's demand LiteHouseOne develops a custom trimmed Interior Concept. All individual and modular elements of the interior work are produced by BOXLER GmbH in their own factory in Rammingen (South Germany) and within short time assembled on site.

The transparent with silver dots printed ETFE foil by HIGHTEX GmbH (Bavaria, Germany) creates a secondary skin in addition to the primary façade which consists of Solar Panels and window elements. The buffer zone created within the two skins optimizes the energy balance according to the different climatic zone.

The Membrane construction, as well as the entire OASIS 1 structure withstand without any damage also gusting winds over 160km/h.

The whole OASIS 1 structure rests on a reinforced concrete basement level which houses the Clean Energy System building equipment.

The main entrance can be placed – upon request – either in the Ground Floor or any of the other upper levels, by means of a floating gangway.

## Project and Execution

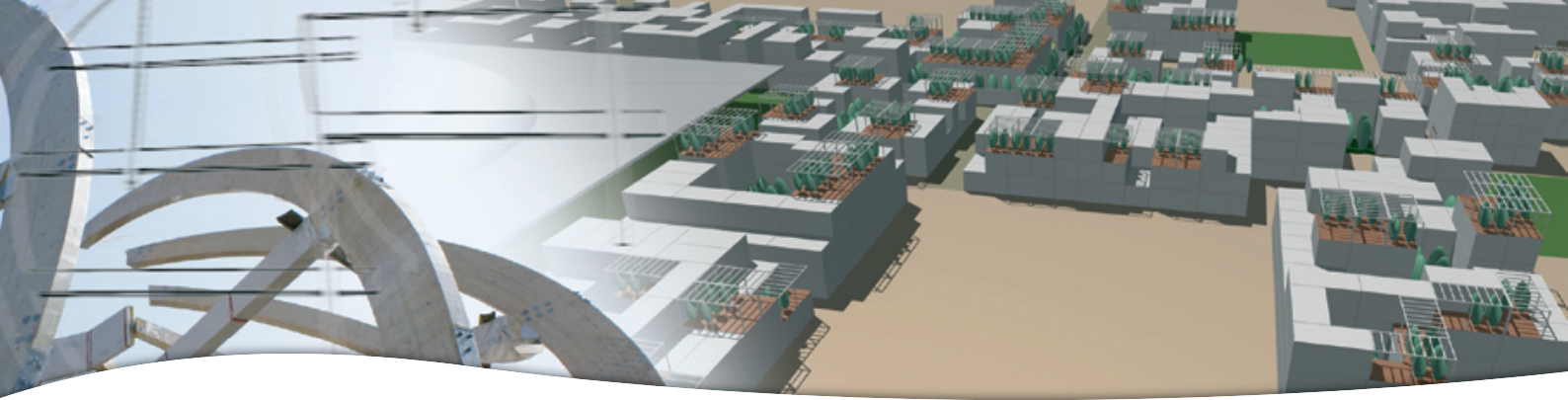
LiteHouseOne offers complete solutions – from the first project idea to the turnkey handing over. Together with our selected Team of High-Tech Specialists from all over Europe, we develop and implement for our Clients, strategically and technically optimal solutions.

The very best specialists assist us in every phase of the project and plan ahead the next steps, based on the already proven and tested developments of the LiteHouseOne Modular Building System and LiteHouseOne Clean Energy System.

Thus, we set new benchmarks for Building Quality, Design, Ecology and Quality of Living.







# Company Profile

## Our Vision

### modern modular building

- revolutionary simple
- resourceful efficient
- regenerative clean

## Our Passion

The passion of Horst Mallmann and Wolfram Berghüser, the two company founders, for the establishment of a forward-looking Construction Method, is the driving force and the foundation all entrepreneurial activities.

Our guiding themes are:

- Protection of natural resources
- High material and manufacturing quality
- Efficient and energy-saving manufacture
- High flexibility for changing client requirements
- High intrinsic value / return of investment for the owner
- Minimal energy consumption and
- Utilisation of Clean-Energy-Sources

## Our Construction Method

Following the results of an interdisciplinary development process, the LiteHouseOne Construction Method rests on two principles:

- Clean-Energy-System (see page 5)
- Modular-Building-System (see page 6)

The choice of domestic timber as primary construction material, the shifting of the building process in the manufacturer's plants, the conversion of the "Building Site" into a "Final-Assembly-Line" and the implementation of most innovative Insulation Systems and Building Services Technologies lead to clear advantages for our clients. Die LiteHouseOne-Construction-method is:

- extremely fast due to the industrial prefabrication; the production of the Space Units respectively Elements take place at the same time with the excavation and foundation works
- efficient and cost saving thanks to the Serial Production of identical Construction Elements and shortening of the construction period
- very flexible through open spaces as a result of free floor plans, again resulting from the creative Structural and Building Equipment Concepts
- high-value thanks to Quality Management in the Serial Production,
- energy saving through excellent Insulation, Solar Energy Gain and the utilisation of Regenerative Energy Sources
- health-improving thanks to Ecologically Clean Construction and active Ventilation Systems

## Our Strategy

Before starting the process of creating, planning and implementing, we begin with an intensive assessment of demand and client's requirements. Only he who permanently develops the best solutions for the clients and establishes himself as the best Problem Solver in his branch can withstand the global competition in the long term.

## Our Enterprise

The internationally registered trade mark LiteHouseOne® stands as a symbol for trend-setting Construction Methods.

We won, with our Vision and Passion, the leading Specialists and their Enterprises as steady Development and Manufacturing Partners for the Implementation of our projects. The main Partners are listed on the reverse of this page.

For further information we kindly invite you to visit our homepage and to a personal contact.

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We look forward to meeting you and learn more about your requirements.



Yours

Horst Mallmann  
Architect Dipl.-Ing. & Urban Planner  
Chief Executive Officer



Yours

Wolfram Berghüser  
Energo Kybernetic Strategy  
Chief Executive Officer

## Partners

	Aktiv Consult: Wellness & Hotel Consulting <a href="http://www.aktiv-consult.de">www.aktiv-consult.de</a>		HÄRING & Co. AG: Timber Construction Engineering <a href="http://www.haring.ch">www.haring.ch</a>		RAUPACH & Wollert-Elmendorff: Attorney of law <a href="http://www.raupach-we.de">www.raupach-we.de</a>
	Airconmech Building Equipment <a href="http://www.airconengineering.com">www.airconengineering.com</a>		HH SCHUNK Relaxing factory: Interior <a href="http://www.relaxfactory.com">www.relaxfactory.com</a>		4rent - München: innovative Light Tech <a href="http://www.4rent-gmbh.de">www.4rent-gmbh.de</a>
	BOXLER: Innenausbau + Interior + Competence in Timber <a href="http://www.boxler.de">www.boxler.de</a>		HIGHTEX AG: Techn. Membrane Constructions <a href="http://www.hightexworld.com">www.hightexworld.com</a>		SCHLEITZER baut Gärten creativ & innovativ GmbH: <a href="http://www.schleitzer.de">www.schleitzer.de</a>
	BUTZ & NEUMAIR: Lift Systems <a href="http://www.butz-neumair.de">www.butz-neumair.de</a>		HL-Technik Engineering Partner: Building Equipment Consulting <a href="http://www.hl-technik.de">www.hl-technik.de</a>		sha. Vertrieb GmbH: AlphaShere <a href="http://www.sha-art.com">www.sha-art.com</a>
	cmr Electrical Contractors <a href="http://www.cmrelectricalcontractors.com">www.cmrelectricalcontractors.com</a>		IMMO PROJEKT, Dr. Rothmeier: Real Estate Development		skm-haustechnik GmbH: Building Equipment Engineering <a href="http://www.skm-haustechnik.de">www.skm-haustechnik.de</a>
	DesignFunktion: Interior <a href="http://www.designfunktion.de">www.designfunktion.de</a>		KLAFS Saunabau: Sauna + Wellness <a href="http://www.klafs.de">www.klafs.de</a>		Statikbüro GELTINGER + Dieter Herrschmann: <a href="http://www.statik-geltinger.de">www.statik-geltinger.de</a>
	EBERLE: Riskmanagement <a href="http://www.eberle-versicherungsmakler.de">www.eberle-versicherungsmakler.de</a>		Koch Membranen: Acoustic Membranes <a href="http://www.kochmembranen.com">www.kochmembranen.com</a>		STEFAN HÄRTL Steuerkanzlei: Tax Adviser
	ECKSTEIN Sigrid: Interior		KOEPE & Partner: Patent Attorney <a href="http://www.innovopat.de">www.innovopat.de</a>		SWAROVSKI: Crystal + Lighting <a href="http://www.swarovski.com">www.swarovski.com</a>
	FaserMix Johann Seiderer: Textile Plastering <a href="http://www.fasermix.de">www.fasermix.de</a>		KONRAD KLEINER: Bath + Sanitary Trade <a href="http://www.kleiner.de">www.kleiner.de</a>		Umwelt-Akademie: Environment + Climate Protection <a href="http://www.die-umwelt-akademie.de">www.die-umwelt-akademie.de</a>
	Forschungsinstitut für anwendungsori- entierete Wissensverarbeitung/n (FAW/n), Prof. Radermacher – <a href="http://www.faw-neu-ulm.de">www.faw-neu-ulm.de</a>		KUBE GmbH: Lighting <a href="http://www.kube-gmbh.com">www.kube-gmbh.com</a>		Utopia Werbeagentur GmbH Marketing Communications <a href="http://www.utopia.by">www.utopia.by</a>
	FREWA Treppen & Stair Systems <a href="http://www.frewa.de">www.frewa.de</a>		MARINA TOURS: Travel agency for Ireland, Scotland, Wales <a href="http://www.marinatours.de">www.marinatours.de</a>		Villeroy & Boch: Bath & Lifestyle Culture <a href="http://www.villeroy-boch.com">www.villeroy-boch.com</a>
	FUNKE INTERIOR DESIGN: Interior Consulting + Planning <a href="http://www.funkeinteriordesign.com">www.funkeinteriordesign.com</a>		Pool & Spa - Enniscorthy: Pool + Spa Services <a href="http://www.poolandspa.ie">www.poolandspa.ie</a>		WEISS & WEISS: Window & Façade Systems <a href="http://www.weissundweiss.de">www.weissundweiss.de</a>
	gap-solution GmbH: Solar Façade System <a href="http://www.gap-solution.at">www.gap-solution.at</a>		ProConHealth: Via Sensus + Ice Tower <a href="http://www.proconhealth.de">www.proconhealth.de</a>		wellnetworks: spa research-development-consulting <a href="http://www.wellnetworks.net">www.wellnetworks.net</a>