

PRESS RELEASE August 8th 2017

The 2017 Innovation Awards highlight 4 major trends that are revolutionising the industry and users

The results are in from the Expert Juries at the Innovation Awards, organised in partnership with ADEME at Le Mondial du Bâtiment 2017 and its trade shows INTERCLIMA+ELEC_{HB}, IDEOBAIN and BATIMAT: 89 nominees were chosen from the 217 participants.

The Expert Juries were formed of around 100 representatives of institutions, certification bodies, contractors, project owners, architects, planers, businesses, distributors and specialist media (see details on page 20).

The number of innovations nominated (up 10% on 2015) is proof of the construction industry's ongoing commitment to R&D. Guillaume Loizeaud, Director of Le Mondial du Bâtiment, explains that this "is confirmation of the sector's determination and capacity for constant innovation in construction and renovation for the buildings of today and tomorrow."

In light of the many and diverse 2017 Nominees, Guillaume Loizeaud continued, "the three Le Mondial du Bâtiment trade shows will once again serve as a launch pad for many innovations, providing the ideal conditions to discover them thanks to dedicated innovation areas and visitor itineraries. The 2017 Innovation Awards will see the emergence of four major trends across all of the industry's professions: smart objects are no longer just a fad but are becoming a reality in all sectors; technological integration is benefiting users by offering improved performance, user-friendliness and ease of maintenance; the arrival of biosourced materials and components will help improve the carbon footprint of construction; the presence of autonomous solutions that generate, store and use energy will also help boost the Energy Transition that is now underway."

The Winners and Special Commendations will be announced during the Awards Ceremony on Monday 18 September at 7pm at Le Trianon (Paris 18th arrondissement).

INNOVATION AWARDS 2017

List of nominated products per category

■ STRUCTURE & ENVELOPE

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AKG GAZBETON	EMIBLOCK	The building block that enables absorbing radiofrequency waves
ATE - AGRI TUBE EXTRUSION	BATIFIBRE SN4	The drain of foundations SN4 without gravier certified QB
ECODIS - KINGSPAN LIGHT + AIR	KINGSPAN DAY-LITE KAPTURE	The skylight with the best ratio light transmittance / solar factor
FLEXIRUB	FLATROOF WATERPROOFING	Flat roof waterproofing with prefabricated 3D EPDM
MECD	DEMODULOR	Valuable and designed for disassembly construction systems
MISAPOR	MISAPOR GREENLIGHT 10/63	The lightweight embankment
SAGEGLASS – A SAINT-GOBAIN BRAND	VARIO	Dynamic solar control from Saint-Gobain for all glass façade solutions
SCIDUS	COQUE DOUBLE COURBURE	The shell of wood made by robot with double curve and variabel thickness
SIMONIN	NLP	The large roof panel, load-bearing, insulating, pre-cut, ready for covering
SUNPARTNER TECHNOLOGIES	WYSIPS® CAMELEON	The aesthetic photovoltaic facade
TROCELLEN ITALIA	PJ HOMESKIN PANEL	The high performance aerogel-based insulation system
WEBER FRANCE – A SAINT- GOBAIN BRAND	WEBERTHERM XM NATURA	The external thermal insulation system with bio sourced cork insulation

■ JOINERY & FENESTRATION

DR. HAHN	HAHN TÜRBAND INDUCTIO®	The smartest door hinge by far
FINSTRAL FRANCE	FIN-PROJECT FORRES NOVA PLUS	The window of innovative aesthetics
GEZE FRANCE	IQ BOX KNX	The interface module for smart ventilation in a KNX environment
LOCINOX	TIGER	The designful hydraulic selfclosing hinge
MANTION	MOVENTIV	The first system for automatic sliding doors: silent and connected
OTIIMA - FRAME SYSTEM	OTIIMA 38 FUSION SYSTEM	Much more than a window
SCHÜCO INTERNATIONAL	VENTOLIFE	The new fully concealed in joineries air purification system

SKY-FRAME	SKY-FRAME SLOPE	The inclined sliding door
TECHNAL – SAPA BUILDING SYSTEMS	CLIMATIC WINDOW	The right temperature summer like winter
TECHNAL – SAPA BUILDING SYSTEMS	FENETRE SOLEAL OPTIMIZED	The window RBR 2020 : more performance with a standard 65mm aluminum module
TODOCRISTAL	AUTOMATIC RETRACTABLE GLASSWALL	Enjoy your terrace all year long
VALENTE SECURITE	MOBILE CODE 5	Micromechanics in action
VALENTE SECURITE	SECURY CONNECT	The door that tells you everything
VELUX FRANCE	VELUX ACTIVE WITH NETATMO	The smart sensor-based home solution for better indoor climate
WICONA – SAPA BUILDING SYSTEMS	WICSLIDE 65 HT	High performance waterproofing
WICONA – SAPA BUILDING SYSTEMS	SMART WINDOW WICONA	The autonomous, motorized and connected window

■ INDOOR FITTINGS

DEHONDT COMPOSITES	NATTEX PANEL	The bio-sourced sandwich panels
ECLISSE	UNIQUE 32 DB	The acoustic sliding door
FRANCEINNOV	BIOACTIV +	The thermoregulating coating which absorbs, stores and restores the energy
ISOVER – A SAINT-GOBAIN BRAND	THE NEW GLASS WOOL ISOVER	Glass wool will never be the same!
METALSKIN TECHNOLOGIES	METALSKIN MEDICAL	The antibacterial surfactive material
МІНВ	DRAGONSKAL	The passive fire protection made in France
NLX	LWP LIGHT WIRE PATH	Connected Light Wire Path
PLACO® – A SAINT-GOBAIN BRAND	HABITO®	The wall that meets all the challenges of everyday life
VICOUSTIC	VICPATTERN	The panel which combines high performance sound absorption with an innovative design

■ OUTDOOR FITTINGS

ALUMINCO	OPEN AIR	The Sliding Glass Windbreaker System
ONLEVEL	KRONOS	The first adjustable glass clamp ever
PISCINES DESJOYAUX	MOBIPOOL	The very first floating swimming pool in the world

■ WORKSITE EQUIPMENT & TOOL

ALPHI	MAXIDALLE ERGO	Slab formwork per panel, efficient and without painfulness, for functional works
ALSAFIX	LIGNOLOC®	The nails made of wood for pneumatic nailers
DRONE VOLT	HERCULES 10 SPRAY	Spray Drone for buildings
EDMA	EDMAPLAC 450	The new generation drywall lifter
LAYHER	UNIVERSEL FW	The versatile solution for wide-span bridging systems
MAFELL	MAFELL INSULATION SAW SYSTEM DSS 300 CC	The solution for executing precise cuts by hand in soft 300 mm insulation boards
MANITOWOC - CRANE GROUP FRANCE	HUP 32-27	The multi-position self-erecting crane with telescopic mast
MESSER EUTECTIC CASTOLIN	DYOMIX® OHM 2.4	The innovative, mobile, safe oxy-flame station without gas cylinders!
MILLS	ESCALIB MILLS HEXAGONAL MDS	The temporary, manually assembled spiral stairway with horizontal side exit
MIRKA FRANCE	MIRKA® LEROS	The lightest electrical orbital wall sander that makes sanding easy and efficient
PERI	DUO	The universal lightweight formwork for walls, columns and slabs
ROLIDE	ROLIDE	The sliding floors for commercial vehicles
TYROLIT FRANCE	TYROLIT CONCRETE DRY DRILLING	No water. No slurry. No problem.

■ DIGITAL, BIM & NEW TECHNOLOGY

TWINMOTION 2018	The real-time Archviz and VR exploration software
ARCHICAD 21	Step up your BIM
SOLIBRI MODEL CHECKER	The world leader in quality control of BIM models and files
ACOUBATBIM BY CYPE	The software to study the acoustic performance of buildings
CONCREMOTE	The real-time concrete on-site monitoring solution
SMARTSNAG	A construction objects automated recognition technology
WINDEC 5.0	50 new tools to make scaffolding design as easy as a few clicks!
LEICA BLK360 IMAGING SCANNER	Imaging laser 3D scanner that anyone can use
DISPATCHER	Interconnect job sites to manage and plan your teams and equipment
	ARCHICAD 21 SOLIBRI MODEL CHECKER ACOUBATBIM BY CYPE CONCREMOTE SMARTSNAG WINDEC 5.0 LEICA BLK360 IMAGING SCANNER

SOGELINK	AMIANTE360	The solution to simplify asbestos risk management
TECHNAL – SAPA BUILDING SYSTEMS	TECHACOUSTIC® BY TECHNAL	Acoustic performance of windows in a few clicks
TECHNAL & WICONA - SAPA BUILDING SYSTEMS	TECH3D / WIC3D	Your BIM Object generator

■ HVAC

AERO TEXTILE CONCEPT	SURFACE	The air diffuser combining design and airflow performance
EBM-PAPST	AXIBLADE	The single fan system for all applications
LG ELECTRONICS	MULTI V 5	Designed for the ultimate VRF experience
LUFTMEISTER	LUFTMEISTER	The system which distributes ventilation costs by measuring energy consumption
PANASONIC FRANCE	ECO G	The VRF system operating with gas engine
RENSON VENTILATION	HEALTHBOX 3.0	The centralized and intelligent ventilation system on demand
SWEGON	WISE II	The demand-controlled-ventilation to combine health and comfort
TERRIS ENERGY	T-EASY	The smart modular heating plant solution
UBBINK FRANCE	ROLUX RENOFIT®	The horizontal terminal for renovation Ø60/100
WEISHAUPT	WM-G20 ZM-PLN	The premix Ultra Low Nox burner

■ RENEWABLE ENERGIES SYSTEM

AIRMAT	COMPACTE ENERGIE +	The air/water heat pump with free hot water in cooling mode in the summertime
FRANCE AIR	MYRIADE®	The multi-hybrid heating and DHW
IMERYS TOITURE	HYBRID'KIT	The photovoltaic tile that also makes hot water
SB THERMIQUE- HERZ	HERZ FIREMATIC CONDENSATION 20/35	The boiler which uses new innovative condensing technology using wood chip as fuel

■ BATHROOM PRODUCT

GEBERIT	GEBERIT PREDA	The Geberit urinal system
GROHE	GROHE SENSE GUARD	The devices detect leaks, pipe breaks and floods - Before a drip becomes a flood
NICOLL	DOCIA®-XS SFH WITH TECHNOLOGIE MAGNETECH	The first compact trap for tiled shower, with the patented magnetic technology

OLFA	WOOD-CARE	The toilet seat with "silver-skin" technology
PRESTO	PRESTOTEM® 2	The innovative shower panels: stylish and simple thanks to its revolutionary design
SFA	SANIPRO® XR UP	The macerator that allows the creation a new bathroom, anywhere
SIAMP	WATERTUNE	The first toilet with a brain
TOTO EUROPE	ZERO DIMENSION BATHTUB - NEOREST	The bathtub that enables ultimate relaxation
VITRA BAD	METROPOLE	The autoclean washbasin
WEDI	FUNDO TOP	The sleek, finished surface for Fundo floor elements

2017 INNOVATION AWARDS

Trends in each category

Trends for STRUCTURE & ENVELOPPE

There are a number of major trends in the Structure & Envelope category. Firstly, the development of products made from recycled or biosourced materials. Secondly, some solutions use complex technology to offer new easy-to-implement systems with new benefits. Thirdly, robotics is used for the prefabrication and machining of elegant products that cannot be hand-crafted in an economically viable way. The fourth trend is the development of photovoltaic generators on exterior walls panels for facades. The roof surface will not be large enough to produce enough electricity to meet building consumption needs, with a view to achieving energy-plus (near-zero energy) status for new office buildings by 2020. The facades will also need to be used and the first aesthetic solutions are starting to appear. Finally, an increasing number of systems are being designed to take into account end-of-life operations such as building demolition and product recycling.

Underground sections will also need to be insulated if buildings are to achieve energy-plus near-zero energy status. **Misapor Greenlight 10/63 by MISAPOR** offers a solution with cellular glass aggregates made entirely from recycled bottles. MISAPOR aggregates offer great mechanical strength (building foundations can rest upon them), total resistance to water, insects and rodents, and significant heat resistance.

SAGEGLASS (SAINT-GOBAIN) has continued to develop uses of its electronic tinted glass. The judges have nominated its **Vario** solution, a structural glass façade fitted with a dynamic electronically tintable layer. It reduces the visibility of structural components (smaller vertical supporting frame) and removes visible solar protections while providing variable solar controls.

WEBER France (SAINT-GOBAIN) has developed Webertherm XM Natura, the first outside wall insulation underlay made using cork panels (λ = 0.040 W/m. K), which is vapour-permeable, rot-proof and almost 100% fire-resistant.

The SCIDUS dual curved shell is a self-supporting dual curved wooden shell that is assembled and machined in just a few hours by a robotic process. It is designed for creating wave-effect roof frames and structures. These shells are modular, require few supporting pilars and can be assembled together for large roof designs.

The **PJ Homeskin Panel** by **TROCELLEN ITALIA** is a high-performance slimline internal thermal and acoustic insulation solution. It is made of a sandwich panel (PEX or cross-linked polyethylene/Silica aerogel/PEX) with the additional option of a heavy mineral layer to significantly increase acoustic attenuation. Silica aerogel has a thermal conductivity of $\lambda = 0.015$ W/m², providing a heat resistance of R = 0.66 m².K/W per centimetre of thickness.

In order to maximise natural light, the **Kingspan Day Lite Capture** skylight by **ECODIS** – **KINGSPAN LIGHT** + **AIR** offers high VLT (visible light transmission) of 80%, a solar gain of 0.45 (non-transmission of heat) and a curved form to capture and redistribute incidental light into the building at the start and end of the day.

Some people are especially sensitive to high-frequency radio waves. To prevent the spread of HF radio waves and to build protected areas, **AKG GAZBETON** has developed **Emiblock**, a cellular concrete building block that absorbs radio waves within a frequency range of 0 to 3 GHz. It offers all the mechanical strength and thermal performance of traditional cellular concrete building blocks, but with the added bonus of preventing the spread of radio waves.

SUNPARTNER TECHNOLOGIES is a leading developer of wall-mounted photovoltaic electricity generation solutions. Its **Wysips**[©] **Cameleon** system is a photovoltaic cladding panel on a metal frame for ventilated façades. The panel comes in a range of colours and patterns and is made of laminated glass with a photovoltaic layer (CIGS): glass/CIGS layer/glass with an electrical junction box at the back.

Demodulor by **MECD** is an industrial self-build kit which can be disassembled and recycled at the end of its life. It currently has 4 components: a prestressed steel and brick wall, a steel/concrete/timber floor, a mixed steel/concrete floor and a timber façade wall with steel splines.

FLEXIRUB has invented an **EPDM membrane** made of several layers fused together, to waterproof flat terrace roofs. It is hot-welded for perfect watertightness. It is pre-fabricated and made-to-measure for each new roof. The first step is to take detailed measurements on site. FLEXIRUB then manufactures a membrane that will be rolled out over the roof needing waterproofing and placed over any roof openings, etc. This process removes the need for welding waterproof panels together, making work faster and reducing risks for operators.

For thermal roof insulation, **SIMONIN** has developed **NLP**, a range of self-standing insulating panels with a span of more than 6 m, which can bear the roof on the top side, while providing a finished underside.

ATE – AGRI TUBE EXTRUSION has developed **Batifibre SN4**, a drainage pipe for building foundations, which remains accessible for maintenance and avoids the need to install gravel or geotextiles.

Trends for JOINERY & FENESTRATION

The nominees for this year's Innovation Awards highlight a number of major trends across this market segment. The first is present across almost all of the Awards categories this year as smart objects are taking ground, offering new applications and services. The second trend, natural ventilation, is also widespread, along with the various technical advances which have made it possible and easy to use, such as the automation of doors and windows, which can be controlled to open and close based on indoor air quality. Two new trends have appeared for equipment in the tertiary sector. Façades are becoming active and the number of self-powered solutions is increasing. Biosourced materials and a focus on end-of-life cycle recycling have also appeared for the first time. Finally, aesthetics and design are still major criteria in the development of solutions for windows, doors and façades.

Hahn Türband Inductio® by DR. HAHN offers a particularly effective and elegant solution to a recurring problem concerning power supply and data transmission for security doors. Generally, reinforced door loops protect and hide data transfer and power cables on security doors fitted with an alarm system. Traditional door loops wear out over time, especially on doors that are opened frequently. For security doors with aluminium frames, Hahn Türband Inductio® replaces these door loops with a three-piece conducting door hinge system providing electrical power supply and two-way data transmission.

VentoLife by **SCHÜCO INTERNATIONAL** focuses on indoor air quality. This 900 x 200 x 110 mm box contains an air purification system (class 12 filter with activated carbon and magnesium permanganate) which can be mounted horizontally or vertically onto the inside or outside of all SCHÜCO windows and façades. The system is fitted with a fan (24 W, 60 m³ / hour), a flap and indoor and outdoor sensors to detect pollution, temperature and relative humidity. Depending on the information supplied by these sensors, the system positions the flap to operate using outdoor air or to recycle the air within the room.

The **Smart Window** by **WICONA** – **SAPA BUILDING SYSTEM** strives for autonomy. It features electronically tinted glass for sun protection, a motor-driven flap for natural ventilation, temperature and light sensors, a glazing bead with photovoltaic glass (a slim CIGS layer), a lithium-ion battery to store electricity and ensure operation even when there is no sunlight and a controller to automate the whole system. The Smart Window requires no power supply and is self-regulated. It can however be connected to a BMS.

The second WICONA – SAPA Building System product nominated is the Wicslide 65 HT sliding window, which is extraordinarily watertight without a drainage channel, but with an integrated pump in the inside slide rail.

TECHNAL climatic window was also nominated in the same category. This aluminium window frame has a Peltier effect component with an electrical current capable of carrying heat from one point to another in either direction, for heating (200 – 500 W) or cooling (200 W) the room.

Another **TECHNAL** product is the **Soleal Optimized window.** TECHNAL has broken away from the race for thicker windows. Until now, better acoustic and thermal performance required thicker window fittings. Soleal Optimized's promise is simple: use a 65 mm frame to achieve the acoustic and thermal performance of a window with a design of 75 mm or greater. Its thermal performance levels are close to Passivhaus certified products (Uw = 1.2 W/m^2 .K with glass at Ug = 1). In terms of acoustic performance, its L_{RA.tr} coefficient is greater than 35 dB with single glazing.

Sky-Frame Slope by **SKY-FRAME** has been nominated. This is an angled sliding window with a maximum inward or outward tilt of 20°. It is perfectly watertight during rain, including torrential rain, thanks to the drainage channel used by Sky-Frame on all its sliding doors.

The **Otima 38 Fusion System** by **OTTIMA FRAME-SYSTEM** is a little different; a sliding window with no visible frame profiles as they are integrated into the building. Each leaf can offer a glass surface of up to 23 m². Exceptional watertightness (E1650 under EN12208) is achieved via a built-in drainage channel.

Velux Active with Netatmo combines the expertise of two companies: **VELUX** for skylight automation (opening/closure, roller blinds and shutters) and **NETATMO** for its sensors that can be used indoors (temperature, relative humidity and CO₂) and outdoors (temperature, rainfall and wind). This is all Internet-connected and an application is available. The system uses local weather forecasts to optimise management of natural ventilation and sun protection systems.

Mobile Code 5 by **VALENTE Sécurité** is not a connected solution, but nevertheless presents an outstanding innovation. It is an A2P certified cylinder + key system associated with the Securystar lock (also A2P certified). The key has 5 rotating pins for up to 32,000 billion possible combinations of different mechanical codes. The cylinder is unbreakable.

Another product from **VALENTE Sécurité** was nominated - the **Secury Connect door** for apartment buildings. It is a smart system, capable of communicating using Sigfox, LoRa or ZigBee protocols. It counts the number of times the door is opened and has a presence detector to sound the alarm in the event of squatters. It also issues an alert when the door is left open or not closed properly. It is fitted with a radiant + convection heating system to warm the entrance hall.

IAQ BOX KNX by GEZE FRANCE is based on the concept of natural ventilation. It is an actuator for window automation that communicates using the KNX protocol. KNX is the world's most widely-used fieldbus in home automation and one of the most common in building management systems. There are literally thousands of sensors for inside air quality (relative humidity, temperature, CO₂, various VOCs, etc.), outside temperature, etc. sold by dozens of different manufacturers that can be coupled with this actuator to optimise natural ventilation.

Fin-Project Forres Novaplus by **FINSTRAL FRANCE** is a window with frames made from three different materials: PVC, Aluminium and ForRes. ForRes is a material developed by Finstral made from PVC offcuts and rice husks which Finstral use to manufacture the bottom parts of their windows.

TODOCRISTAL has been nominated for its **automated glasswall** of the same name. It is a tempered or shatterproof glass wall with a fixed bottom part and 1, 2 or 3 mobile parts above.

Tiger by **LOCINOX** is a hinge for automatic closure of outdoor gates and doors. Its hydraulic system provides 180° closure function. It resists temperature variations.

Moventiv by **MANTION** is an electric drive system for sliding doors. A travel motor uses contactless repellent magnetic fields to drive its sideward motion using no mechanical parts. It moves silently and is suitable for doors of up to 120 kg. It connects to smartphones or tablets using BLE (Bluetooth Low Energy) with an application for initial configuration by the installer and then for user controls.

Trends for INDOOR FITTINGS

Three major trends can be seen in the products and systems entered into the interior design category at the Innovation Awards. Firstly, an increasing number of products that includes recycled or organic materials. These developments are connected to the expansion of the voluntary E+C-accreditation scheme, a precursor of the forthcoming RBR2020. These initiatives look beyond thermal performance and take a broader look at the environmental footprint of buildings, with the aim of reducing and then neutralising it.

Secondly, more and more solutions include significant technological advances, often representing progress in several areas simultaneously. They may improve thermal or acoustic performance, environmental characteristics or hygiene, as well as being easier to use in building projects. The third trend is seeing the aesthetics of even the most technical products becoming a major design criterion. Some products and systems combine these three major trends.

One example is the **Bioactiv+** indoor paint by **FRANCEINNOV**. It contains micro-capsules a phase-changing material (PCM) in order to increase the thermal inertia of buildings. However, it can be used just like conventional paint, contains no VOCs and the PCM formulation can be adapted to different climates.

SAINT-GOBAIN ISOVER's new glass wool for interior insulation uses more than 70% recycled materials and a new 100% organic binding agent containing no formaldehyde or phenols. It has

enhanced acoustic and thermal performance, as well as an improved environmental footprint. The glass fibres are longer, thinner, stronger and suppler, making it much softer and more pleasant for the insulation fitters to use.

Nattex Panel sandwich board by **DEHONDT COMPOSITES** is made with flax fibres. It has been designed as a plywood competitor, at half the weight, but the same mechanical strength. It absorbs vibrations and offers significant acoustic attenuation, all with no VOCs – naturally.

Metalskin Medical by **METALSKIN TECHNOLOGIES** is a surface treatment solution for improved hygiene. It is made using biocidal copper, which prevents germ development and propagation, and is marketed for door handles, bannisters and support bars in accessible toilet facilities.

French manufacturer MIHB developed its Dragonskal firewall panels with the support of researchers from the French National Institute of Applied Science (INSA) and expertise from two competitive clusters, Techtera (textiles) and Plastipolis (plastics). Dragonskal is a 100% mineral composite panel reinforced with glass fibres. It is classified Euroclass A1, the highest European fire resistance rating. 1 mm of the material is sufficient to act as a flame arrestor and with a 40 mm thickness, Dragonskal is certified fireproof for 2 hours. If a panel is exposed to a flame at more than 1000°C, it ensures that the temperature behind the panel surface remains below 140°C. Aesthetics have not been forgotten either. Dragonskal is sold untreated, or with various die finishes and a range of colours available.

ECLISSE has developed Unique 32 DB, a sliding door that provides 32 dB of acoustic attenuation.

Habito[®] is a new plasterboard by **PLACOPLÂTRE SAINT-GOBAIN**, which is fitted using standard techniques, but provides extraordinary mechanical strength: a single screw is enough to hang a weight of 20 kg.

Vicpattern from **VICOUSTIC** is an acoustic attenuation panelboard for use in the interior design of offices and public buildings of any size, offering a wide range of attractive finishes. It comprises a cutout wood motif, available in 7 designs and 3 different colours, backed with an absorbent fabric panel that comes in a choice of 15 colours.

NLX presented **LWP Light Wire Path**, a multi-purpose smart cable runner system that provides Ethernet connections, a lighting bracket, presence detection functions, video-surveillance and more.

Trends for OUTDOOR FITTINGS

Today, many of us are looking to make the best of our outdoor areas and spend more time outside, with a smooth transition between the indoors and outdoors. The BDM (which stands for Sustainable Mediterranean Buildings) voluntary certification scheme for new build projects has developed a whole approach to assessing and promoting this Mediterranean lifestyle, where life often happens outside as much as inside. The three products nominated in this category are a reflection of this desire to take back our outdoor spaces.

The first product, **Open Air** by **ALUMINCO**, is a system of vertical-sliding laminated glass partitions. The vertical slide system is hydraulic, with no electrical power required. Open Air is designed to offer acoustic protection and a wind break for café and restaurant terrace areas, to make all fresco dining comfortable for longer.

The second product, **Mobipool** by **PISCINE DESJOYAUX**, is a floating swimming pool. It is built with floating components, a reinforced roll-out membrane liner and an on-board water treatment system.

The pool is designed for use on lakes, rivers, canals or other bodies of water. The treatment system purifies water to meet bathing water standards. The size of the pool proper can vary from 6×3 m to 20×10 m, and the surrounding floating chambers form the sides, with a guard rail around the riverboard edge.

The third product, **Kronos** by **ONLEVEL**, is a glass clamp designed to make life easier for installation contractors. Glass balustrades have to be held in place using clamps fitted to the balustrade posts, and these often vary in design according to the glass thickness and the post shape. ONLEVEL has invented KRONOS, an adjustable clamp for all glass thicknesses from 8 to 12.6 mm and all straight (42 or 48 mm) or rounded posts. The solution facilitates procurement and reduces costs.

Trends in WORKSITE EQUIPMENT & TOOLS

The first thing to note in this field is how connected many of the products are, making use of digital applications. Positioning systems and data analysis are now increasingly applied to tools, to develop new services, including equipment monitoring to optimise use, predictive maintenance to prevent breakdowns or reduce outages, and systems for reordering consumables in good time and measuring operator exposure to vibrations in order to significantly reduce the risks of repetitive strain injury (RSI). A second trend is the use of very advanced technologies in worksite tools and equipment to reduce energy consumption and pollution, and to make them easier and safer for operators to use on site. The third trend is smart, user-centric design, leading to innovative and clever low-tech tools. The fourth and final trend is that several tools have been designed for work at height, without requiring the operator to leave the ground.

Maxidalle Ergo by **ALPHI** is a modular slab formwork system designed to take the strain out of formwork and form removal. The system includes both the formwork panels and a pneumatic telescopic mast for lifting them. This "MaxUpDown" lifting solution can raise or lower Maxidalle panels to a height of 5.6 m. An operator working with this equipment can assemble or remove 40 m² of slab forms in a day. The MaxUpDown mast can be disassembled and carried by hand. It is easy to use and requires no electrical power supply. It has just one button to rise and the other to lower the panels.

MESSER EUTECTIC CASTOLIN's Dyomix[©] OHM 2.4 offers a genuinely disruptive technology - a water-based high-temperature flame welding station. It is about the size of your aircraft hand luggage and can be transported with handles and wheels. It electrolyses water from its on-board tank, producing oxygen and hydrogen that power the torch. At full power (2.4 kW, 2800°C) it uses 6 l of water per hour. With its non-polluting flame, this technology removes the need for to order, store and reorder gas cylinders.

TYROLIT FRANCE has produced a **dry core-drilling solution for reinforced concrete**, for core diameters ranging from 50 to 160 mm. It works with an industrial vacuum system that sucks away dust, removing the need for a water hose or a water removal and treatment solution.

The Hercules 10 spray system from DRONE VOLT heralds the arrival of drones for maintenance and cleaning work. With a flow rate of 3 litres per minute, this sprayer can be used for roofs, façades and other hard-to-reach areas. With their feet firmly rooted on the ground, operators can easily and safely carry out work at height.

HUP 32-27 by **MANITOWOC** – **CRANE GROUP FRANCE** is a self-erecting crane with a telescoping mast and 32 m jib. It is capable of 20 different configurations, can lift 1 tonne at its jib end (32 m), with a maximum capacity of 4 tonnes and offers a height under hook (HUH) of 27 m.

LAYHER FRANCE has brought two technologies together with its **Universel FW** system – steel framework and scaffolding – to design long-span structures that can be used to build walkways, cantilevers, and rain covers to protect roof renovation work, bridging ledgers, etc. The system features just 3 main component types – booms, diagonals and vertical struts – and the structures are exceptionally strong, with a 30 year service life, even with multiple reuse.

Mirka® Leros from MIRKA France is an electric orbital wall and ceiling sander. Weighing only 3.5 kg, it has a sanding arm and a head with 180° inclination and it is ideal for sanding at height. Its brushless electric motor contains no carbon and has a gradual start-up mode to reduce vibrations for the operator.

One low-tech development is the **Lignoloc®** wooden nail for pneumatic nailers from **ALSAFIX**. Lignoloc is designed for use on timber-framed buildings, saunas, furniture and even coffins. Lignoloc nails are made from German beech wood and have a tensile strength of 230 N/mm². The nails have a 3.7 mm diameter, range from 50 mm to 65 mm in length and come packed in rolls. Lignoloc nails avoid the thermal bridge formed with steel fasteners. The nails require no glue or pre-drilling. The heat generated by friction when the nails are driven in, causes the wooden nail to weld and join with the base wood.

Another simple and effective low-tech concept is **Escalib Mills Hexagonal MDS** by **MILLS**, a manually assembled spiral staircase. The staircase exit can be placed at any height from 0 to 5 m, and the ground footprint is only $1.6 \times 1.4 \text{ m}$.

Edmaplac 450 by **EDMA** is a multi-position panel lifter. It can be raised manually or using power drill assistance. The maximum load is 80 kg, which can be raised to a height of 4.5 m (horizontal panel). The maximum height in a vertical position is 5.5 m (with a 2.5 m panel). It can also lift boards at any angle up to 90°. It folds away easily to a width of 63 cm – narrow enough to fit through any doorway.

PERI Duo is a lightweight formwork system for easy manual handling. The biggest and heaviest component (0.9 x 1.35 m) weighs just 25 kg, with its fibre-reinforced polymer structure. It is designed for use in forming slabs (with a capacity of up to 80 kN/ m^2 , slabs of up to 30 cm thick can be formed), walls, columns and foundations.

MAFELL's DSS300 CC Insulation Sawing System is a tool for cutting foam insulation products (PSE, XPS, PUR, PIR, etc.). It comes with an extractor system and portable workbench.

Rolide from **ROLIDE**, is a sliding floor for loading and unloading pick-ups. With a load-bearing capacity of 1 tonne for trucks up to 3.5 tonnes, it means operators don't have to climb onto the vehicle to load and unload.

Trends for DIGITAL, BIM & NEW TECHNOLOGY

The first point to note about the entries and nominations is that digital technology is an everpresent. The products on offer cover a wide range of activities, from scaffolding to concrete, from design to maintenance and worksite management. The second is that Building Information Modelling (BIM) is more complex than it seems. It clearly requires design software... but this isn't enough. A range of other specialist software is required to ensure dialogue between the various players in project design, between the designers and construction project manager and between the various contractors, including maintenance contractors. All this has led to the development of a whole BIM ecosystem, in which a number of specialist software developers are involved. Thirdly, although BIM is driving the expansion of digital technologies, many other worksite or design applications are using new data collection or simulation technologies. The nominated solutions can be split into three groups: direct BIM-related products, simulation tools (some of which are BIM-connected) and other digital tools.

An example of the third category is **Concremote** by **DOKA**, a real-time on-site system for monitoring the strength of cast-in-place (CIP) concrete structures. RFID chips are set into the concrete immediately after pouring to provide detailed information on its temperature and humidity, etc. This information is collected by sensors and sent to the Concremote web platform, which analyses the data and outputs real-time information on concrete maturity. All this means that formwork removal can be managed based on accurate knowledge of the curing process, reducing the need for safety margins in project scheduling.

Amiante 360 by SOGELINK is a tablet application that records the results of asbestos surveys in order to complete the documentation on Asbestos-Containing Materials (ACMs), which is required before any major renovation project. The software provides operators with all client documents (e.g. building plans, asbestos detection file, where applicable) on their tablets.

They can take photos of elements on site, locate them on the plan, and immediately assign them to a specific structure. Back at the office, they then synchronise the tablet with the Amiante 360 software, which updates or generates the ACM report and asbestos detection file.

WINDEC 5.0 by **LAYHER FRANCE** is a multi-purpose software solution for scaffolding firms. The application interfaces with the Sketchup 3D drawing application, for 3D design of all types of scaffolding. It analyses drops and loads, generates plans and comprehensive parts lists, a construction method, calculates erection and disassembly times, and specifies any lifting gear that might be required.

All this information can also be accessed in the Quotation module, for quick, comprehensive and accurate costing. NFC tags or QR codes on the scaffolding can be used with a smartphone or tablet for quarterly site inspections.

Smartsnag by FINALCAD applies image recognition techniques to construction. The smartphone or tablet application is standalone, requiring no Internet connection, and can recognise objects in a building and their context. It contains 12 item categories (electrical, plumbing, doors & widows, etc.). Smartsnag is for building inspectors, site foremen, maintenance contractors and more. Its main use is for recording site inspections, combining photographs and comments, grouped together by trade category.

The final entry in this category, **Dispatcher** by **REDWIT** is a resource management tool, enabling construction firms to manage their equipment and staff teams across all worksites. The application runs locally (on a tablet or smartphone) and in the Cloud, displaying a schedule of all current and planned jobs. It then establishes a calendar view for the resources used on each site, making it easier to view resource allocation. The application facilitates communication between sites and the office, and also offers access to a broad selection of equipment hire firms.

Five nominated products are directly BIM-related. The first is the latest version of the BIM precursor, **Archicad 21** published by **ABVENT**. Archicad remains on the cutting edge of BIM developments and the publisher has plumped wholeheartedly for an open and collaborative BIM, with the OpenBIM approach. Version 21, however, includes two remarkable new features. The first is an intuitive, quick and stunningly accurate 3D staircase and banister design tool. This module ensures compliance with all staircase design regulations, as determined by the planned use of the building. The second tool is the first time Archicad has touched on reconciliation, one of the key processes in a BIM approach. In

building design, there are often several trades working simultaneously on a 3D building model (e.g. structural engineering or HVAC), and they all use their own specific trade software. Regular reconciliation is needed to ensure that design developments are coordinated and analysed in the general architecture model, in order to check consistency and detect any clashes. Specialist tools exist for this task, including SOLIBRI, the next entry, but Archicad 21 has innovated by including this function.

Solibri Model Checker, whose French version is offered by **ALLPLAN FRANCE**, is the most powerful reconciliation tool on the market. It imports a large number of 3D files, enabling operators to configure their reconciliation needs in accordance with specific project requirements (e.g. regulations) and to compile and coordinate BIM files. Solibri is the BIM Manager tool *par excellence*, checking the conformity of 3D data, extracting it from graphic files, converting it to spreadsheet format and sending it out to the key contacts specified by the BIM Manager.

Acoubathim by **CYPE** is a software tool developed in collaboration with the French Scientific and Technical Centre for Building (CSTB) to assess the acoustic performance of buildings against official standards or voluntary certification requirements. It uses the free IFC Builder tool to import IFC 4 files, and draws on the CSTB ACOUBAT acoustic computation engine and a library of acoustic performance characteristics including 2400 products and 3000 structures.

TECH3D / WIC3D from **TECHNAL & WICONA – SAPA BUILDING SYSTEMS** is a tool for façade, window and door design, with its feet planted firmly in the world of BIMs. TECH3D/WIC3D has been developed by the SAPA group as BIM object configuration software for various aluminium façade solutions – from door infills to curtain walling – by the TECHNAL and WICONA brands.

The package comes in three forms, a standalone application, a REVIT-integrated module, or in a few months' time, an ARCHICAD-integrated module. When the designer creates a BIM object, the software manages all its technical characteristics, sourcing them from the associated database (profiles, glazing, etc.). The BIM object can then be converted into instructions for the aluminium component manufacturer's software.

The Leica BLK360 3D Imaging Laser Scanner from LEICA GEOSYSTEMS solves one of the key challenges of BIM for existing buildings. In these situations, the first step is to acquire data for the existing building. This usually requires complex instruments, operated by highly qualified technicians. The Leica BLK360 is a game-changer. It is the smallest and lightest scanner on the market, capturing a 3D panoramic image and overlaying it on a point cloud. The data (image + points) is transferred to the Autodesk ReCap Pro iPad application. The application filters (reduces the number of points) and registers the scan data in real time. It is connected to a thermal imaging camera, which captures a 360 x 70° image. It takes less than 3 minutes to scan a room. The scanner captures 65 million points with millimeter accuracy at a distance of 60 m. And all this is available for just €15,000!

Finally, two simulation tools have been nominated. **Techacoustic** by **TECHNAL** is a software tool developed with the GAMBA design team to calculate the acoustic attenuation of a sash window, sliding window, complex door or window design or curtain wall. Acoustic performance is a key issue for various reasons – either for compliance with acoustic regulations for new build projects or to achieve certain performance levels for voluntary accreditation schemes such as the HQE, BREEAM or LEED labels. The only method currently available is to assemble the window or wall part and test it in an acoustic testing laboratory, which is a long and expensive process that doesn't give designers the opportunity to try out a variety of solutions. Depending on the complexity, a simulation using Techacoustic by TECHNAL can take a few minutes or a few hours, and the results are accurate to ±1 dB. The tool takes into account the glazing solution described, the frames and any in-fill panels. Techacoustic can be used in two ways. Users can either test a design and compute its acoustic

attenuation or work to an acoustic attenuation target value as a way of designing the window or façade.

The other simulation tool is **Twinmotion 2018** by **ABVENT**, a real-time 3D immersion and virtual reality tool for Mac and PC. The application reads file formats from almost all 3D modelling software on the market and offers real-time synchronisation with Archicad and Revit. It is the only real-time visualisation tool available on the market, generating fixed images and panoramas as well as conventional or stereoscopic videos. Twinmotion 2018 offers 3D virtual reality rendering compatible with OCULUS Rift and HTC Vive. It is a visualisation and simulation tool for designers, architects and project managers, construction, public works and urban design contractors.

Trends for HVAC

Various trends can be seen in this market. The first thing to note is the development of air-driven HVAC systems. Secondly, advanced technologies are increasingly included in products and systems to improve their energy performance and reduce noise. This trend is a direct consequence of the European Ecodesign Directive on energy-related products (also known as the ErP Directive). The final key aspect is the development of smart solutions.

LUFTMEISTER presents **Luftmeister**, an elegant and reliable energy measurement device for heating and cooling systems, which can identify the relative energy consumption in different rooms served by a single air conditioning system. Luftmeister comprises a main unit and a multi-probe fitted into the air duct for precise mass flow and enthalpy measurements.

Rolux Renofit® from **UBBINK FRANCE** is a solution for use in the renovation of horizontal boiler pipework from inside the home, without requiring external access. It makes it easy to replace a conventional room-sealed boiler by a condensing boiler.

The WEISHAUPT VM-G20 ZM-PLN gas burner is a gas burner with a premixing system and surface-stabilised combustion. Two versions are available: 180 to 1750 kW and 250 to 2500 kW. It is designed for renovating low-temperature or condensing heat generators, regardless of their design (single, double or triple pass), even with shallow combustion chambers. It offers excellent combustion performance, with very low levels of NOx emissions.

Multi V5 from **LG ELECTRONICS** is the latest LG VRF system, and it includes some remarkable innovations. The heat exchanger has 4 sides, significantly enhancing heat transfer performance. The DUAL SENSING CONTROL detects relative humidity and temperature in the room in order to optimise heating and cooling operation. The compressor casing is made of a synthetic material that is stronger and lighter than steel. Finally, it is an inverter system and the same large-capacity outdoor unit is designed to supply a two-pipe or three-pipe diffuser system with heat recovery.

TERRIS ENERGY entered **T-Easy**, a prefabricated condensing boiler solution. It comprises a cascading array of boilers (built from stainless steel heaters by Sermeta), a module with pumps and three-way valves, tanks and heat exchanges. It produces hot water near-instantaneously, with a smart heat control system. The control module permanently monitors the system and logs operating data.

Healthbox 3.0 by **RENSON** is a smart single-flow ventilation system offering 11 individual controlled extractor heads, with motor-driven flaps and CO₂ sensors in every room.

Axiblade by **EBM-PAPST** is a fan system with brushless motor for speed control, offering lower consumption, higher air flow and a quieter performance. It is designed for manufacturers of air

coolers, condensers, refrigeration systems and outdoor inverter units, helping them to meet the requirements of the ErP Directive.

Wise II by **SWEGON** is a demand-controlled ventilation system that can operate room-by-room in office buildings. Each air diffuser is automated, with HF radio communications linking it with the Swegon director system.

ECO G by **PANASONIC** is an advanced gas-driven VRF system. VRF stands for Variable Refrigerant Flow, an HVAC solution for office buildings, where each indoor unit is individually controlled, while connected to a common fluid distribution system. It requires very little electrical power, which is ideal for heating and air-conditioning facilities in buildings at the end of a power line. It provides both heating and cooling power and can even supply hot water while in cooling mode by recovering the engine heat.

Surface from **AERO TEXTILE CONCEPT** is a 600 x 600 mm textile air diffuser. This 360° solution comes in a range of colours and patterns, and is machine-washable.

Trends for RENEWABLE ENERGIES SYSTEM

The consistently low oil prices over recent years and attractive gas prices have made life difficult for renewable energies (photovoltaic, thermal solar power, wood and biomass, heat pumps, small-scale wind power, energy recovery and small-scale hydropower). However, they should get a boost from the introduction of "energy-plus" building standards for new build projects, from 2018 for public buildings and 2020 for all buildings. The nominated solutions in this category focus on photovoltaic power, solar thermal, heat pumps and on-site energy recovery systems. They provide a good snapshot of what is already technically feasible, preparing the way for the wider roll-out of "energy-plus" approaches for new builds.

Myriade® by FRANCE AIR is a solution for new housing developments. The scalable system manages energy recovery and on-site production with the aim of maximising renewable energy use for heating, hot water production and ventilation. At the core of the system, there is a control system for managing a heat pump that works with extracted air, solar thermal collectors, greywater heat recovery systems and photovoltaic collectors. The control system maximises the use of available onsite energy. It is a scalable, adaptable system and can accept new renewable energy sources (additional PV or thermal generation) or equipment replacement. Myriade is designed for individual homes and new collective housing developments, and has been awarded "Title V — System" accreditation for the way its calculations take into account the French Thermal Regulations 2012.

Compacte Energie+ by AIRMAT is a very clever dual-function split-source heat pump that produces heating and hot water or cooling and hot water. In heating mode, the pump, which is available at rated outputs of 4 to 12 kW, extracts heat from outdoor air, uses compression to amplify its effect, and feeds it into the heating system and hot water tank. In cooling mode, the heat pump extracts heat from the home and releases it outside. The key idea developed by AIRMAT was to intercept the heat from inside the home and use it to make hot water in a 150, 200 or 300-litre tank, before releasing any leftover heat outside. All this means that the system can generate hot water for "free" and thus significantly reduce the annual energy footprint of the home.

The Herz Firematic Condensation 20/35 boiler by SB THERMIQUE uses condensing technology with wood chips, which is a lower-quality fuel whose water content is significantly less stable than pellets. Wood chips are cheaper but much harder to use. To ensure the boiler keeps on working over the long-term, it has a stainless steel heat exchanger and an automatic combustion grate cleaning system

using a continuous water spray system in the combustion chamber and turbulators. This gives a nominal heating efficiency of 105% HHV.

Hybrid'Kit from **IMERYS TOITURE** is a mixed-use roofing tile combining solar thermal and photovoltaic power with a thermodynamic hot water preparation tank and an uninterruptible power supply that ensures the thermodynamic tank is prioritised for use of the photovoltaic power generated on site. All wiring is provided. The inclusion of a circulating thermal collector underneath the tile helps to cool the surface and increase photovoltaic output by 25% annually.

The thermal collectors preheat the water then the thermodynamic tank raises the temperature to 60°C with an average annual COP of 3.6, rising to 6 in the summer. The system as a whole generates as much electricity each year as the tank uses, which is another step towards "energy plus" housing.

Trends for BATHROOM PRODUCTS

Five major trends can be observed for bathrooms. Firstly, technology is increasingly being used in bathroom products and systems, to improve performance, provide new services and make the products easy to install and use. The second trend is the development of smart objects, with this connected technology acting as a driver for new services. Thirdly, and continuing a strong trend already seen in previous years, improved hygiene is very present for sanitary facilities. In bathrooms, comfort and a sensual user experience are key design goals for new solutions, and this is a fourth trend. The fifth trend is water savings. And finally, there is also a welcome trend for common sense in product development and consideration of the needs of installation contractors.

The DOCIA[©]-XS SFH shower drain with Magnetech technology by Nicoll is an example of sophisticated technology. Details have not yet been released. Come and discover the innovation at the show.

The Preda urinal by GEBERIT brings together multiple trends in bathroom design, including technology, with its rimless ceramic design, infrared user leg detection and adjustable flush, water savings with flush volumes of 0.5 I and ease of installation and maintenance. Control components are hidden away under the urinal, out of reach of any vandals. The Preda urinal is battery or mainspowered.

GROHE is using connected technologies to offer a genuine value-added service, bringing together in a single smart system Sense – a smart floor-level water leak sensor that tracks temperature and humidity, **Sense Guard** – a solenoid valve system that can automatically shut off water supply – and ONDUS, a smartphone or tablet app. SENSE detects leaks and triggers an audio or light signal, sends a message to the Sense Guard valve, which closes, and also alerts the Ondus application which makes sure the message gets to the people who need to know (occupiers, maintenance contractors, cleaners, etc.). The Ondus application remotely controls the valve to open or close it. The system also logs water consumption so that usage data can be compared over different periods.

The premium Zero Dimension Bathtub — Neorest by TOTO EUROPE aims to provide the most relaxing bath-time experience possible. With LED lighting, massage jets for the back and legs, it is a weightless bath, where the bather adopts a reclining position similar to the posture of astronauts in zero gravity conditions. An ergonomic adjustable pillow provides a warm water flow on the bather's neck and upper body.

Watertune from SIAMP combines technology, hygiene and water savings in a smart toilet system that operates without human intervention. It comprises a support framework, wall-hung toilet, flush tank, slimline seat and control panel with screen. The system detects the presence of a user, analyses

the toilet contents, decides the flush volume to use (from 1.5 I upwards in 0.2 I) steps, and then checks the toilet is clean. All of this is contactless and achieves water savings of up to 50% according to SIAMP. It also measures flush water consumption on a daily or weekly basis and reports it via an application.

The self-cleaning Metropole basin by VITRA BAD uses cutting-edge rimless basin designs combined with its AutoClean system to improve hygiene with a basin flushing system. A discreet outlet at the top of the ceramic surface introduces a blend of 5 to 10 ml of cleaning fluid from the product tank (1 l) with 1 litre of water, and diffuses a perfume throughout the bathroom. Cleaning is activated using a touch control, and a vandal-proof version exists for public facilities.

Wedi Fundo Top has been developed to make life easier for plumbers. It is used with a WEDI shower tray and replaces tiles for easy installation with no seals required. The Fundo Top is a single-piece ready-to-fit jointless coating that is only 6 mm thick and made of mineral materials. It comes in square or rectangular shape in a range of dimensions and three colours, and can be trimmed to size on site.

The **Wood Care** toilet seat and lid by **OLFA** has a bactericidal silver ions surface treatment, which reduces the transmission of hospital-acquired infections, without requiring a special cleaning protocol.

Prestotem[©] **2** by **PRESTO** is a new shower panel for communal shower facilities. It is designed for easier installation and maintenance, with three key parts: a lightweight wall frame (<1kg) for easy installation, a front panel that is attached to the frame and is compatible with water inlets from the rear or top, and a removable valve plate. The system is compatible with all types of PRESTO taps and valves. It is vandal-proofed with a secure locking system. Because the valve plate is removable and interchangeable, other models of PRESTO taps can be used. It is also practical for winter care, for example on campsite bathroom facilities. The valve plate can easily be removed to avoid taps freezing in the cold.

Plumbers and installation workers will be delighted with the Sanipro[©]XR UP macerator system from SFA that makes maintenance and replacement easy. The macerator itself used to need to be removed and disassembled to access the blades and remove any hard objects jamming the system... but that's now a thing of the past. A simple, clever hatch that can be removed with just two screws, opens up the basket and can solve 80% of issues. The macerator also comes with all the best technical features, including connections to 4 different sanitary equipment items, transport over distances of 5 m high and 100 m long, and reduced noise operation.

Discover the 217 entries in the Innovation Awards in the Special Participants & Nominees Press Pack

Visuals available HERE

* Expert Jurys Members of Innovation Awards of Le Mondial du Bâtiment

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2017 INNOVATION AWARDS

LE MONDIAL DU BÂTIMENT PROMOTES INNOVATION

The prize-winners chosen by a Grand Jury meeting on 6 September will be revealed at the **Le Mondial du Bâtiment Awards Ceremony** at Le Trianon in Paris on **18 September 2017**.

The Innovation Awards, organised in partnership with ADEME, will be heavily promoted before and during the 3 trade shows, via a **Press Dating** event, **Innovation Areas** at the shows and an **Innovation Itinerary** through each show.

⇒ Press Dating: 18 September from 2:30 pm to 6:30 pm

Before the winners are revealed live during the Awards Ceremony, Le Trianon will play host to a special event on the afternoon of 18 September, where all nominees can meet with journalists and present their innovations in detail.

⇒ Innovation Areas at the trade shows

Visitors to Le Mondial du Bâtiment will be able to discover, handle and appreciate the winning products from the 2017 Innovation Awards.

Three new Innovation Areas will be located at the heart of INTERCLIMA+ELEC_{HB}, IDÉOBAIN and BATIMAT where there will be daily demonstrations of the innovations exhibited in order to promote their performance and boost their distribution and use.

⇒ Innovation Itinerary at the trade shows

This offers a practical way for visitors to tour the trade shows and will feature all stands from companies which entered the Innovation Awards.