

# SPAIN'S TOWERING AMBITION



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**KNAUF** INSULATION

Architect: Estudio Carme Pinós  
Ventilated façade with Ultravent Black and Aquapanel

# SPAIN'S TOWERING AMBITION

New landmarks such as the world's tallest Passivhaus building are redefining sustainable construction in Spain.

Knauf Insulation is providing cutting edge solutions for some of the most prestigious building projects in Spain including the tallest Passivhaus tower in the world.

After years of recession, the country's construction industry is regaining its confidence demonstrated by flagship projects such as Bilbao's 88-metre Bolueta – the tallest Passivhaus on earth – and the 11,000m<sup>2</sup> Soto de Lezkairu, the first Passivhaus multi-family building in Spain.

Other projects that have generated headlines include the new 4,000-employee Economic Campus for the Government of Catalonia, a 100-room boutique EDITION hotel in Barcelona and a new 6,800m<sup>2</sup> headquarters for a major international company in the Basque region.

Oscar del Rio, our General Manager for Iberia says: "We are proud to say that Knauf Insulation solutions have been installed in every one of these projects.

"Each building has demanded high standards of acoustic performance, exceptional air quality and outstanding energy saving performance – and we have delivered.

"Furthermore, our solutions have met the demanding certification standards of LEED, BREEAM, WELL and Passivhaus required by each of these buildings and our use of Life Cycle Assessments, Environmental Product Declarations and recycled material has helped specifiers achieve valuable credits."

These prestigious certified landmarks also symbolise a growing trend in Spain for the use of Green Building Rating Systems (GBRS).

In 2017, for example, there were 587 buildings in Spain that had been registered with LEED and 228 that had achieved certification, while from 2016 to 2017, the number of LEED certified buildings had increased from 47 to 63. The country's Green Building Council now estimates that Spain will exceed 650 LEED registered buildings by the end of 2018.

In another move towards more sustainable buildings, Spain is seeing the introduction of new national energy efficiency regulation. "It is a step in the right direction, but still falls short of our expectations," says Oscar. "I think much of the drive for better buildings is coming from private sector companies that want GBRS certification to differentiate their projects and ensure extra quality control."



# NEW LANDMARKS OF SPAIN

## BOLUETA

The tallest Passivhaus building in the world at 88 metres – is the first of four towers in Bilbao – and has already been certified by the Passivhaus Institute. Work has begun on the second which is planned to be certified by BREEAM. Well-being, comfort and almost zero energy efficiency were critical considerations for specifiers.

**Our solutions:** 9,800m<sup>2</sup> of TP138 with E-Technology and Ultracoustic for internal insulation and partitions.

**Client:** Germán Velázquez (VArquitectos)



## ECONOMIC CAMPUS FOR THE GOVERNMENT OF CATALONIA

This striking new build offers 46,000m<sup>2</sup> of office space for 4,000 Catalan Government employees in the Barcelona economic district and is aiming to achieve LEED Platinum and WELL Gold. Excellent standards of well-being and comfort were essential as was high energy efficiency, LCAs and EPDs.

**Our solutions:** 10,000m<sup>2</sup> of E-Technology TP138. This is our first WELL project in Iberia.

**Client:** Green Living Challenge – Batlle I Roig Arquitectes



## HOTEL EDITION BARCELONA

The design of this 100-room boutique hotel in the heart of Barcelona was conceived by Marriott with hotel design legend Ian Schrager. In addition to restaurant and art club it features a lounge, outdoor pool and bars. Building well-being and comfort were vital, particularly acoustic performance. The building is aiming for LEED certification.

**Our solutions:** More than 6,200m<sup>2</sup> of Ultravent 032 with E-Technology.

**Client:** OAB Arquitectes



## SOTO LEZKAIRU

The first Passivhaus multi-family residential building in Spain is a 11,000m<sup>2</sup> development of 29 homes that has won the 2017 Asprima-SIMA Prize for sustainability. Almost zero energy consumption was a critical priority in addition to comfort, air quality, acoustics, constant temperature and LCA documentation.

**Our solutions:** 6,700m<sup>2</sup> of Panel Plus TP 138 with E-Technology.

**Client:** Germán Velázquez (VArquitectos)



## INTERNATIONAL HEADQUARTERS

In Idiazabal, a huge headquarters for a major international company required 6,800m<sup>2</sup> and 2,800m<sup>2</sup> of green roof. As the building height was up to 15m and the building was made of metal – with long spans between roof ribs – a light-weight solution was essential.

**Our solutions:** Our Urbanscape® Green Roof System was chosen as it can hold up to 45 litres of water per square metre but only weighs 70kg/m<sup>2</sup> – half the weight of traditional green roof with a similar capacity.

## HELPING TO BUILD BETTER

The Spanish government may be lacking in ambition when it comes energy-saving regulation but we are aiming to make a difference by sponsoring Plataforma Edificación Passivhaus which works with architects and specifiers to improve building standards. We are also a member of Consorcio Passivhaus – a platform for manufacturers, buildings and industry professionals. Our solutions were also featured in a Passivhaus construction that was built at the national Edifica Exhibition and Fair to allow visitors to experience the difference of an almost zero energy building.

# SUSTAINABILITY IS NOW PART OF EVERYDAY CONVERSATION

Emmanuel Pauwels is an expert in LEED, WELL and Living Building Challenge. He works for Green Living Projects and Green Living Education in Spain.

## HOW LONG HAVE YOU BEEN ASSESSING FOR GREEN BUILDING RATING SYSTEMS?

I have been active as a green building consultant and trainer since 2009. I am based in Barcelona and most of my projects are located in Spain although I also work in Latin America and the Mediterranean.

## WHICH OF YOUR PROJECTS ARE PARTICULARLY SIGNIFICANT?

The most notable project we are working on is a new Campus for the Government of Catalonia. This project is aiming for both LEED Platinum and WELL certification. Another exciting project is a residential project that aims for LEED for Homes Platinum in combination with Living Building Challenge Certification.

## WHAT HAVE BEEN THE BIGGEST CHANGES YOU HAVE SEEN IN THE SUSTAINABILITY INDUSTRY?

In the last decade sustainability and green building certification have become part of everyday conversation and the number of projects that require certification is increasing.

## WHAT NEW TRENDS ARE YOU SEEING?

Building well-being and comfort are increasingly important.

## TO WHAT EXTENT ARE ENERGY SAVINGS STILL IMPORTANT ISSUE?

Energy savings and renewable energy generation are financial common sense. Over its lifetime, a well-designed, energy efficient building will almost always be the lowest cost building. Unfortunately, the industry is struggling with the creation of innovative financial tools to link investment to savings.

## WHAT FUTURE TRENDS DO YOU ANTICIPATE?

For energy there is a clear path towards Zero Energy. As far as water is concerned, I see a change in regulation allowing projects to use more non-potable water. For products and materials, trends are circularity and transparency as well as better end of lifecycle use. The market is also demanding more transparency about what ingredients are in products.

## HOW DOES KNAUF INSULATION HELP?

Insulation is essential to achieve low energy buildings. What Knauf Insulation is offering in addition are products without toxic substances.

## DO YOU FIND IT EASY TO OBTAIN INFORMATION ABOUT KNAUF INSULATION PRODUCTS FOR ASSESSMENTS?

Knauf Insulation has a clear section on their website providing information about how their products contribute to different green building certifications.



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