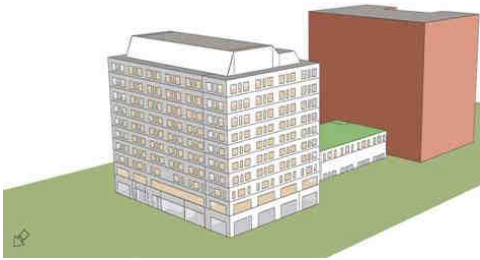


3E BREEAM CERTIFICATION GUIDANCE

Selection of Projects



Client: P&V
Status: Design stage certified
Function: Offices
Project area: 13 500 m²
Ref 3E: PR103248

BREEAM CERTIFICATION OF AN OFFICE BUILDING IN BRUSSELS (BE) FOR P&V ASSURANCE

3E has been awarded a BREEAM buildings pre-assessment study for an existing 13 500 m² office building undergoing extensive architectural and environmental renovation.

3E is providing technical assistance and guidance to P&V Company, the project developer, and to the various project members (the architect, mechanical engineers, system engineers and other consultants) in relation to the BREEAM certification.

The scope of the mission includes technical communication and administrative management with the BRE organisation, pre-assessment of the project, coordination of information gathering and preparation of the specific certification requests at design and at post-construction stages.

The building is now 'Very good' BREEAM certified at design stage.



Client: Altarea
Status: On-going
Function: Shopping centre
Project area: 32 000 m² GLA
Ref 3E: PR104507

BREEAM CERTIFICATION OF A SHOPPING CENTRE BASED IN MASSY (FR) FOR ALTAREA

Altarea Cogedim is currently undertaking a massive refurbishment of 'X%' shopping centre in Massy. The current site offers about 23 500 m² of gross leasing area. An additional 8 500 m² of new area is to be built.

The overall project will be divided into medium and retail shops.

3E first did an analysis workshop with the entire design team to evaluate the BREEAM potential score. 3E is now in charge of both BREEAM and HQE® certifications for the project, together with some specific studies such as energy analysis, thermal and visual comfort, low impact material selection and a renewable energy scan.

The 'Very good' rate is the current minimum target.



Client: ROVA
Status: On-going
Function: Dwellings and shops
Project area: 1 200 m²
Ref 3E: PR103598

BREEAM BESPOKE CERTIFICATION OF A MIXED DWELLINGS AND SHOPS PROJECT IN BRUSSELS (BE) FOR ROVA BRAIE

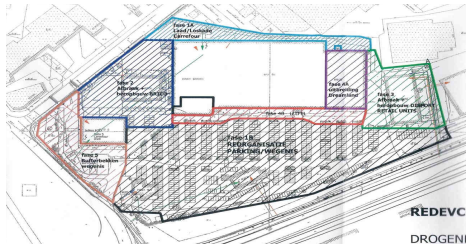
3E is leading the BREEAM certification for both design and post-construction stages for this mix dwelling and shops building in town centre. This work is done together with the all team: the client, the architect, the design office and the main contractor.

This project target is to obtain an 'Excellent' BREEAM certification, working in several environmental aspects. 3E works on some specific studies such as visual comfort, low impact material selection and biodiversity study coordination.



3E BREEAM CERTIFICATION GUIDANCE

Selection of Projects



Client: Redveco
Status: Closed
Function: Shopping Centre
Project area: 13 000 m²
Ref 3E: PR103277

DEVELOPING THE BUSINESS CASE FOR A SUSTAINABLE RETAIL PARK AT DROGENBOS (BE) FOR REDVECO

3E conducted a pre-assessment on sustainability for a typical retail park with the aim of developing an energy concept. The BREEAM pre-assessment covered compliance criteria, evidence required at design stage and evidence required at post-construction stage.

The results serve as preparation for actual certification of future retail parks.

The energy concept study will lead to a one-page sustainable dashboard, listing a selection of energy efficiency measures to lower the energy demand, a definition of profiles for retailers, a qualitative comparison of sustainable energy production scenarios, environmental performance, spatial impact and typical financial-technical feasibility, and the definition of the most relevant energy concept for one specific retail park.



Client: De Paepe
Status: Closed
Function: Offices
Project area: 24 000m²
Ref 3E: PR103508

ENERGY CONCEPT AND BREEAM GUIDANCE FOR THE PRELIMINARY DESIGN OF AN OFFICE IN DIEGEM (BE) FOR DE PAEPE

De Paepe is considering the development of a high environmental performance building of 24 000 m² which would attain the BREEAM certification level 'Excellent'.

3E was responsible for designing the energy concept for the project and guiding all stakeholders throughout the BREEAM process (technical guidance and advising, action plan development, cost assessments, application preparation).

3E is specifically focusing on the evaluation of the different options available to the developers.



Client: Immochan
Status: On-going
Function: Shopping Centre
Project area: 6300 m² GLA
Ref 3E: PR103698

BREEAM certification of a shopping centre based in Castres (FR) for IMMOCHAN

Immochan intends to combine an old shopping centre refurbishment with a new construction to get an overall 6 300 m² gross leasing area new shopping centre. This future building will host several medium shops.

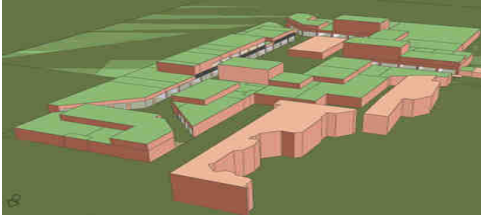
3E is assisting the client in the design certification stage and in some other tasks such as the green lease agreement and the building user guide elaboration.

The client's aim is to reach a 'Good' scoring for this project.



3E BREEAM CERTIFICATION GUIDANCE

Selection of Projects



Client: ING Real Estate
Status: On-going
Function: Shopping Centre
Project area: 13 000 m²
Ref 3E:PR 102663

ENERGY & ENVIRONMENT CONCEPT AND BREEAM CERTIFICATION FOR A SHOPPING MALL IN WALLONIA (BE) FOR ING REAL ESTATE

ING Real Estate is developing a 13 000 m² shopping centre in Belgium and has requested 3E's assistance for a series of missions ranging from concept to project realisation.

3E is responsible for developing the energy concept, optimising both the building physics and technical installations. 3E is also in charge of follow-up the implementation of the final concept during construction.

Finally, 3E is responsible for BREEAM buildings certification of the shopping mall, guiding all stakeholders to achieve their environmental performance objectives and preparing the certification applications at design and post-constructions stages.



Client: Immochan
Status: Closed
Function: Shopping Centre
Project area: 8100m² GLA
Ref 3E: PR 103697

BREEAM ANALYSIS WORKSHOP TO EVALUATE THE POST-CONSTRUCTION CERTIFICATION OF A SHOPPING CENTRE IN MONTAUBAN (FR) FOR IMMOCHAN

3E lead several workshops to determine the BREEAM certification potential for the 'Les Trois Rivières' refurbished shopping centre that opened in September 2010.

This project was conducted by the client to reach a high energy level: the overall energy consumption is 325 kWh/m²/year.

Once all parameters were considered, it appeared that this shopping centre may be certified as 'Excellent' in post construction phase if a few complementary analyses are done. The client is now considering this option to resume and properly start the certification work.



Client: Confidential
Status: On-going
Function: Offices
Project area: 17000 m²
Ref 3E: PR104102

BREEAM CERTIFICATION OF AN OFFICE BUILDING IN KIRCHBERG (LU)

Considering the construction of a new office building, the client intends to develop a sustainable strategy and play down the environmental impacts of such a project. This is a seven-storey building of about 17 000 m² based in Luxembourg.

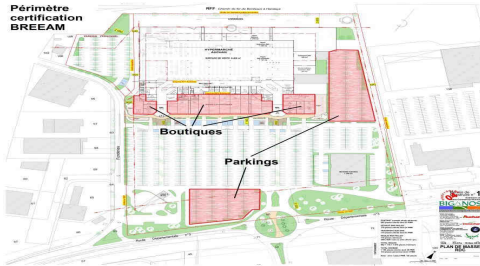
3E was given the mission to carry on the BREEAM certification from the design stage to the end. This implies a role of coordination together with the all design team. This project was first evaluated through several BREEAM workshops, before to effectively being assessed on the design stage.

3E is now deploying the different options that were considered to the design team. The target is currently 'Very good'.



3E BREEAM CERTIFICATION GUIDANCE

Selection of Projects



Client: Immochan, ING and Auchan
Status: Closed
Function: Shopping Centre
Project area: 2900 m² GLA
Ref 3E: PR 104051

BREEAM ANALYSIS WORKSHOP TO EVALUATE THE DESIGN AND POST-CONSTRUCTION CERTIFICATION OF A SHOPPING CENTRE IN BIGANOS (FR) FOR AUCHAN

Auchan has requested 3E's assistance for a BREEAM pre-assessment. This project scope is limited to the extension area of an existing shopping centre based in Biganos.

The actual front façade will be moved for ten meters. On a total, 2 981 m² will be added and occupied by several retail shops.

3E made one workshop to consider the project details together with the client and Auchan priorities. A feasibility report on a potential design stage certification was finally written. 3E highlighted non forecasted studies to have to be contracted at each project step.

The client is considering a 'Good' rating for this new extension.

