

The AMANAC-CSA aims to support and encourage long-lasting collaboration within all the 'Advanced Materials and Nanotechnology' projects, to maximise the impact on European Industry and Society.

The AMANAC cluster projects are grouped into six thematic areas:

- Insulation Materials
- Embodied Energy
- Smart Windows
- Lightweight Components
- Indoor Environment Quality
- Pilot Production

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<http://www.amanac.eu/>



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<http://www.osirysproject.eu/>



<http://www.h-house-project.eu/>



CETIEB

<http://www.cetieb.eu>

<http://eco-see.eu/>



<http://www.brimee.eu/>



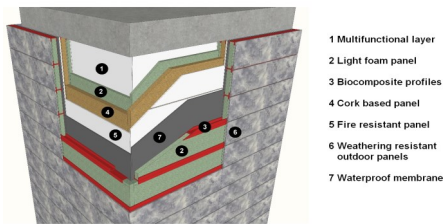
ADVANCED MATERIAL & NANOTECHNOLOGY CLUSTER

Indoor Environment Quality



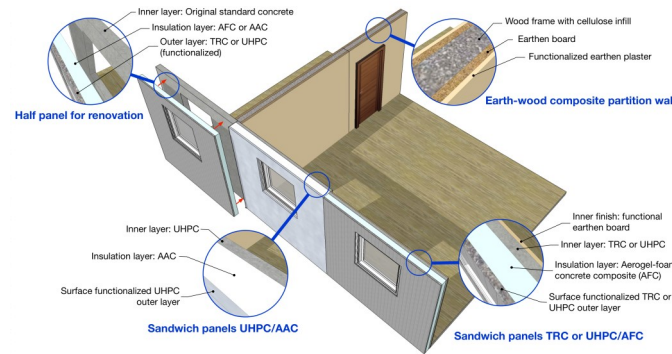
OSIRYS - Forest based composites for façades and interior partitions to improve indoor air quality in new buildings and retrofitting actions

OSIRYS proposes a holistic solution for façades and interior partitions for retrofitting and new construction by developing biocomposites to meet Building Code requirements which also improve indoor air quality by VOC and microorganisms elimination, increase thermal and acoustic insulation and control breathability of the construction systems. Research activities encompass new eco-innovative materials, aesthetic aspects, LCA and cost evaluation, compliance with the Building Code and consideration of different climates.



H-HOUSE - Healthier Life with Eco-innovative Components for Housing Constructions

An adequate building envelope should protect against moisture ingress, heat loss in winter, excessive heating in summer and noise. The H-HOUSE project aims to develop durable, energy-efficient and affordable building components where environmental aspects and living comfort are complementary. Earthen materials, optimised cementitious materials with modified surfaces and wooden/cellulose materials are used to create optimal conditions indoors.



CETIEB – Cost-Effective Tools for Better Indoor Environment in Retrofitted Energy Efficient Buildings

CETIEB developed innovative solutions for better monitoring of indoor environment quality and investigated active and passive systems, focused on cost-effectiveness to ensure wide application. The project addressed three main objectives: Development of monitoring systems for comfort and health factors, development of indoor environment control systems using both passive elements and active systems which control the environment based on the monitoring data, and modelling of indoor environments for validation. A European cluster for Indoor Environment Quality was established to identify research needs.



BRIMEE — Cost-effective and sustainable Bio-Renewable Indoor Materials with high potential for customisation and creative design in Energy Efficient buildings

Today's challenge is the realisation of sustainable low-energy buildings, which combine thermal insulation properties with a healthy, comfortable and safe indoor environment.



The BRIMEE project aims to combine the development of better performing insulation materials providing a significant reduction of buildings operational energy, with the capability not to emit harmful substances and to act as an absorber for indoor pollutants.

ECO-SEE — Eco-innovative, Safe and Energy Efficient wall panels and materials for a healthier indoor environment

The ECO-SEE project aims to address an emerging health problem associated with modern low carbon buildings, with research showing that a build-up of potentially harmful chemicals in the air is potentially causing negative impacts on occupants. The ECO-SEE project studies the use of innovative eco-building materials that will address poor air quality, while also radically improving the energy efficiency of buildings.

