Tiles & Bricks Europe

Ceramics, quality for life





Introduction

Clay is one of mankind's oldest working materials. Clay bricks and roof tiles form the basis of the European building tradition, along with the more recent blocks, pavers and façade cladding. Our industry provides sustainable construction products that link architectural heritage and energy efficient building solutions. Whether from ecological, economic or social aspects, clay building products constitute a sustainable option and have favourable life-cycle assessments with low environmental impact.

Clay masonry bricks and blocks are flexible in use. Through their mass, these products provide thermal inertia and create excellent living conditions and good indoor climate.

Clay roof tiles come in a large range of formats, dimensions, colours and fittings. This great variety of products allows us to help preserve our regional architectural heritage across Europe.

Clay building products have a very long lifetime, require little or no maintenance and help minimise heating and cooling costs; they therefore provide optimal economic performance. Buildings made from clay building products have a very positive environmental footprint over their lifetime. Last but not least, clay buildings are characterised by a high resistance to fire.



Abundant raw material & biodiversity

Clay is the mineral group that is found in greatest abundance in the Earth's crust. So much so that well managed clay reserves may be considered as an unlimited source of natural material, just like renewable raw material resources. However, it is vital for the industry that long-term mineral planning ensures security of supply and thereby encourages investments.

The clay brick and roof tile industry is an extractive industry relying on natural resources for its raw materials. The quarries from which our raw material is extracted are valuable habitats for a variety of animals and plants. During and after extraction our sites are restored and returned to a natural state, thus supporting the creation of new habitats, and delivering biodiversity gains.







Efficient production

The manufacture of clay building products is constantly improving. Today's computer controlled kilns ensure that 100% of the products are fired at the correct temperature. A kiln heat recycling system allows maximum heat recovery and reduced energy consumption. More so, modern process technology ensures minimal waste and therefore a minimal environmental impact.



The clay brick and roof tile industry monitors its energy usage, which forms a significant part of total production costs. Firing gives our products their exceptional long life and durability performances and is an indispensable part of the production process. Much work has already been done to decrease specific energy consumption and consequently emissions in line with European and government guidelines and further work is being carried out.

Clay blocks are especially designed to be energy efficient in use and there has been a significant increase in thermal performance of products over the years. Our objective is to continue this trend in order to deliver efficient products that are manufactured with careful energy usage, controlled emissions and minimal waste.



Sustainable architecture

Clay products have already proven their sustainability over thousands of years. Now the promotion of sustainable construction is a political target. What is still required is to ensure that participants in the building process understand their role in managing sustainability.

This requires that:

- Industry produces high quality products;
- Authorities provide financial incentives to support sustainable building projects;
- Architects and engineers create sustainable buildings;
- Contractors work according to established codes of practice.

A weak link anywhere in this partnership can undermine the effectiveness of any sustainable construction strategy. Therefore, our industry cooperates closely with the European institutions, local authorities, architects, engineers, research institutes, builders and other relevant stakeholders to develop efficient construction solutions.

By examining the context of European construction and by understanding and accepting its various regional differences, our industry is provinding solutions of technical excellence that lead to sustainable architecture. More than ever, sustainability remains our driving principle.



Long service-life & recycling

The last phase in a product's life cycle can become the first, if demolition is followed by recycling or re-use. Pavers and roof tiles are often reused. Despite the potential long life of clay brick buildings (well in excess of 150 years), they are sometimes demolished well before the end of their useful life.

Building and demolition waste is used extensively throughout Europe for roadwork and as secondary aggregate. This is facilitated by fast developing recycling technology that allows precise extraction of various materials from mixed demolition waste. Separating out ceramic matter provides an opportunity to recycle or re-use a very sustainable building material.

New research is looking into the introduction of ceramic debris as a high-value raw material component in the raw material mixture for the production of clay products.





Tiles and Bricks Europe (TBE) promotes the interests of the clay brick, block, paver and roof tile industry in Europe. It provides a forum for its members to exchange information on technical development, sustainable construction and emerging issues. Our association was established in 1952.

Our main partners are the European Commission, the European Parliament and the Comité Européen de Normalisation (CEN).

Today, TBE brings together industry associations and companies from 21 European Union Member States plus Croatia, Norway and Switzerland. TBE represents more than 700 companies of all sizes, from SMEs to world leaders, and 1300 productions sites from across Europe. Last but not least, we collaborate closely with our corresponding associations in Australia, North America, Russia and South Africa.



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