

Research projects - Homepages, reports etc

Some major international R&D projects are outline below and links to the homepages given.

TEAM - Testing and Assessment of marble and limestone



Summary

All across Europe the long term deformation of marble cladding has resulted in safety and durability problems. This has resulted in increased maintenance costs, and reduced production, exports and employment. The assessment of facades at selected study sites, using monitoring systems, risk assessment and lifetime prediction, will be used to develop hypotheses for the observed deterioration. Repair techniques was developed for existing buildings, thus reducing maintenance costs for existing problems. Research carried out on a large number of stone types is used to explain degradation and develop European test methods. The test methods are used for production control and screening tests to identify good and deleterious marble and so reduce future damage and promote use of natural stone for cladding, thus improving employment and increasing European competitiveness in this area.

The project has three clear-cut objectives being:

- To establish a sound understanding based on natural sciences of the phenomena leading to poor field performance of marble clad facades.
- To devise a test method for determination of potential bowing of thin slabs of natural stone.
- To develop a field monitoring, evaluation and repair guide for facade cladding, which will include risk assessment and service life prediction

www.sp.se/building/team

OSNET - Ornamental Stones Network



OSNET is a *Targeted Thematic Network on Ornamental and Dimensional Stones*, funded by the European Commission under the Competitive and Sustainable Growth Programme. OSNET aims to bring together all the organisations active in the European Ornamental Stones Sector, industry, academia, research institutes, national centres and stone federations. It is expected to be an instrumental tool to meet the sector needs, as it will provide the necessary forum to share problems and experience and to facilitate the transfer and incorporation of technology to the interested European market companies and organisations.

The OSNET Network publications cover all the range of industrial activities related to:

- quarrying
- stone characterisation/classification
- stone production and processing methods
- tools and equipment used for stone shaping processing and finishing
- environmental protection
- safety in all phases of production

www.osnet.ntua.gr

I-STONE - “Re-engineering of natural stone production chain through knowledge based processes, eco-innovation and new organisational paradigms



Aim of the I-STONE project is the re-engineering of the stone production chain, in order to considerably increase its efficiency and productivity, minimize the amount of stone wastes disposed, produce a new generation of multifunctional products based on stone wastes and safeguard quality in stone application and use.

Eg. Reports

- **D5.23: Handbook on care and maintenance of Natural Stone**
- **D5.27: Expert system for predicting stone behaviour in different construction applications Design tool for dimensioning pf cladding panels**
- **D5.28: Handbook for proper selection of stone to each application and climate**

www.istone.ntua.gr

NICe Harmonised requirements on Nordic natural stones

Objective: Facilitate and increase the trade in good quality natural stones between and outside the Nordic countries

- Develop harmonized Nordic recommendations for application requirements and tender documents.
- Implement the EN standards CE-marking so as to safeguard the quality of European and non-European stones
- Develop information and education packages to the producers, users and specifiers
- Ensure a long-term positive development by identifying R&D needs of the trade and enhancing the international collaboration between the stone industry, the construction industry and research

www.nordicstones.org