

DIN EN 16515:2015-06 (E)

Conservation of Cultural Heritage - Guidelines to characterize natural stone used in cultural heritage

Contents		Page
Foreword		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Preliminary operations	6
4.1	Initial survey	6
4.2	Sampling	7
5	Methodology to characterize sound and deteriorated material	7
5.1	Visual examination of specimens	7
5.2	Examination under petrographic microscope	7
5.3	Mineralogical analysis by X-ray diffraction (XRD)	8
5.4	Micro-structural examination by Scanning Electron Microscopy	8
5.5	Chemical analysis	8
5.6	Physical properties	8
5.6.1	General	8
5.6.2	Density, porosity and pore size distribution	8
5.6.3	Hydric behaviour	9
5.6.4	Colour	9
5.7	Mechanical properties	9
5.7.1	General	9
5.7.2	Compressive Strength	9
5.7.3	Flexural strength	9
5.7.4	Static modulus of elasticity	9
5.7.5	Dynamic modulus of elasticity	9
5.7.6	Sound speed propagation	10
6	Characterization report	10
Bibliography		11