

## **DOLOMITE AS A DIMENSION STONE – CHARACTERIZATION AND PROSPECTION TECHNIQUES**

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Due to Minas Gerais State great dimension stone reserves and geodiversity, it were studied one of the most important carbonatic rock quarry (Cumbi), represented by beige to reddish stromatolitic dolomite bodies of Fecho do Funil Formation, Piracicaba G., Minas SG., at Cumbi quarry (Ouro Preto), which are extracted by Minas Pérola for dimension stone use. Special emphasis were taken in this study for dolomite technological characterization and structural relation with its adjacent phyllite. For dimension and geometrical relationship among those bodies, it was tested a geophysical technique for prospecting and exploitation (GPR -Ground Penetrating Radar). Beyond this, quarry samples were submitted to petrographic and technological characterization tests. Data obtained were compared with other carbonatic rocks. It was followed Brazilian normalization committee (ABNT) and Spanish LOEMCO procedures' adaptations. It was compiled an overview of dimension stone market and its potentiality in Minas Gerais and also the historical evolution of stone usage in constructions. The main results obtained were a classification proposal, based in dimension stone technical characteristics, and also new lab procedures for physical index and acid attack tests. GPR supplied important discontinuity persistency information and it was also detected carbonatic dissolution spots. It was possible to attest Cumbi's dolomite quality compared to other carbonatic rocks.