



## **Restoration and reconstruction of extremely weathered and damaged sandstones on Renaissance reliefs**

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Sandstone is probably the most preferred building, decoration and sculptural stone of a natural origin. In the Czech Republic, the sandstone was used mostly in Gothic, Baroque and historicizing styles in the 19th century. The sandstone is widely used because it is relatively easy to process. But the sandstone is also a natural material that may easily erode, this being typically a case when it is exposed to humidity, salt or air pollutants.

This paper describes actions taken within reconstruction of extremely weathered sandstone of Renaissance tombstones placed in walls of St. Martin's Church in Dolní Benešov near Opava. A detailed petrographical analysis of the sandstone was carried out and possible places of origin were determined. During the restoration it was essential to desalt and neutralise the sandstone surface thoroughly, to consolidate the sandstone material, to ensure static cohesion (to eliminate other material losses) and to replace the missing material. In some places, the material loss was as much as 80 per cent. This was mainly the case of reliefs and lettering. Within after-care it is essential to clean the relic regularly and apply hydrophobic coating. It is also advisable to cover the relic partly or place it under a roof.