



## International Course on Stone Conservation SC13

---

**SESSION:** Roman construction techniques

**INSTRUCTOR:** Gionata Rizzi

**TIME:** Monday, 15<sup>th</sup> April/ 9:30 – 11:00 (1.5 hours)

---

### SESSION OUTLINE

#### ABSTRACT

The architecture of the Roman Empire was made possible by and is distinctive for Roman builders' adeptness with structural innovation. This achievement is fundamental to appreciate the intrinsic architectural and structural values of the remains that are still visible in Rome and forms the basis for understanding subsequent Byzantine and Romanesque structures. This session provides an overview of Roman construction techniques both for large civic buildings and private residences in Rome as well as in the provinces.

#### OBJECTIVES

- To develop a basic understanding of the variety of materials and structural typologies in Roman construction (in Rome and abroad).
- To understand the structural performance of stone in Roman construction design.

#### CONTENT OUTLINE

- The materials of Roman architecture (dried and fired clay, wood, mortars, and stone)
- The different types of masonry; the *opus caementicium*; ashlar
- The nature of stone-block building construction
- Wooden floors and vaults
- Roofs, trusses, vaults and domes: The case of the Pantheon
- How did the Romans build their houses: The case of Herculaneum
- Stone finishes: *crustae*, *opus sectile*, mosaics
- Organization of the Roman building site

#### READINGS

 = Essential reading material

 = Available online

Adam, Jean Pierre. 1984. *La construction romaine : Matériaux et techniques*, Grands manuels picard. Paris: Picard.

MacDonald, William L. 1982. *The architecture of the Roman Empire*. Rev. ed. Vol. 1: An Introductory Study, Yale publications in the history of art. New Haven: Yale University Press.

©2013 J. Paul Getty Trust and ICCROM

