

The Laboratory

The Proof testing and Research on Structures and Materials Laboratory (*PRiSMa*) of the Roma Tre University is born in 2000 in order to integrate research activities developed by the departments in the area of Structures.

The actual lab equipment allows to execute experimental testing on building materials, on structural components and on scaled models.

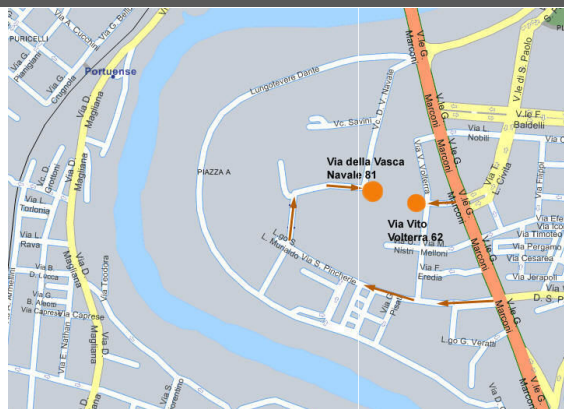
The *PRiSMa* Lab's facilities comprise: a contrast wall and slab, actuators with capacities between 200 and 1000 kN, a universal machine MTS, two compression machine both with a capacity of 3000 kN in order to test standard and big dimensions specimens, one tension machine, position and force transducers with the acquisition system, equipments required to execute in situ testing (rebar locator, rebound hammer, ultrasonic pulse velocity tester, core drilling machine, flat jacks, etc.).

The *PRiSMa* Lab executes:

- basic and applied research on Structures;
- services performed for outside bodies, as special, ordinary and in situ experimental test;
- experimental activities as Official Laboratory according to the provisions of the Italian law N.1086/71;
- educational activities for bachelor's degree, masters, phd and professional adjournment.

Request for building material tests

Application form and price list available on:
<http://prisma.uniroma3.it>



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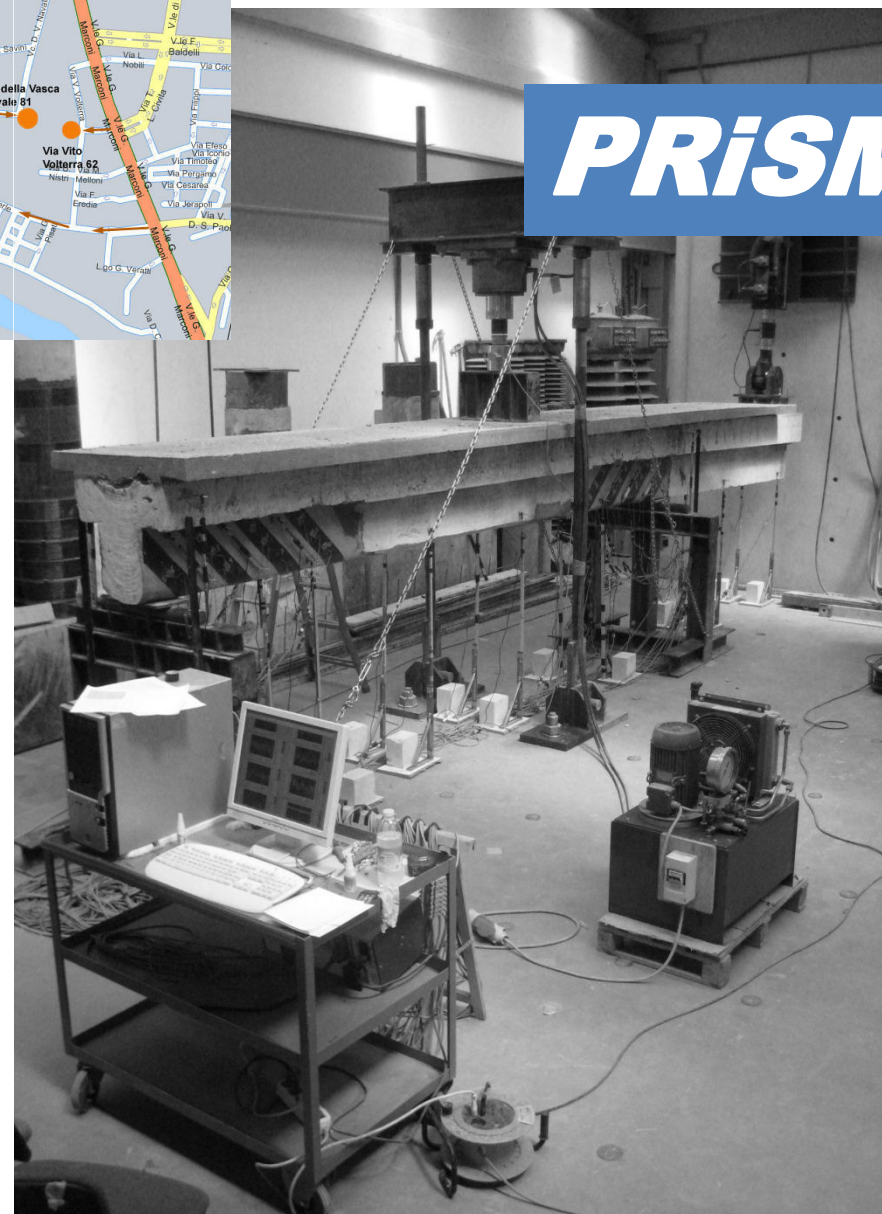
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Open to the public:
from monday to friday
9.30 -13.00 ; 14.00-16.30

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PRiSMa

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**Proof testing and Research
in Structures and Materials**

Material testing

The *PRiSMa* Lab executes tests on building materials (concrete, steel, masonry) as an Official Laboratory in accordance with the provisions of the Italian law N.1086/71.

The equipment available to the Lab allows to execute quality and acceptance controls on the materials employed in the construction of new structures or to evaluate the mechanical characteristics of materials coming from existing structures.

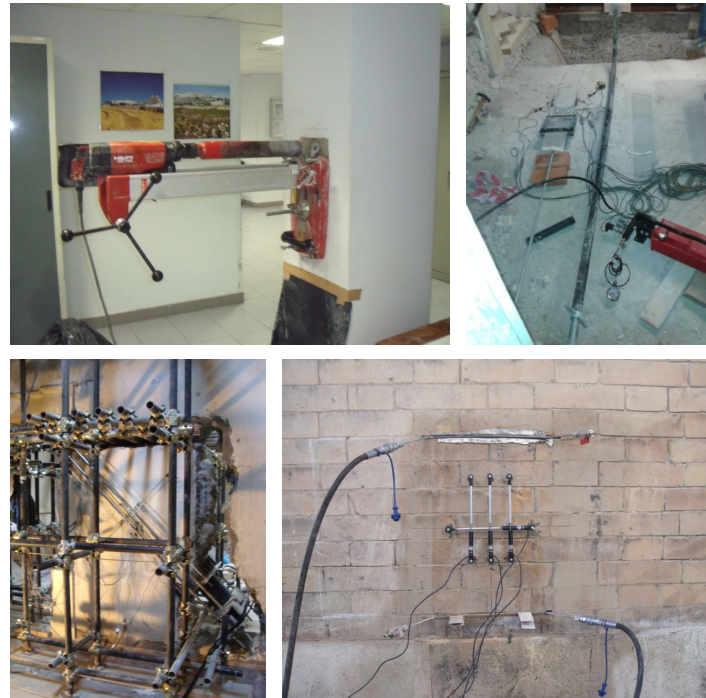
The *PRiSMa* Lab executes also more engaging tests as those over masonry panels, the determination of stress-strain law for any material, tests for the quality control of composite materials (tension and single-lap shear on bonded joints) etc.



In situ testing

The *PRiSMa* Lab executes experimental campaigns directly on site in order to evaluate the mechanical characteristics of the existing structures.

For this purpose the range of services goes from the core drilling, the classic NDT for concrete as the combined SonReb method and the flat jacks for masonry structures to more engaging tests as the diagonal compression test on masonry panels performed directly on site.



The *PRiSMa* Lab also acts in the area of the quality control of composite materials employed for structural strengthening, performing in situ pull-off and shear tearing tests.

Finally the *PRiSMa* Lab implements and executes also in situ special tests at the request of the customer.

Special testing



The *PRiSMa* Lab executes engaging special tests on building materials and structures in order to integrate the research activities developed by the departments or asked from outside bodies.

The area of interest concerns the assessment of existing structures, including seismic behavior, and the consequent strengthening techniques with the employment of innovative materials and control devices as isolators and dampers.

Other topics concern industrial installations and the development of new construction techniques able to increment the seismic reliability of public works as bridges and viaducts.