

Historical Sireg

Keep the Louvre Healthy and Dry

A review on world Historical Buildings and Great Civil Monuments strengthened by Sireg solutions



Historical Sireg

Keep the Louvre Healthy and Dry

Since 2010 **Sireg Geotech** has been giving a strong contribution to make **Louvre Museum** a safe place. Sireg Geotech manufactured and supplied its **Durvinil tubes à manchettes** for this enlargement project. Pipes were installed along the edge foundations of the Museum in Paris, as to apply a ground improvement and strengthening at first.



Historical Sireg

Keep the Louvre Healthy and Dry



The repeated injection cycles and works created a “waterproof skirt” below the famous **Louvre** building, while securing a contribution to the structural stability of the Daru Wing of the Museum.

Grouting works along the edges of relatively “delicate” structures like this one can be operated with minor risks and efficient results thanks to **Sireg Geotech** products.



The Contractor employed a number of special foundation techniques on the project: to start 400 jet grouting columns were installed under the original foundations to distribute all loads (facades and interiors) to the solid limestone bedrock under the surface alluvial layer.

Furthermore, 200 injection holes were drilled through the jet grouting columns to a depth of up to 22 m: **Sireg Durvinil® manchette pipes** were installed inside these boreholes. Delicate grouting cycles were forming a waterproof “skirt” to protect the foundation site from water entry (the water table lied at a depth of 6 m), along with crack injections designed to consolidate the original foundations. Earthworks then got under way, alternating with anchoring (900 anchors and nails) and wall shielding by shotcrete. The museum remained open to public visits during all work stages.

