



## **C and C for “Support” by Lorenzo Quinn**

Two monumental hands, emerging from the water as if supporting the building on the Grand Canal, to symbolize the role people have to play in supporting the unique heritage of Venice. Each of the two sculptures is made of expanded polystyrene D20, supported internally by a metal column welded to a 25-mm thick circular base.

Both sculptures are hollow in the lower part to allow for attachment to the foundation structures and minimize the thrust of the surrounding water mass.

The left hand has a total weight of 2,303 kg and a height of 8.05 m at level 0 of mean sea level while the right hand has a weight of 1,943 kg and a height of 5.98 m at level 0 of mean sea level.

The weight of the hands is entirely supported by the foundation piles created for the project developed by our studio, which perform the task of supporting the load component under compression and under traction.

For each forearm, the foundation structures are composed of four metal piles of 168.3 mm diameter and 10 mm thickness fixed in the bed of the Canal. The piles are equipped with a helix on their head and were fixed in position by rotation. They were created in two 5.35 m sections, connected to each other by bolts, giving a total length of 10.7 m.

The heads of the piles, emerging from the water, are connected on top by a circular metal base of 1000 mm diameter and 40 mm thickness with 16 M20 studs, adapted for connecting to the base of each hand. To facilitate installation below the base plate, four sleeves were welded to accommodate the heads of the four piles. Once the base was installed, the connection between the sleeves and the piles was ensured by fillet welding.

The Public Administration required illumination of the installation for reasons of safety of navigation along the Grand Canal. To meet this requirement and at the same time to respect the plastic and textural characteristics of the work of art, we opted for a system where the light descends from above and therefore extends the effect of daylight, avoiding presenting the work differently when under artificial illumination.

The light was graduated in its intensity and a colour temperature was chosen that was most closely related to the sculpture surfaces so as to highlight the dynamic effect of the plastic gesture of the two hands.

Eight LED-type projectors were installed, which are mounted on lightweight aluminium frameworks. The frameworks are placed on the floor of the balconies of three of the corner windows of the piano nobile. So as to ensure support and protection for the historic materials, they stand on plastic platforms. Lateral stability was ensured by nylon bands.

The illumination system installed respects the historic materials of the windows. It does not interfere with but rather enhances the work of Lorenzo Quinn in the context of the Ca' Sagredo palace and its exquisite connection with the Grand Canal.

Our team also supervised the installation stage of the sculpture, taking into account the need to avoid as far as possible any disruption to transportation along the Grand Canal, without interfering with the nearby ACTV landing stage of Ca' d'Oro and obviously ensuring the protection of the historic building facing the sculpture.

The process of drafting the technical and administrative documents submitted to the City Council and the Soprintendenza (artistic heritage authority) for the approval of the installation was particularly demanding. As was the work of coordinating with the Gondola Authority to move some of the gondola berths in front of Ca' Sagredo.

#### **C and C Project Management Team**

Architect Fulvio Caputo (Technical Director)  
Architect Pierluigi Claudino (Project Leader)  
Engineer Marco Zanon (Structural Engineer)  
Surveyor Davide Cassandro (Safety Superintendent)

#### **Companies involved**

Rein (installation and logistics)  
ST technical services (installation and pontoons)  
Geopali (foundation piles)