

## The Suburban Baths of Herculaneum



**The Suburban Baths of Herculaneum** are exceptionally open to visitors, offering the unique opportunity to explore an active restoration site and to access areas that have never before been open to the general public.

This is **the best-preserved Roman bath complex in the world**, where doors, windows, pools, decorations, and even ancient pipes are still in their original positions. Crossing the threshold, it almost feels as if one only needs to turn the taps to see water once again flowing into the hot and cold bathing pools.

The complex was built at the beginning of the **1st century AD** by order of *Marcus Nonius Balbus*, a prominent politician and benefactor of the city. Damaged by the earthquake of 62 AD, the baths were likely restored and expanded, but only a few years later, in **79 AD**, the eruption of Vesuvius buried them along with the entire city of Herculaneum under a flow of mud and pyroclastic material.

The volcanic surge penetrated the rooms, sealing every detail and transforming the building into an extraordinary **“time capsule”**. It is precisely thanks to this dramatic event that we can today admire its exceptional state of preservation.

After the first Bourbon excavations in the 18th century, archaeologist **Amedeo Maiuri** brought them back to light between the 1940s and 1950s.

After decades of closure, the Baths are today exceptionally reopened to the public thanks to conservation and enhancement work carried out as part of a public-private partnership with the **Packard Humanities Institute**. The completion of the interventions, scheduled for 2026, will finally allow the building to open regularly to all visitors.

## ENTRANCE



The building **stands outside the city walls**, in the southwestern corner of the town. Originally, it faced the sea and was arranged on three levels: the terrace-gymnasium, the bathing rooms, and the rooms housing the water and heating systems.

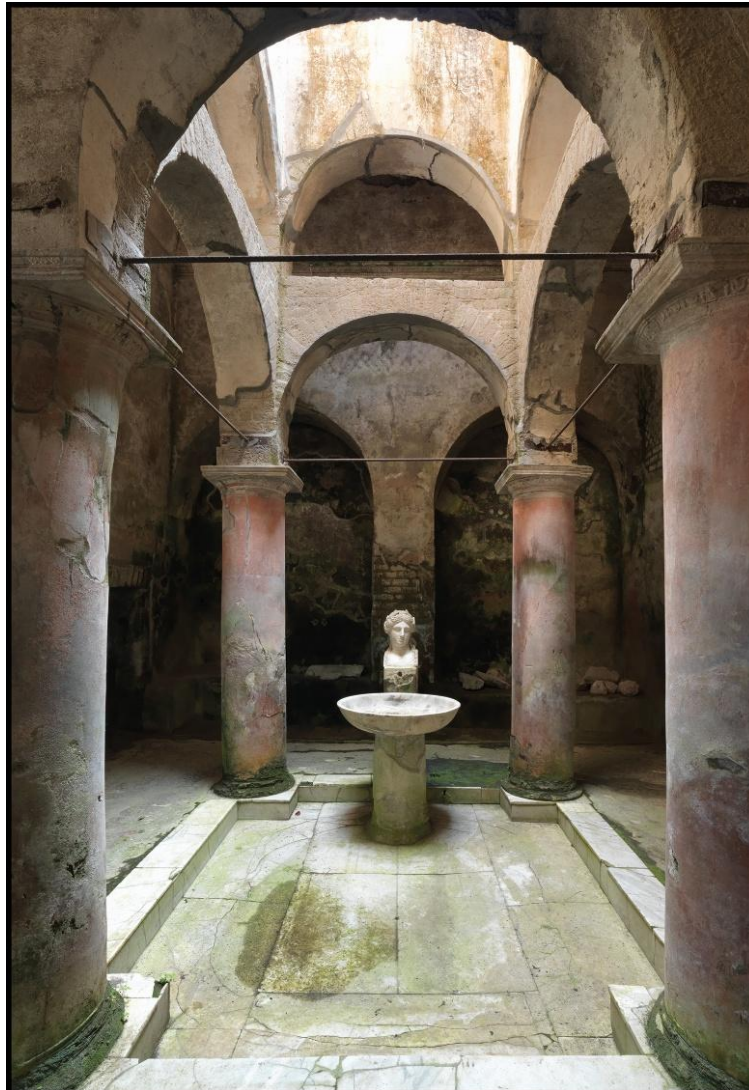
**The main entrance** opens onto the terrace of *Marcus Nonius Balbus*, at the center of which stand his statue and funerary monument. The original core of the complex, dating back to the **Augustan age**, was smaller and perhaps directly connected to the nearby **House of the Relief of Telephus**, owned by the same *Nonius Balbus*. After the earthquake of **62 AD**, the complex was enlarged with the construction of the large hot-water pool, which incorporated part of the southern wing of the domus.

In the last years before the eruption of **79 AD**, the phenomenon of **downward bradyseism** (a slow lowering of the ground) that affected the Herculaneum coastline caused severe damage to the *opus reticulatum* masonry of the southern façade, making consolidation works necessary and reducing the windows of the *piscina calida*.

The main entrance consists of a doorway framed by Corinthian half-columns and a brick pediment. On either side open **two independent rooms**: to the north, the *cella ostiaria*, the doorkeeper's room; to the south, another chamber containing numerous stacked terracotta pipes for the maintenance of the heating system. On the walls of an inner room, graffiti with erotic themes and coarse language, written by bath frequenters, can still be seen. The presence of roof tiles and building materials suggests that, at the time of the eruption, the building was **undergoing renovation**.

**A secondary entrance**, consisting of a brick ramp, directly connected the beach to the complex, allowing access also to sailors and dock workers.

## ATRIUM



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A masonry **staircase** with wooden steps, extraordinarily well preserved, leads to the small atrium with four columns and a **double order of arches** framing the light well. Rainwater was channeled into the marble-lined **basin of the impluvium**, decorated with a **herm of Apollo's head**, transformed into a fountain from which water flowed into the white marble basin. On the floor, **the mechanism** that operated the jet is still exceptionally preserved.

Overlooking the atrium, in addition to various service rooms, is also the *prae-furnium*, a room with **the furnace** and the remains of the **large bronze cauldron** that heated the water for the adjacent *calidarium*.

Through a corridor one reaches a **large rest and belvedere hall**, about 7 meters high, with wide windows that offered a spectacular view of the sea and the Gulf of Naples. Walls with painted **half-columns and brightly colored frescoes** gave it the appearance of a hypostyle hall. Here, the use of precious **Egyptian blue**, an artificial pigment rare in antiquity, has been identified

## BATH COMPLEX

### *FRIGIDARIUM*



On the eastern side of the atrium opens the first bathing room, the *frigidarium*, a large rectangular hall with a vaulted ceiling and lit by a central skylight. It contains a rectangular pool for **cold baths**, into which one could descend by means of **semicircular steps** along the edge. The floor and walls are decorated with slabs of **colored marble** and **frescoes** depicting fantastic architectures on a white background, while the arch framing the pool has a decoration of **painted stuccoes**.

In this room, one can observe traces of the **Bourbon tunnels** of the 18th century and a doorway filled with **volcanic material**, intentionally left unremoved by Maiuri to remind visitors of the tragedy that struck the city.

From this room, through an extraordinarily well-preserved **wooden door**, one entered a heated room, the *tepidarium*, which served as a resting space before passing into the hotter areas.

## TEPIDARIUM



The *tepidarium* features a **heating system** with terracotta pipes (*tubuli*, hollow clay elements through which hot air circulated) along the walls, and served as a room for rest and acclimatization before entering the *calidarium* for the hotter bath. On the sides of the room there are two **marble benches** and another beneath the large window, with legs shaped like griffin heads. On these benches, people conversed and rested while enjoying the sea view. In this room as well, the floors and walls were covered in colored marbles.

In the middle section of the walls, the decoration consists entirely of **white stucco** with panels in which, in relief, **seven warriors in heroic nudity** are depicted, with helmets and shields: three hold spears and one a sword, three are bearded and four are beardless. Their poses recall Greek statues of the warriors of classical 5th-century BC Athens. Scholars have long debated the meaning of these figures: some immediately thought of the **seven heroes of the Theban saga**, others linked them to the monument dedicated to the eponymous heroes in the Athenian agora, who gave their names to the tribes of Attica. All, however, agree on the relationship between this representation and the **heroization of Marcus Nonius Balbus**, whose honorary statue stood precisely on the terrace at the entrance to the baths.



In the eighth panel, instead, there is the depiction of **two flying erotes** carrying baskets of fruit and garlands, interpreted as **Eros and Anti-Eros**, alluding to love skirmishes, a theme often used in bathing contexts. From the perfectly preserved wooden door still in place on the west wall, one entered the *calidarium*.

## CALIDARIUM



The *calidarium*, the room for **hot-water baths**, features a rectangular **pool** with a bronze spout for the water and a basin, a *labrum*, on the opposite side. This marble basin for cold-water ablutions, into which water flowed from a lead pipe shaped like a dog's head (the original is now in storage), is located beneath a large window in the southern apse. From this window, the violent flow of lava that poured into the room completely overturned the basin, hurling it toward the entrance, as evidenced by the **cast** left on site, where the imprints of the window's glass fragments, some still preserved, can be seen.

The window was made of a **double wooden frame with panes of glass**, and this frame is still, in part, extraordinarily preserved. Along the walls are two **marble benches** where bathers could sit. The floor consists of **slabs of colored marble**, as does the high dado of the walls, while the upper part and the vault were decorated with **stuccoes** featuring architectural and vegetal motifs.

From the eastern **door**, passing again through the *tepidarium*, one accessed the largest room of the baths, which contained a very particular installation.

## CALIDARIUM WITH “SAMOVAR” STYLE HOT POOL



This large rectangular hall has, at its center, **a wide pool** whose water was heated using the so-called “samovar” system: **an enormous bronze cauldron** in the center was heated by the fire below, and **by induction** it also warmed the water inside the pool. Furthermore, the pool floor itself was heated thanks to the *hypocaust* system, consisting of **brick pillars** (*suspensurae*) that raised the pool, creating a sort of air chamber where hot air from the furnace (*praefurnium*) circulated.

**The walls and the floor of the pool**, painted blue, created a stunning effect with the reflections of the water and the light entering through the large windows. The pool was accessed via **staircases**, while in one corner a lead pipe, probably originally connected to a statue or vase, spouted water.

The room was illuminated by **large sea-facing windows**, with a wooden frame discovered during the excavations.

The **vaulted ceiling** still preserves traces of **stucco decoration with strigilature** (grooved patterns), a system designed to let condensation droplets slide along the sides of the vault instead of falling on the bathers’ heads. In both the vault and the walls, there was also **a heating system made of terracotta pipes and “mammata tiles,”** which allowed the circulation of hot air. **Stucco** decoration fragments adorn all the walls, showing vegetal and architectural motifs with weapon friezes.

Along one wall of the hall open two small, very hot rooms used as **saunas**: one directly connected to the furnace room and equipped with **benches** for sitting, and another **circular** one with **semicircular niches and a conical vault** with a central **skylight** used to regulate heat and release steam. The floor, in simple **white mosaic** with a double black border, has at its center an emblem depicting a krater entwined with ivy tendrils.

## ONGOING RESTORATIONS

The **restorations** currently underway, carried out as part of the project “*Extraordinary maintenance for the conservation and enhancement of the Suburban Baths of Herculaneum*”, began in September 2024 and are scheduled to be completed by **October 2026**.

The project as a whole pursues three main objectives:

- **Stabilize the thermo-hygrometric conditions** of the rooms, ensuring the proper preservation of the structures and preventing damage caused by humidity and climatic variations;
- **Restore the safety** of the masonry, systems, and decorative elements, guaranteeing the protection of the original features still in situ and preserving the authenticity of the complex;
- **Define new routes of access and enhancement**, making the Baths regularly accessible to the public and offering a visiting experience that combines heritage protection with visitor safety.

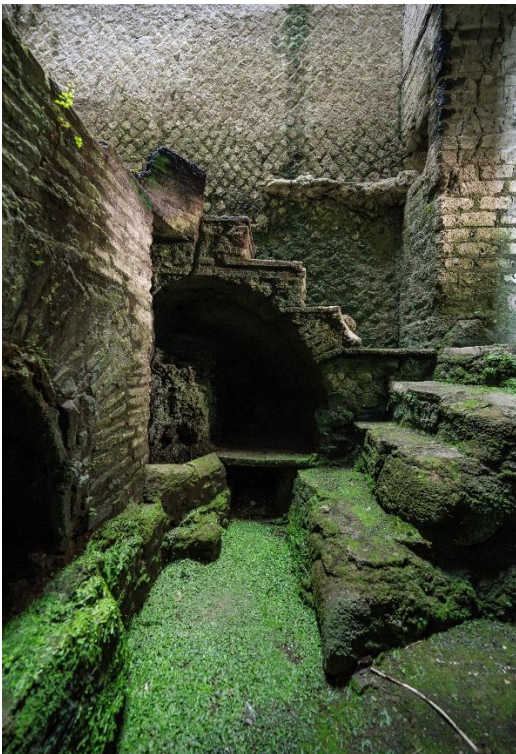
It is therefore an intervention that not only focuses on material conservation but also projects the Suburban Baths toward a new life, finally returning to the public a site unique in the world.



**Cleaning works on the frescoed wall of the belvedere hall**



**Pile of firewood in the service corridor**



***Praefurnium* before restoration**



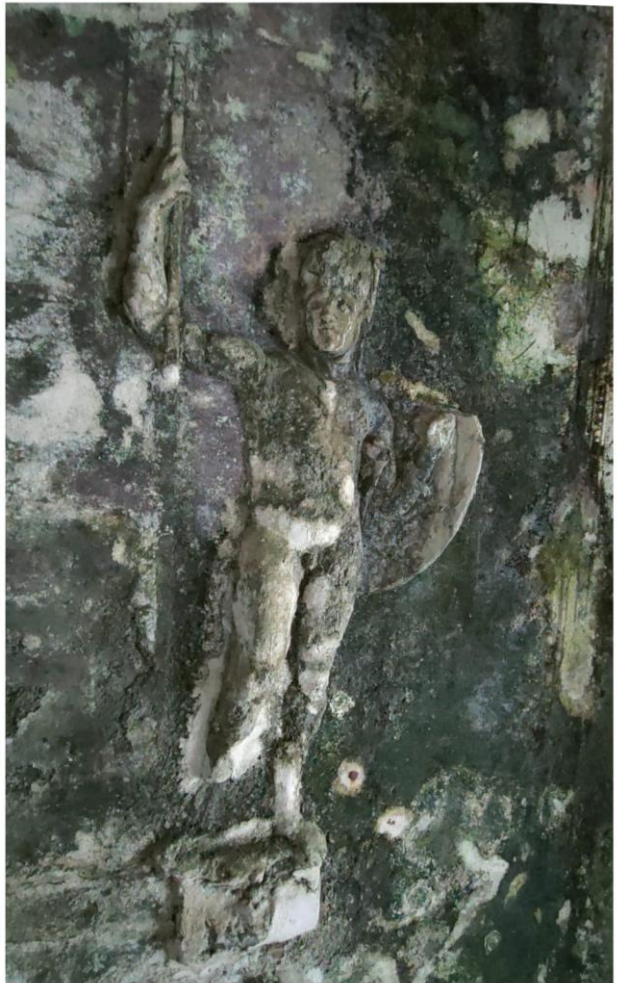
**Cistern**



*Frigidarium before restoration*



**Identification of Egyptian blue pigment through VIL diagnostic analysis**



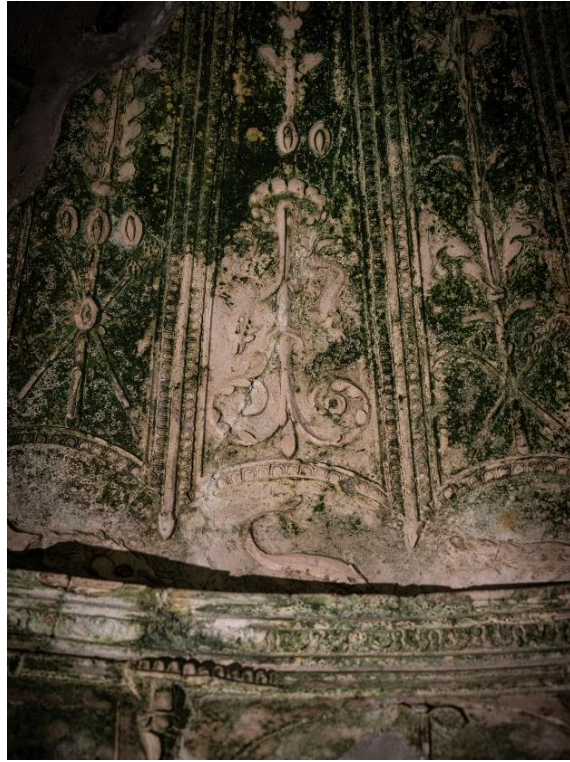
*Tepidarium* before restoration and warrior figure after restoration and before restoration



*Calidarium* before restoration



UV examination on some biodeteriogens



**Detail of the stucco decoration of the *calidarium* exedra with “samovar” style pool before restoration**



**Sauna**