Ancestral Technique to Be Utilized for the Future —Japanese-style Wall Plastering—



The Sustainable Development Goals (SDGs) have recently been a focus of public attention as goals to be achieved toward a sustainable future. In fact, a technique used in the preservative restoration of the former Suzuki family residence may provide a model to help achieve the SDGs. That is the Japanese-style plastering technique, which covers the surface of walls with natural materials, such as earth and straw.

Since ancient times, Japanese wooden buildings have been constructed using locally produced natural materials and reusing old parts effectively. Our ancestors' attitude of using limited resources with great care may provide helpful lessons for us today.

[COLUMN] Plastering process with various scenes and colors







[Reuse of used earth]

In olden days, the earthen walls of buildings used to be repaired by reusing earth used in the original walls. The same approach has been applied to this preservative restoration project too. Earth collected from dismantled walls is mixed with new straw, sand, and water and then fermented. This process is repeated every several months until the straw is so fermented that the earthen mixture becomes sticky and ready for reuse as plaster.

[Otsu-style wall: Colors created with earth]

The buildings in the former Suzuki family residence have walls called "Otsu-kabe" ("Otsu-style walls"), also known as "Iro Otsu" ("colorful Otsu-style walls"). This style of wall is surfaced with a mixture of colored earth and a small amount of lime and susa (a kind of glue that prevents cracks in plaster) kneaded in water.

Earth from different areas and from the strata of different ages varies in color. This preservative restoration project aims to restore the original colors of the walls by blending available colored earth from various areas around Japan based on the results of a detailed examination of the existing walls.





