Historical Plaster in the 'White City' of Tel Aviv

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Plaster is the finish coat of a building, designed to protect its exterior walls, while serving an aesthetic function. In professional lingo it is called the "sacrificial layer" since, due to its characteristics and exposure to human and natural wear-and-tear, it is intended to be replaced once it deteriorates.

Local plaster is divided into two major groups:

1. **Slaked lime-based plaster** – This typical smooth white plaster has become one of the hallmarks of the White City. It originated in a centuries-old local building tradition dating back to Roman times. Until the early 1920s plaster mixtures were created with slaked lime and crushed roofing tiles, hence the ruddy hue of Ottoman period houses in Jaffa and its vicinity. In the 1920s the use of crushed tiles ceased, and the city's buildings were painted with a wide spectrum of lime-based paints.

2. Decorative cement-based plaster – Developed in Europe in the early nineteenth century, this technique was brought to Palestine by architects who immigrated in the 1920s and 1930s. Decorative plaster was commonly used in Central Europe, northern Italy, Belgium, and Eastern Europe. In the early 1920s, Czech engineer Emil Teiner, who specialized in the improvement of construction processes and was well-versed in the production of decorative plaster, arrived in Israel; it is to him that the extensive use of decorative plaster in Tel Aviv ought to be attributed. Teiner prepared special plaster mixtures by commission, described in the professional press as "Teiner's plaster"

While appearing in numerous forms and hues, local decorative plaster may be divided into three major groups:

Kratzputz – scraped plaster

Waschputz – washed plaster

Steinputz – stone-like plaster

Kratzputz and waschputz are similar in composition, mainly in terms of the quantity of cement in the mixture. They differ in the mode of application:
kratzputz is scraped with a nail brush, whereas waschputz is washed with a gentle trickle of water. In both cases, the colored stones comprising the mixture are thus exposed.

Steinputz is considered a higher quality, more durable type of plaster. Its application requires more time, and the ratio between the cement and the aggregates is 1:2 instead of 1:3, as in the aforementioned plaster types.

Each group may yield different results, depending on the type and size of stone, the pigments added to the mixture to variegate the background (from reddish orange to light blue and green), the finish type (washing, coarse or gentle scraping, polishing, etc.).

The specimens, their influence on White City architecture, and the dilemmas arising during the conservation process will be addressed in depth at the conference.