

Documentation of the floor of the main hall, 2nd Story, The International Conservation Center, Citta' di Roma

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This project was accomplished within the framework of
Saving the Stones, Practical Conservation Program
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Abstract

This project has focused on documenting the marble floor on the second story of the International Conservation Center- Citta' di Roma (ICC). It has been held as the first step within the required conservation procedure. Using the 3-d software Google Sketchup, the documentation includes:

A map of the floor materials

A map of pathologies and damages

The documentation is based purely on observation, and the conclusion recognizes the historical repairs of the floor and the history of the building.

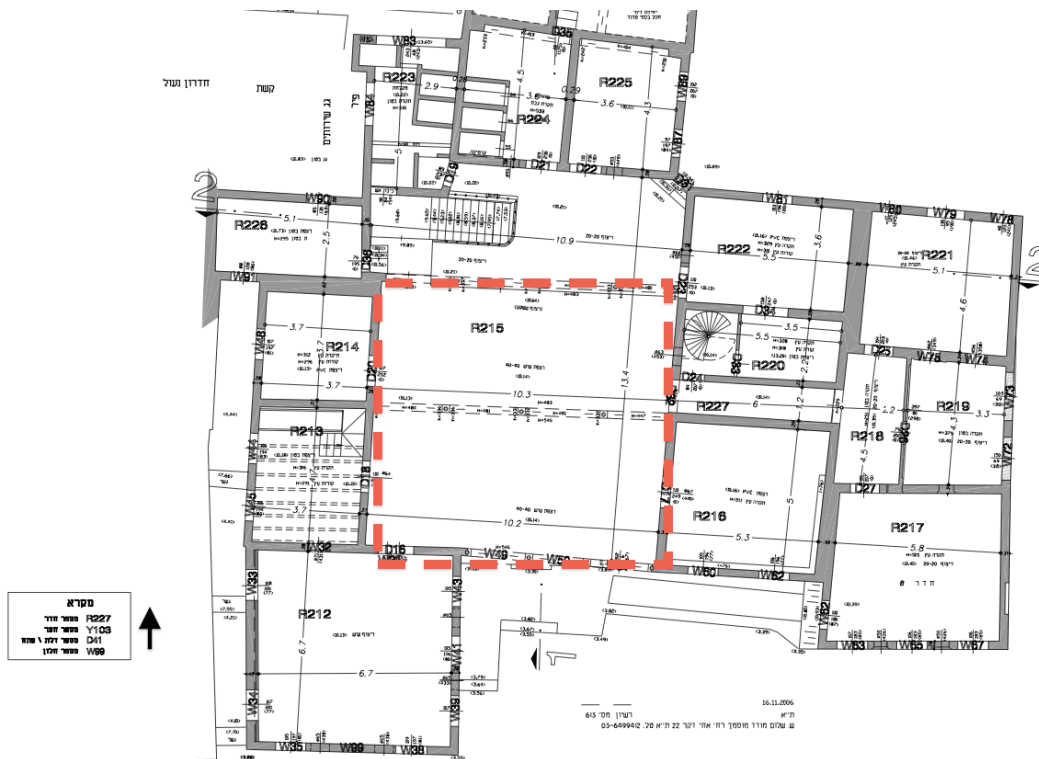
Table of Contents

General Features of the Building	4
3D Model	6
Characteristics	8
Missing Pieces	9
Material Map	10
Marble	11
Schist	12
Terazzo	13
Small Marble	14
White terazzo	15
Pathology Map	16
Conclusions and Recommendations	17

General Features of the Building

The meeting of Crusader and Ottoman architecture marks the personality of the city of Akko. The ICC is situated in the Southern part of the Old City of Akko, in the Crusader Pisan Quarter and beside the Ottoman Wall. It is a spacious, two-story, 19th century residence, with an area of 1,000 square meters. The building's massive pillars and impressive supporting vaults, suggest that part of the structure may date back to the Crusader Period. The upper floor once housed one of the wealthy families of Akko, and has architectural elements typical of a Lebanese house, i.e., a central hall plan, where the rooms open to face a central salon, which is decorated with marble floors, pillars and decorative wooden ceilings.

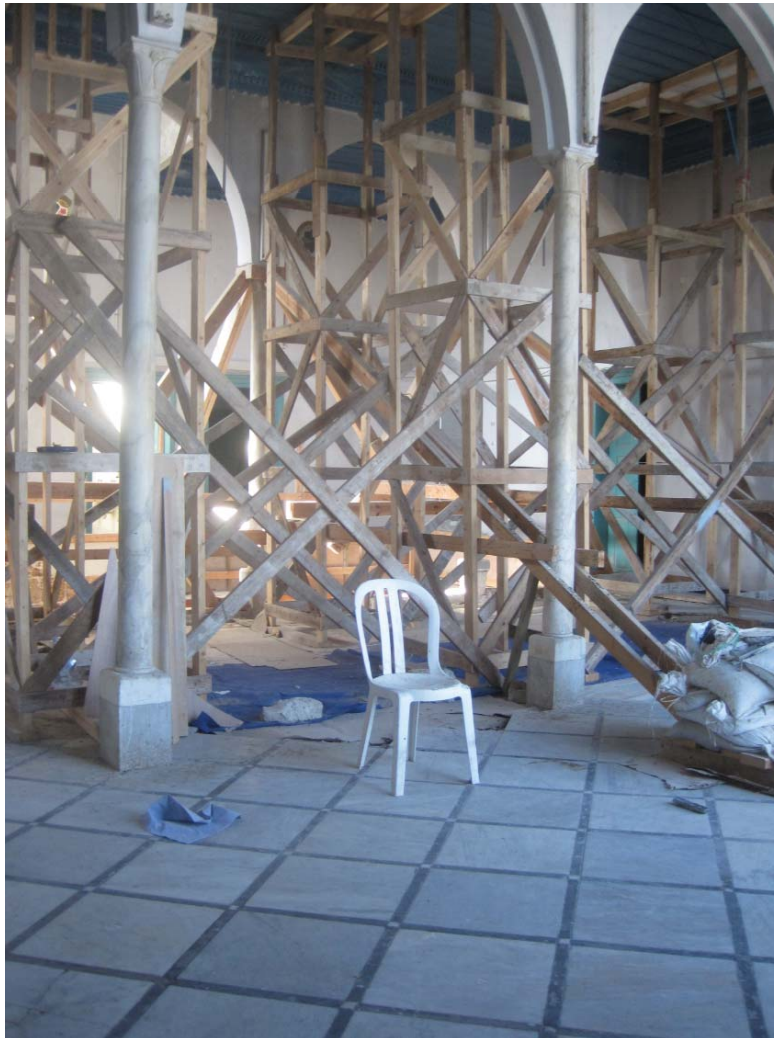
In recent decades, the building housed a youth hostel, later vacated. Neglect and improper use have damaged the structure and its special features. This project focuses on a feature of the Ottoman residential area of the building, the second story marble floor.



The floor being documented is the central hall itself. It is this hall which connects all the other main rooms on the floor.



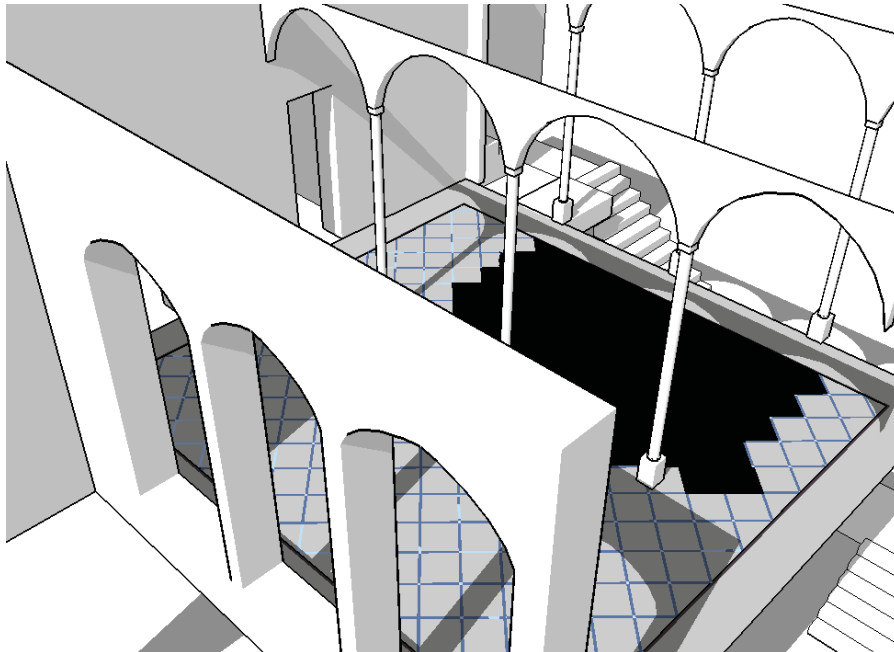
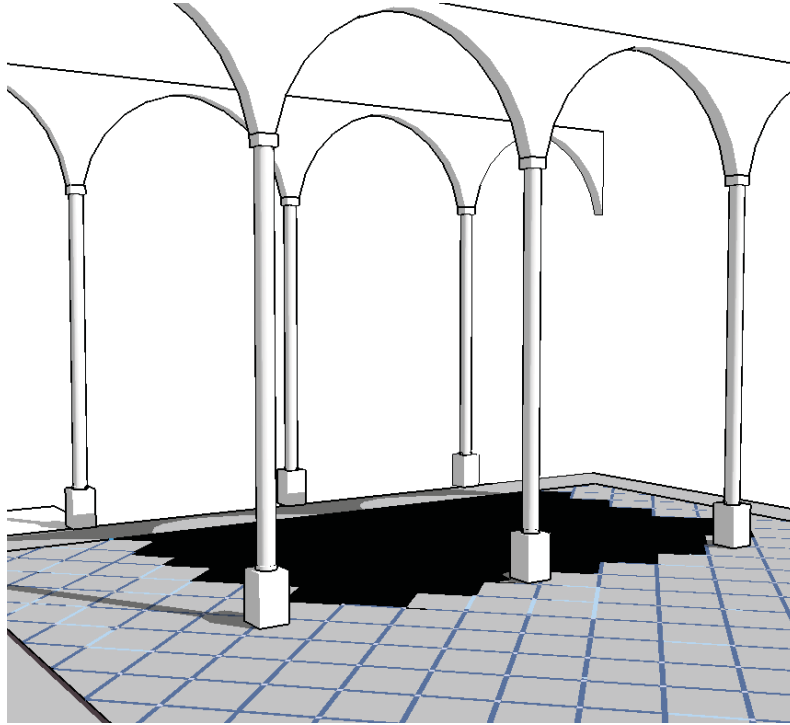
Historic picture of the second story from the 1970's (found in the documentation file of the building)

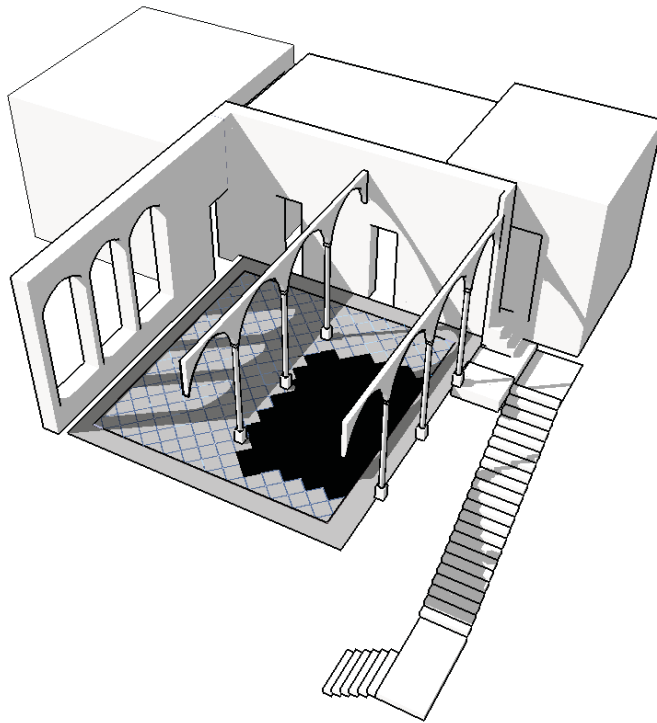
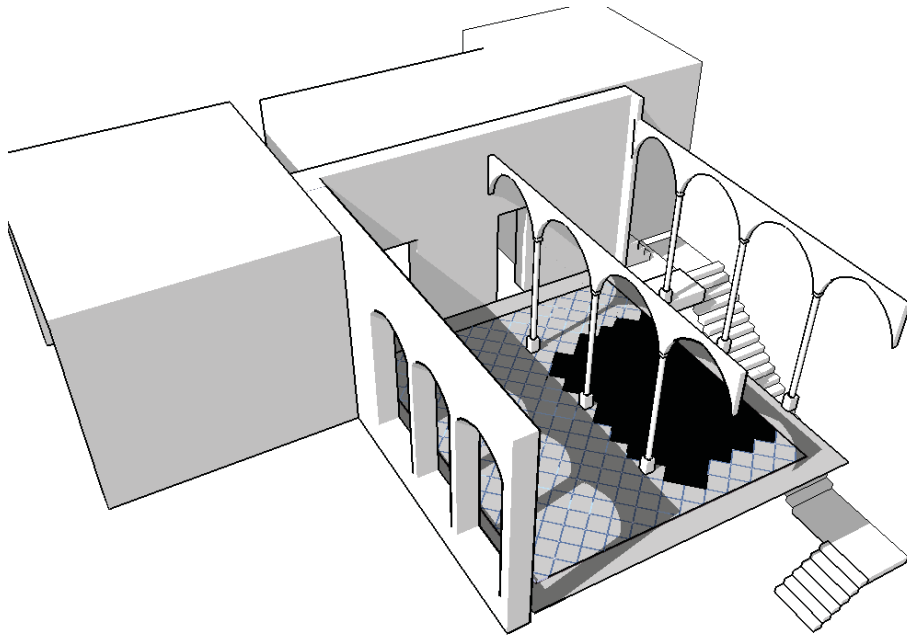


The floor in July 2011. Wood scaffolding has been installed to stabilize the roof (photo: Yano Rivera)

3D Model

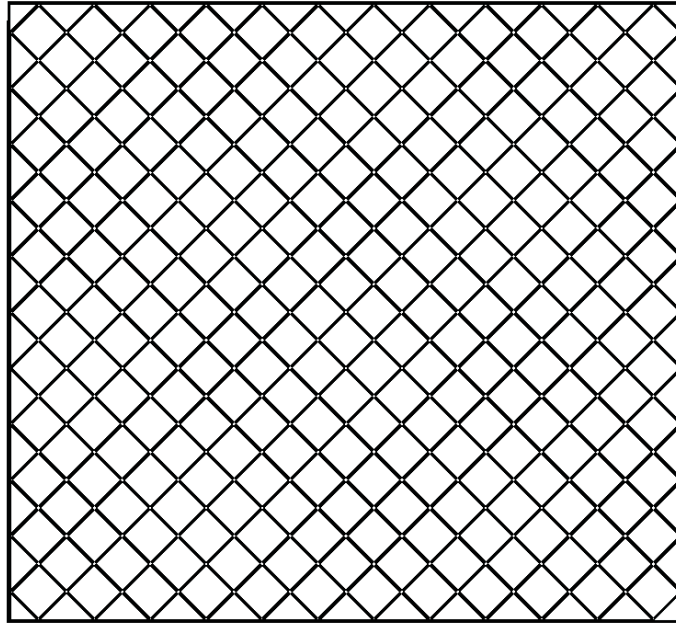
The next series of images are the 3-d model of the space that was made specifically for this documentation project. It was made with Google Sketchup, and served as the foundation for the pathology maps of the room. (model: Yano Rivera)



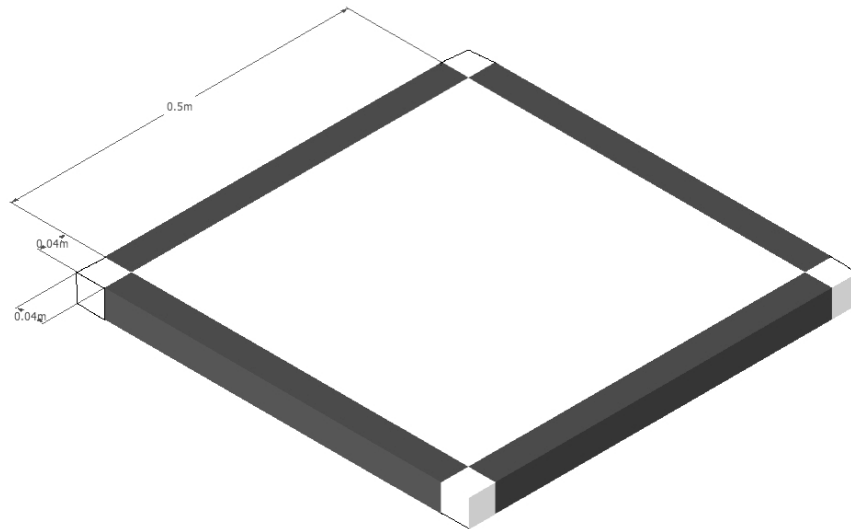


Characteristics of the floor

The pattern is made up of simple diagonal squares filling the center of the floor. This pattern is surrounded by a marble tile frame, which reaches around the pattern, filling the rest of the floor in the hall. This is a common pattern in Akko floors; again, in "central hall" type buildings.



The room fills an area of 11 squares by 12 squares, comprising a total of 132 tiles.



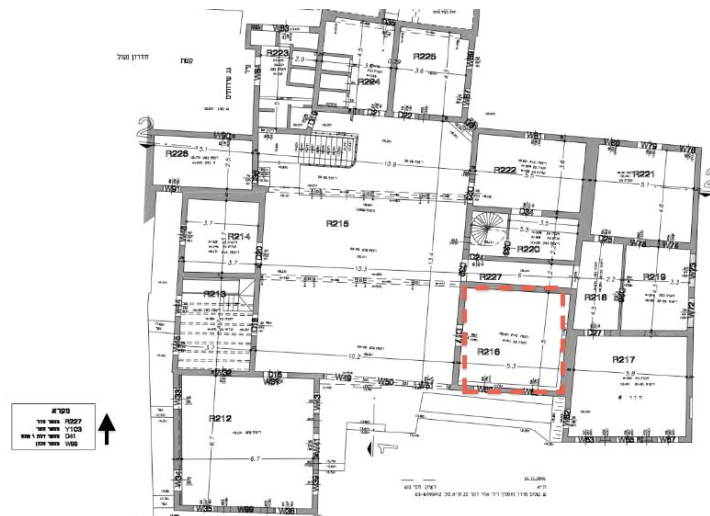
Each one of these tiles is made up of these measurements, as presented in the diagram:
Large square marble: 50 x 50cm, Long schist/terazzo: 50 x 4cm, Small square marble: 4 x 4cm.

Missing Pieces of the Floor

The floor is currently under conservation process, and a large part of the floor is missing.

Where are the missing tile pieces?

The missing tile pieces are held in storage in the in the next room.



Plan of the second story - the storage space in discussion is indicated in red

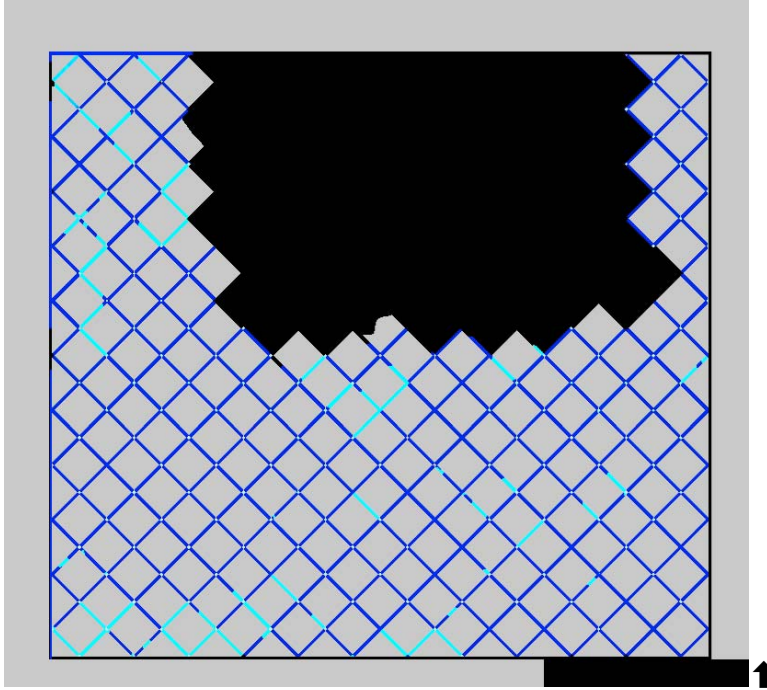


Part of the floor had to be removed in order to change the rotten wooden beams underneath them. Before removal, all the marble was documented and carefully moved to the adjoining room. They have been set temporarily in the exact order as they existed originally.

Material Map of the Floor

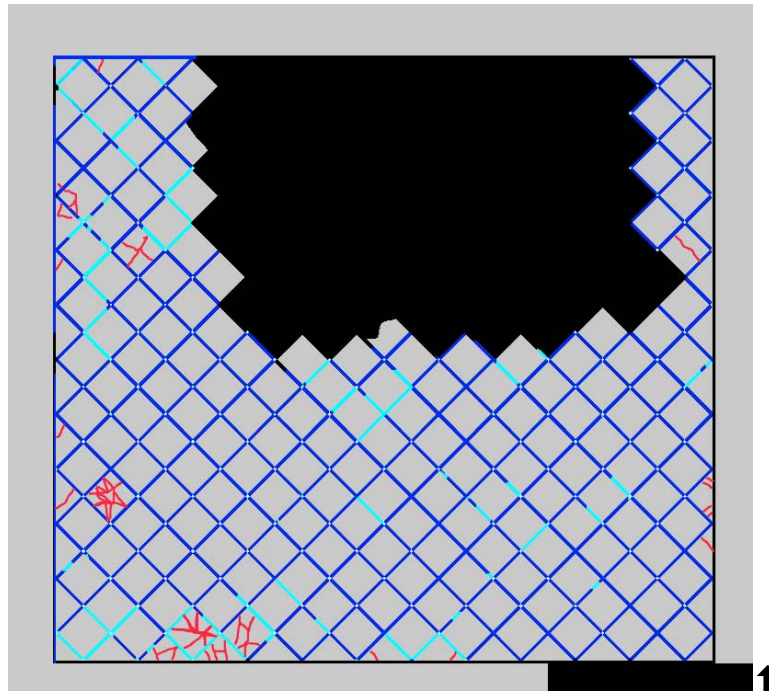
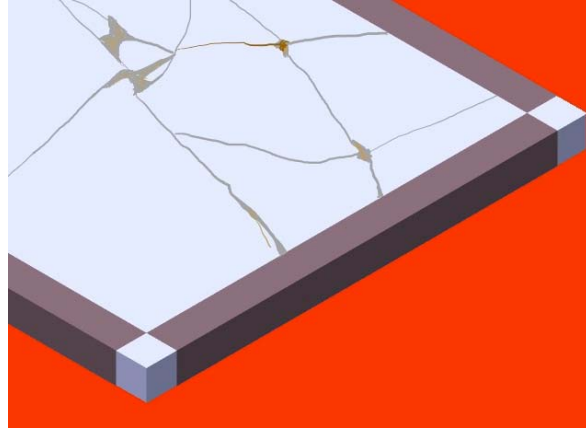
This is a materials map of the floor, as it is current as of this paper.

Marble ■, Terazzo ■, Schist ■, Missing Pieces ■



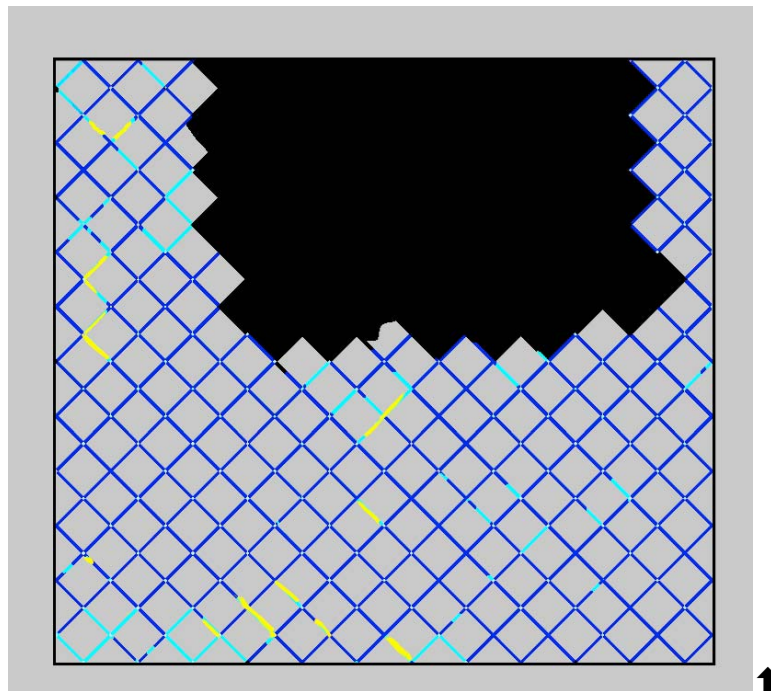
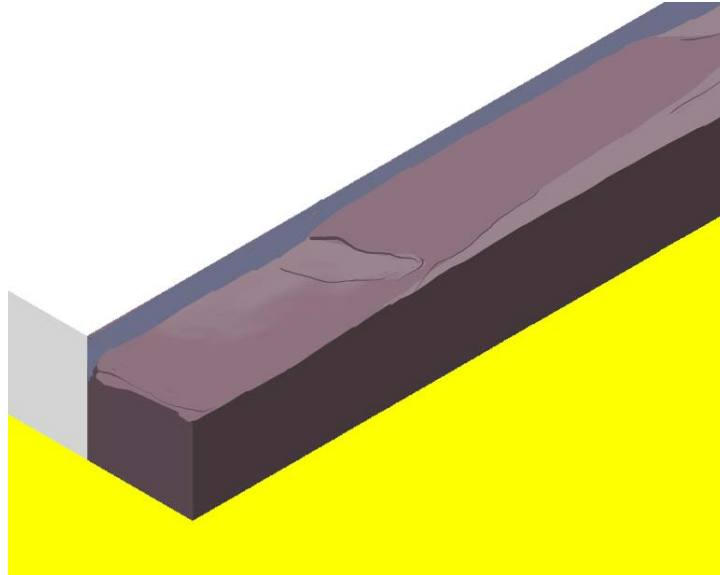
Marble

Marble covers a large section of the floor. The large square pieces, and most of the small square pieces are made of tile. It is gray tile. The large marble tile has a pattern of deterioration that is characterized by cracks. Cracks in the marble are drawn with red lines.



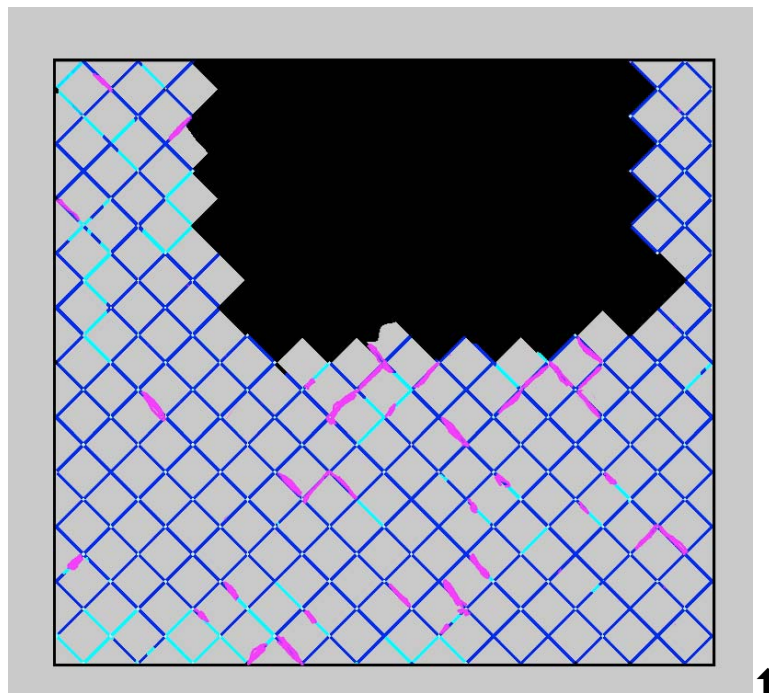
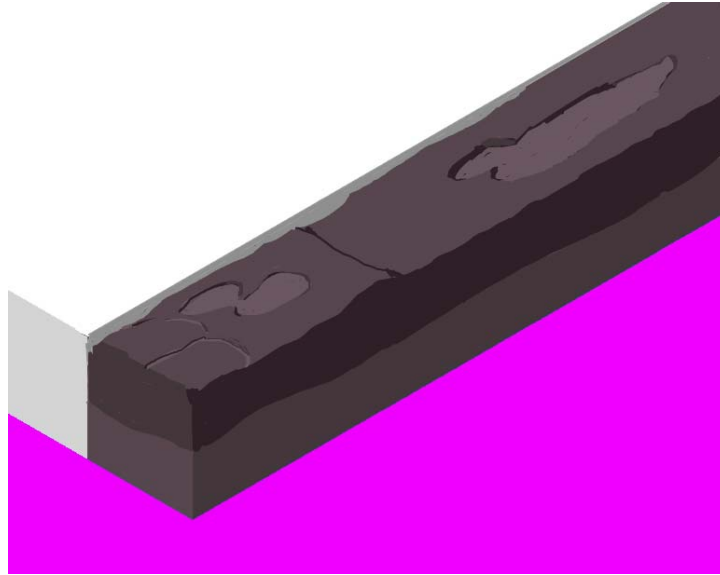
Schist

The schist tiles have a pattern of deterioration that is characterized by erosion. The top face of their surfaces flakes off, and this causes the surfaces to dip. It is the inherent vice of the material, as schist is a metamorphic rock, made of layers squished on top of other layers. Some areas of schist are more problematic than others, and only the more problematic schist is indicated on the map by yellow.



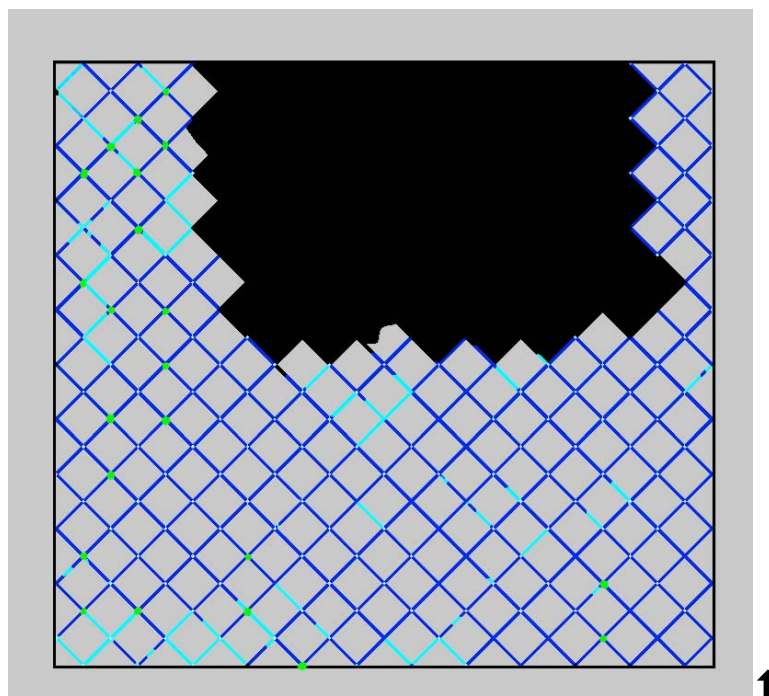
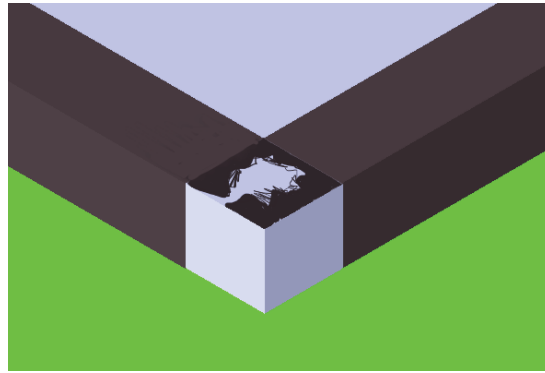
Terazzo

Terazzo is a concrete infill, placed on top of eroded schist. Terazzo's surface deteriorates by showing *lacunae*, and the decking/flaking edges. It is a problems that the material exhibits throughout the floor in general. Particularly problematic pieces of terazzo are delineated through the map in purple. There appear to be different kinds of terazzo throughout the floor.



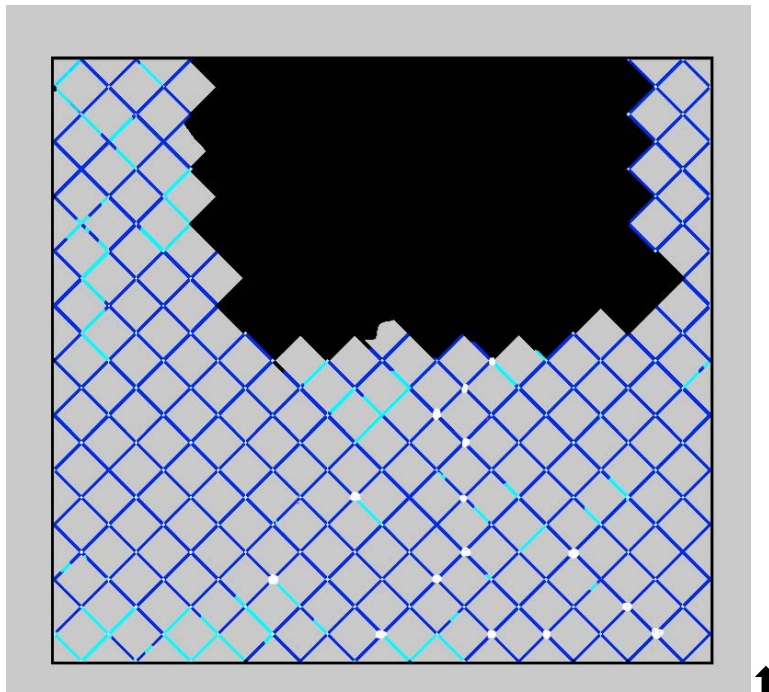
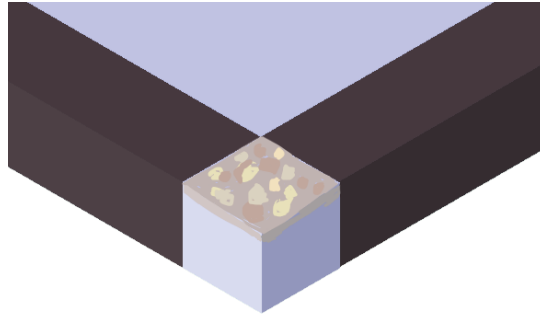
Small Marble

The small marble tiles sometimes get covered with terazzo, which spills over from the schist on to the small tiles. These spills are leftover from what appears to be the painting of terazzo. The problem of spilling over is present throughout the floor in general. Tiles that are particularly spilled over have been pointed out in green.



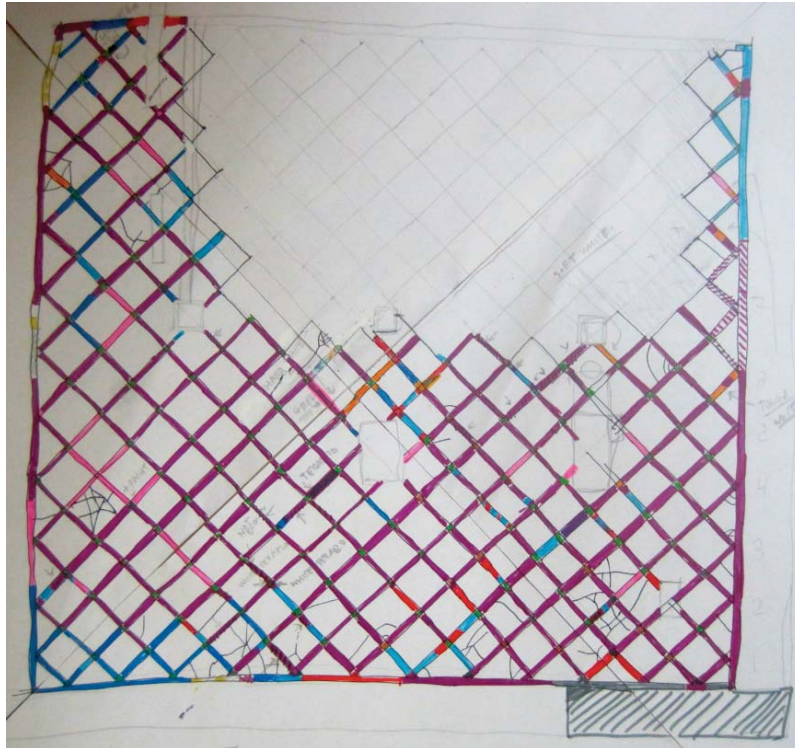
White Terazzo

The white terazzo is made of a piece of a common terazzo tile cut to fill missing small marble squares. These small square corners are an anomaly of the floor, and they reveal something about the history of previous conservation efforts of the floor, mainly, where pieces of small marble tile are missing. They are pointed out in white dots on the map.



Pathology Map

The full documentation of the floor is a hand-draw document. It includes all the pathologies piled on top of one another.



- Schist ■
- Schist with paint ■
- Small marble ■
- Small marble with paint ■
- Small white terazzo ■
- Terazzo ■
- Low quality terazzo ■
- Low quality terazzo (greenish) ■
- Low quality terazzo (rough) ■
- High quality terazzo ■
- Missing ■

Conclusion and Recommendations

This document presents layers of materials that are part of the ICC building's heritage. Close examination enables an understanding that an important feature of the floor is the mosaic of materials it is made of; a kind of homage to floor repairs. Recognized as a specific aesthetic value in Grade 1 Buildings in Akko and connected directly to the development of the building, it is recommended to leave the floor intact. Recommendations based on this documentation require a full intervention. These should include:

Basic cleaning

Removal of bird droppings and paint, to reveal original appearance of floor surfaces.

Filling in cracks between the marble. Filling in lacunae in the surface of the terazzo.

Exchange of deteriorating schist for new schist, as needed.

Exchanging deteriorated marble as needed.

Reusing original materials when best possible.

Application of a protective coating, to stop or slow the deterioration of the existing schist.

Installation of screens on windows, to prevent birds from flying in.

Regular maintenance in the future should be sensitive to marble's natural weakness against acid.

Regular maintenance should also be careful not to scratch off the surfaces of schist.

Future building changes should consider the value of the floor in its existing condition.