Domestic Grounds

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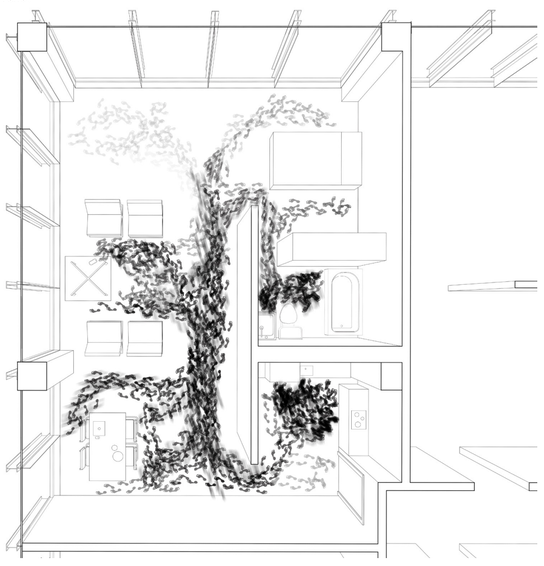
Domestic Grounds seeks to disclose the potential for tactile stimulation of floor design. Arriving home and taking off our shoes is not a random impulse. Walking barefoot is an ancestral human experience. In the shoeless paradise of the domestic environment, alternating rugs, wood boards and tiles: softness and hardness, warmth and cold, the floor plane is already a celebration of tactility. If we strategically reconsider the way we apply material and form in the design of floors and floor coverings, we can radically increase the performance of these surfaces to include restorative properties and amplify the sensory experience of domestic circulation.

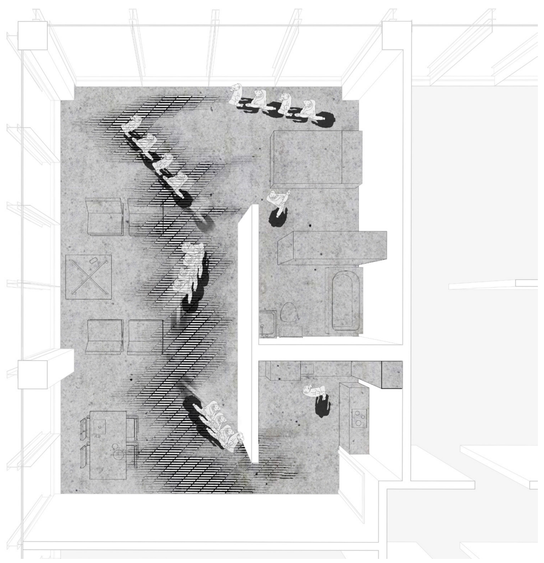
There are multiple therapeutic advantages to walking barefoot on uneven surfaces, such as: reduced blood pressure, stimulation of the immune and lymphatic systems and lower anxiety levels among others. According to the National Institute of Health (NIH), on average most sedentary individuals take from 1000-3000 steps per day. A lot of this walking can take place in the domestic environment, the goal of Domestic Grounds is taking full advantage of our household walking routine to invigorate our damaged feet.

As an ideal site for a case study, we chose a corner unit in one of the high-rise towers of 860-880 Lake Shore Apartments in Chicago by Mies van der Rohe. Located at the heart of the dense urban Chicago center, and therefore surrounded by miles and miles of heavy traffic, pavement and asphalt, this site, automatically draws attention to the home floor as a secluded oasis for the feet in the midst of the city.

Since the completion of the two 26 story glass and steel apartment towers in 1951, 63 years have passed. Multiple interior renovations have taken place and almost three generations of owners and tenants have occupied the space. A quick look at recent images of the interiors of 860-880 Lake Shore drive provides a predictable catalog of some of the most common choices for affordable floor coverings today: laminated wood, vinyl planks, ceramic tiles, carpet and parquet tiles among others. (See image above) In essence, a wide variety of synthetic surfaces replicating natural materials.



Color coded pattern. Darker tones correspond to higher cylinders.



We chose to work with stamped concrete for its ubiquitous availability, readiness and low cost. Often called textured or imprinted concrete, stamped concrete is usually an outdoor paving choice mimicking stones such as slate, tile, brick and even wood. We opted for an abstract pattern of varying sizes corresponding to the ranging scales of the feet's sensory capability. The proposed pattern forms a field of half cylinders of four different radii. These radii vary by quarter inch increments from ¼" being the smallest to 1"being the largest. To determine the location of the pattern, we first looked at the movement of the users within the unit and noticed most circulation takes place at its central axis.

This is the work of an ongoing investigation resulting in a moderate imprinted concrete topography. Ergonomic research informed the geometry. The design was first modeled digitally and later partially casted at full scale (two tile samples).

Domestic Grounds advocates for a carefully designed and controlled return to our pre-shoe, barefoot walking origins. As Winston Churchill once said: "We shape our buildings; thereafter they shape us."

Tile sample built at the University of Texas at Austin. Radii vary by quarter inch increments from ¼" being the smallest to 1"being the largest.