

# Background Information

Information photographs

## DFAB HOUSE – Empa NEST

Zurich, 29. Juni 2017

The following photographs and video footage can be downloaded free of charge:

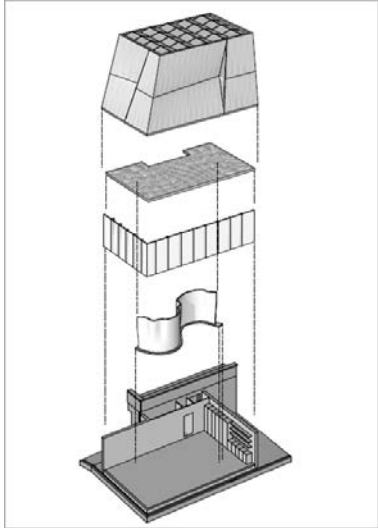
<http://bit.ly/dfabhouse> →



Computer generated visualisation of the DFAB HOUSE on NEST at Empa in Dübendorf, ZH. The DFAB HOUSE not only allows the realisation of completely new design, material and production technologies, but also comprehensive analyses under realistic conditions.

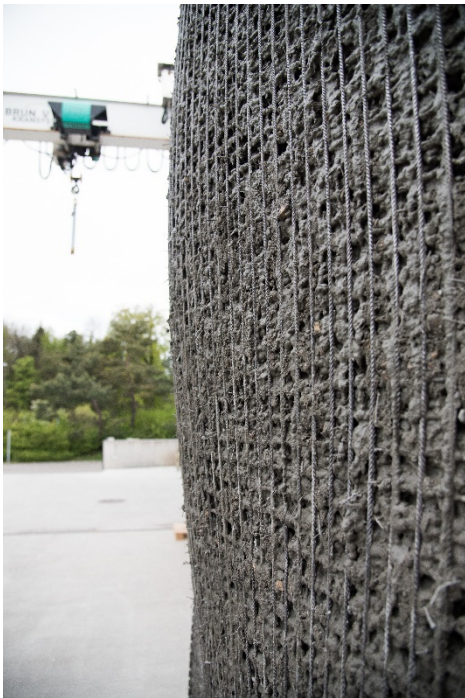
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Exploded axonometric drawing of the DFAB HOUSE. Unique architectural innovations are seamlessly combined to realise the living unit.

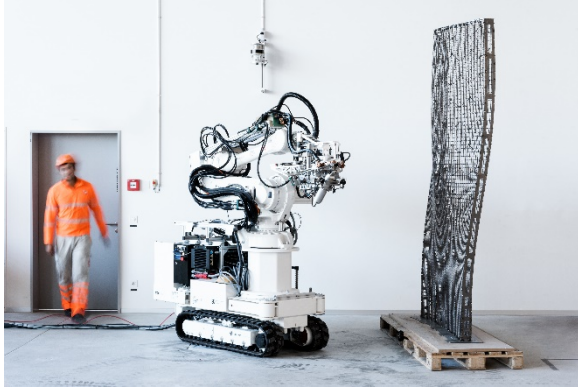
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Close-up image from the prototype Mesh Mould wall. The metal structure is manually filled with concrete after the robotic fabrication of the steel mesh.

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The In situ Fabricator equipped with the Mesh Mould toolhead and the Mesh Mould prototype with a double-curved geometry at the Robotic Fabrication Laboratory, ETH Zurich.

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DFAB HOUSE prototype at the Robotic Fabrication Laboratory, ETH Zurich. The prototype demonstrates the seamless combination of other innovation objects on the DFAB HOUSE, such as Smart Dynamic Casting and the Smart Slab with the Mesh Mould wall.

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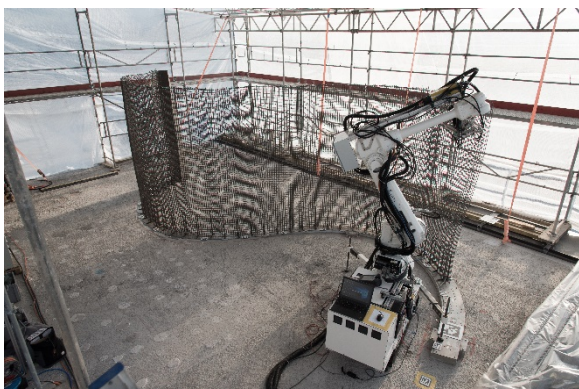
Close-up image of the fabrication process. The Mesh Mould toolhead bends and welds a 6 mm steel rebar to fabricate the mesh structure.

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The In situ Fabricator building the Mesh Mould on Empa NEST. The Mesh Mould process unifies the reinforcement and formwork production into a single and robotically controlled on-site fabrication system.

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The In situ Fabricator building the Mesh Mould on Empa NEST. The Mesh Mould process unifies the reinforcement and formwork production into a single and robotically controlled on-site fabrication system.

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The concrete will be poured in once the mesh fabrication is completed. Activating the mesh as reinforcement renders it as a functional stay-in-place formwork, making the process inherently waste free.

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Video footage of the In situ Fabricator building a Mesh Mould wall.

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