

SIKA AT WORK PREFABRICATED WALLS USING SikaFiber® Force-60

HOLCIM PREFAB WANDEN B.V. AND SIKA WORK TOGETHER ON WALLS FOR PREFABRICATED HOUSES



BUILDING TRUST

IMPROVING EFFICIENCY SikaFiber[®] Force-60



In 2019, Holcim Prefab Wanden B.V. will have constructed a total of 90,000 m² of prefabricated building systems, on schedule, at various locations in the Netherlands. A major reason for choosing Sika were the fabrication savings on material costs, labour and the improvement in production efficiency.

PROJECT DESCRIPTION

Since 1985, Holcim Prefab Wanden B.V. has been a leader in the production of prefabricated building elements. These are used in all kinds of building projects such as private houses, social housing and for nonresidential construction. The walls are constructed with a high quality lightweight or self-compacting concrete. The surface of the walls is very smooth and ready for wallpaper finishing.

The use of Sika's synthetic macro-fibres in precast concrete reduced the amount of steel reinforcement and improved production efficiency. The homogeneous distribution of the fibres in the entire concrete cross-section improved the concrete toughness, increased the resistance against crushing and impact at the edges and corners.

Sika engaged the services of a Structural Engineer to review the existing design and they proposed a new hybrid design containing steel mesh and rebar in conjunction with Sika's synthetic fibers to obtain the best possible economical and durable solution.

SIKA SOLUTION

SikaFiber® Force-60 is a synthetic macro fiber made of polypropylene for use in insitu and sprayed concrete. The length of the fiber is 60mm with an equivalent diameter is 0.84mm. The fibers are safe and easy to handle which also results in less machinery wear compared to steel fibers. The special embossing on the fiber improves the anchorage in concrete, increasing the concrete ductility and distributes strains in the concrete which can cause cracking. SikaFiber® Force-60 is non-corrosive and does not cause a rust stain on the surface. The fibers are tested according to EN 14889-2 (Fibers for Concrete – Polymer Fibers) and fulfils the performance and production requirements necessary for the European CE-Certification.

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Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use





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