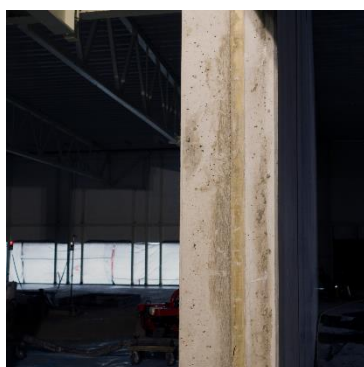
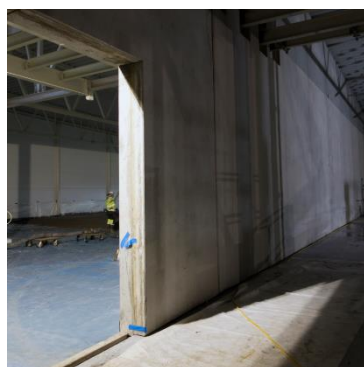


PRECAST INSULATED FIREWALL PANELS

Vagle Norway



CEM-FIL MINIBARS™
High Performance Composite
Macrofiber



Insulated Fire Wall

Project Profile:

Category:	Commercial warehouse
Owner & Developer:	Rema 1000
Structural Engineer:	Egersund Betongteknikk and Concribe
Main Contractor:	SV Betong
Precaster:	Egersund Betongteknikk
Completion:	Feb 2017

Technical details:

Precast Element:	Precast Insulated Interior Wall Panels Insulated Interior Fire Wall 40mm (1 ½") outer concrete layer with plain concrete finish
Concrete Type:	C50/60 – 7250 psi Concrete
Composite reinforcement solution:	Cem-FIL MiniBars™ 43mm @21 Kg/m ³ - 35 lbs/yd ³ Composite rebars to reinforce at stress concentrations
Other:	Engineering of the fire load case assumed no MiniBars™ as reinforcement, so local reinforcement could be added as needed. MiniBars™ reinforced concrete has a Class A1 non-flammable acc. to DIN 4102-1 standard



PRECAST INSULATED FIREWALL PANELS

Vagle Norway

Project description:

For this Commercial Warehouse building project in Vagle Norway the challenge for the Precaster and Developer was to offer an innovative firewall solution.

By replacing all the welded wire reinforcing (WWR) steel mesh with MiniBars™ corrosion-free, high performance composite macrofiber, the need for concrete cover was reduced so that the thickness of the outer concrete wythe was 50% less.

The outer layer was reduced from 80mm (3") to 40mm (1 ½").

Thin firewall panel design allows increased floor space within the same building footprint. Reduced panel weight saves logistic costs, improves efficiency and simplifies installation by the contractor.

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