

DYNAMax
The Ultimate Performance Concrete



BUILDING NEW DIMENSIONS

A MEMBER OF
 **HOLCIM**


AGGREGATE
INDUSTRIES



MAKE MORE OUT OF CONCRETE

DYNAMax CONCRETE: HIGH-PERFORMANCE CONCRETE FOR MAKING THE MOST DYNAMIC BUILDING PROJECTS POSSIBLE

BEYOND CONCRETE

Developed by the most innovative minds in material design and application, DYNAMax is concrete that is characterised by high strength, outstanding durability, and superior stiffness combined with unrivalled expertise, experience and concrete know-how. In short: DYNAMax is the ultimate performance concrete for the new design trends, environmental challenges and technical requirements in the construction industry.

BUILD MORE WITH LESS

The increasing world population needs more housing and more infrastructure. Environmentally friendly products and construction are essential for the eco-balance of buildings. At the same time, land is scarce, financial resources are limited and natural resources must be conserved. The unique qualities of DYNAMax provides answers to meet these challenges in building construction and infrastructure following the principle to 'Build more with less'.

MORE DESIGN FREEDOM:

DYNAMax opens up unimaginable design opportunities and a true architectural design freedom that enables you to execute your sophisticated and bold ideas in concrete. Thinking of the future in design, DYNAMax will facilitate planning and constructing in entirely new dimensions.

LOWER CONSTRUCTION AND LIFE-CYCLE COSTS:

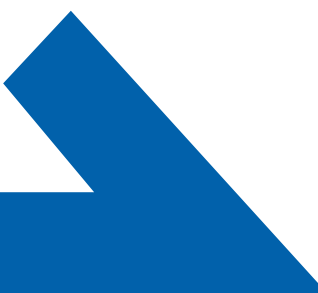
DYNAMax is characterised by very high strength and durability, thus significantly increasing the technical service life of buildings. The high durability of DYNAMax minimises the maintenance and therefore also the life-cycle costs of your construction project. The reduced concrete and steel reinforcement usage, and hence lower transportation, combined with a very high early strength development cuts the total cost of construction.

MORE SUSTAINABLE:

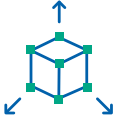
With DYNAMax you can execute components and structures for the same purpose with significantly less concrete and steel reinforcement. The reduced need for these building materials as well as the fact that it is produced locally with short transport routes improves the carbon footprint of the building. Furthermore, like all concrete, DYNAMax is fully recyclable and contributes to a positive circular economy, making it the ideal resource-saving building material for your project.

MORE SPACE:

DYNAMax allows you to use thinner cross-sections for columns, walls and slabs as well as substantially wider spans and wider column grids. This offers greater design flexibility, reduced cladding, improved functionality and more usable space for the same building volume.



THE BENEFITS



MORE DESIGN FREEDOM AND SPACE

Push the boundaries of architectural design and engineering.

BENEFITS

- ▶ Greater stability and wider spans due to very high compressive strengths with superior stiffness due to a high E-Modulus.
- ▶ More usable space with the same building volume.
- ▶ Increased number of floors or floor heights with the same building height.
- ▶ Greater variability in the layout of the floor plan.
- ▶ Greater design freedom for more functional, cantilevered and appealing structures.
- ▶ Slender design with the same or higher load bearing capacity.
- ▶ Additional space for various utility services.
- ▶ Clear separation of load-bearing structure and building utilities through optimised floor construction.



SUSTAINABILITY

Achieve eco-balance by lowering material demand and your carbon footprint.

BENEFITS

- ▶ Lower material demand without compromising performance and thus reducing the overall carbon footprint of the building.
- ▶ Local production in existing RMX concrete plants.
- ▶ Reduced transport due to lower concrete volume.
- ▶ Less use of resources and longer service life.
- ▶ Reduced maintenance costs.
- ▶ Lower project and construction costs.

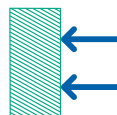


EASE OF PLACEMENT

Out performs conventional concrete with faster and more effective construction processes.

BENEFITS

- ▶ The same working processes as for conventional concrete.
- ▶ Excellent pumping properties.
- ▶ High early strength.
- ▶ Less reinforcement and reduced congestion.
- ▶ Faster completion of the building.
- ▶ Faster and more effective construction processes with reduced workforce requirements.
- ▶ Improved working conditions.
- ▶ Automated construction and boosted site productivity.



DURABILITY, STRENGTH AND STIFFNESS

Discover a new dimension of concrete with superior strength, durability and stiffness.









BENEFITS

- ▶ Excellent corrosion resistance and outstanding performance of exposed concrete components.
- ▶ Low concrete permeability and superior concrete cover to reinforcement.
- ▶ Smaller foundations thanks to lower building dead loads.
- ▶ Reduced cladding cost.



PRODUCT RANGE

High strength, outstanding durability or superior stiffness – what are the main requirements for your project? The DYNAMax high performance concrete product range has a tailor-made solution ready for any scenario – the choice is yours!

	DYNAMax	DYNAMax ^{XD}	DYNAMax ^{XR}	DYNAMax ^{XRD}
HIGH STRENGTH				
OUTSTANDING DURABILITY				
SUPERIOR STIFFNESS				



THE NEW DIMENSION OF BUILDING WITH CONCRETE

DYNAMax pushes the boundaries of what is possible and gives you access to unrivalled expertise, experience and know-how in concrete. In combination with other products from the Aggregate Industries range, it opens up a new world of building with concrete. Let your imagination become reality – our concrete experts will be happy to show you how you can realise your ideas with DYNAMax.

1. EXPOSED COMPONENTS:

The dense pore structure ensures extremely resistant surfaces, increases service life and reduces maintenance costs of the load bearing structure.

2. LARGE SPANS:

High compressive strength and concrete stiffness enable slender concrete construction with wide spans.

3. COLUMNS AND BEAMS:

Smaller cross-sections require less valuable space, thus increasing the usable area.

4. SLABS:

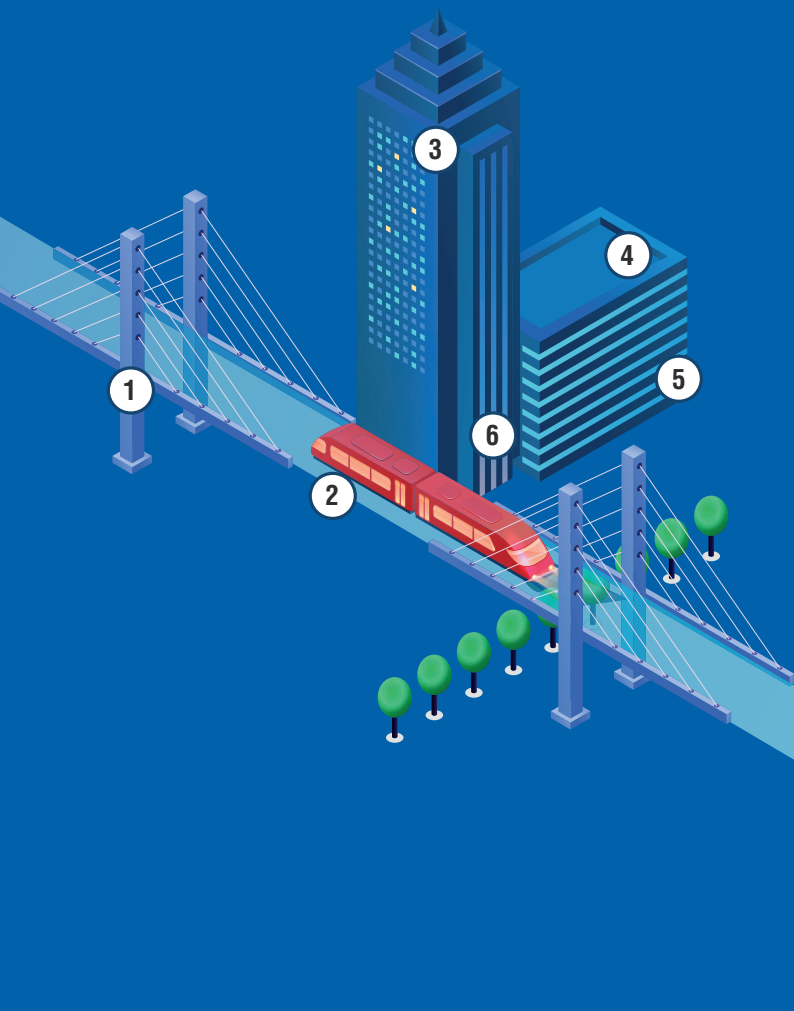
Reduced thickness allowing the separation of the supporting structure and building utilities, thus speeding up the construction process and facilitating later adjustments.

5. MULTI STOREY CAR PARKS:

Slim supporting structures simplify traffic routing, increase the number of parking bays and create more room height. Excellent resistance to corrosion induced by deicing salts.

6. STAIRWAYS AND ELEVATOR SHAFTS:

Reduced wall thickness increases the usable area.





LET'S TALK ABOUT YOUR IDEAS

**FURTHER INFORMATION AVAILABLE
AT [AGGREGATE.COM/DYNAMAX](https://aggregate.com/dynamax)**

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