

High-Flow

New wave concrete.

High-Flow concrete is a superior self-consolidating concrete product with performance characteristics that meet and exceed those of conventional concrete and is ideal for use in areas of highly congested structural reinforcement.

Part of the Performx[®] series of mixes available from Heidelberg Materials, High-Flow concrete boasts both enhanced flowability without segregation and exceptional finish qualities, making it an ideal product for architectural, commercial, industrial and precast applications.

Performance characteristics

Ease of placement

- Easier placement by pump, crane or chute
- Virtually self-leveling
- No segregation
- Increased design flexibility for both horizontal and vertical applications
- Enhanced performance with conventional stripping characteristics
- Little or no vibration required, resulting in elimination of high noise levels on jobsites

Exceptional finish

- Smooth surfaces
- Marked reduction of surface defects such as honeycombing and bugholes
- Allows for a variety of architectural finishes and esthetically pleasing concrete

Economical

- Reduced pour times and placing labour
- Little or no vibration required
- Early stripping strengths
- Virtually eliminates the need for surface touch-ups

Strength

Superior strength development

Heidelberg Materials

"CANA used Heidelberg Materials' High-Flow self-consolidating concrete for all of the columns on the Calgary Courts Centre. With the fast track schedule, this decision proved to be advantageous as the product has exceeded our expectations. The high fluidity enabled efficient placing of the concrete, eliminating the requirement for vibration. This not only resulted in increased productivity, but also a very consistent and high-quality finish."

- Fabrizio Carinelli, P.Eng. Project Manager, CANA Management Ltd.

"Precon Precast Products has experimented with High-Flow concrete for the past 3 years. Heidelberg Materials has tailored a mix design specifically for one of our larger products that requires 3 to 7 cubic meters in a single pour. This High-Flow mix allows us to pour a heavily reinforced product without the use of any internal or external form vibration. Our pour times are reduced dramatically, and the resulting product has a superior appearance. The aggressive set times experienced from High-Flow concrete allow us to easily pour this product daily. Precon Precast Products has certainly benefited from the use of High-Flow concrete, and in the future we plan to explore and maximize the use of this product in more of our manufacturing."

- Alan Sparks

General Manager, Precon Precast Products





Product specifications

Density

 2,200 kg/m3 – 2,400 kg/m3 (comparable to conventional concrete)

Compressive strength

• Typical 7-day values greater than 35 MPa 28-day values designed to meet your project-specification needs

Shrinkage

• Similar or less than conventional concrete mixes

Modulus of elasticity

• Similar or superior to conventional mixes of similar strength

Air entrainment

• Available in a variety of ranges

High-Flow can be designed to qualify for LEED[®] projects.

Please contact your local sales representative for additional product specifications.

