

Hard-Wear

Hard to the core.

Hard-Wear concrete is an innovative ready-mix product that outperforms other mixes, even under the toughest of conditions.

As part of the Performx® series of mixes, Heidelberg Materials has developed Hard-Wear concrete, a revolutionary mix for high-wear applications. Strength and durability are built right into Hard-Wear concrete mixes, ensuring uniform hardness and wear resistance throughout the full depth of the slab, not just on the surface.

Hard-Wear concrete is ideal for applications requiring abrasion resistance.

Performance characteristics

Superior flexibility

- Available in air-entrained and non-air-entrained mixes
- Can be used for all applications

Excellent finishability

- Compatible with all finishing applications, including troweled, broomed and stamped
- Placed and finished the same as standard concrete
- Improved finishability with reduced placing labour
- Eliminates performance inconsistencies typically experienced with other types of hardeners

Outstanding durability

- Increased abrasion, wear and impact resistance
- Uniform hardness throughout the full depth of the slab, not just the surface
- Eliminates hardener delamination
- Plant batching ensures quality control, consistency and full-slab wear resistance

Economical

- Cost savings to owners compared to other high-performance concretes and placers due to the elimination of additional hardeners and cleanup
- Eliminates performance problems experienced with other labour-intensive hardeners

Environmentally friendly

• Elimination of dust and dust protection improves working environments



Compressive strength (f'c)





Product performance

- The charts for compressive strength and slump are a result of an engineering review conducted by D.R. (Rusty) Morgan, Ph.D., P.Eng., Chief Materials Engineer for AMEC Earth & Environmental Ltd. The abrasion charts depict the results of tests conducted by Pildysh Technologies Inc.
- Hard-Wear concrete out-performed in all the tests conducted with a GU control and GU with a nonmetallic hardener.



Abrasion resistance (air-entrained concrete) (Taber abraser: ASTM C1353)



Slump

mm

% loss

 160

 140

 120

 100

 80

 60

 40

 20

 0

Abrasion resistance (non-air-entrained concrete) (Taber abraser: ASTM C1353)

> Heidelberg Materials

