

Planitop[®] HPC Floor 46^{NA}

Three-Component Ultra High-Performance High-Ductility Free-Flowing Cementitious Mortar

Planitop HPC Floor 46 [NA] is a three-component ultra high-performance high-ductility free-flowing high-strength cementitious mortar made using a special admixture, reinforced with selected aggregates and steel fibers. The fibers contained in *Planitop HPC Floor 46* [NA] feature hooked ends, and are made from stiff, galvanized steel. The separate 4 to 6-mm aggregates allow for thicker applications and less shrinkage.

- Very high flexural and compressive strength
- High ductility
- High resistance to cyclical loads
- Impermeable to water
- Excellent adhesion to old concrete, if dampened with water before application, and to rebar, especially if treated beforehand with *Mapefer™ 1K* [NA]
- High resistance to wear from abrasion and impact loads



MAPEI Canada





**Planitop HPC
Floor 46**
NA

Product Performance Properties using 2.55 L (0.67 U.S. gals.) (ratio of 10.2%) of water per 25 kg (55.12 lbs.) bag of *Planitop HPC Floor Powder*.

Laboratory Tests	Results
Compressive strength – ASTM C349 modified	
1 day	> 40 MPa (5,800 psi)
28 days	> 120 MPa (17,400 psi)
Adhesion to Concrete at 28 days – ASTM C1583	> 3 MPa (435 psi)
Shrinkage – ASTM C157	
75 x 75 x 285 mm (3" x 3" x 11-1/4") prisms	< 0.15%
Water Expansion – ASTM C157	
75 x 75 x 285 mm (3" x 3" x 11-1/4") prisms	< 0.15%
Working time	Minimum 45 minutes
Thickness on Horizontal surfaces	2 to 8 cm (0.8" to 3-1/8")

Shelf Life and Product Characteristics before mixing at 23°C (73°F) and 50% relative humidity

Shelf life	12 months when stored in its original, unopened packaging
Storage conditions	Store in a dry, covered area.
Physical state	Powder, fibers and aggregate
Color	Grey

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

CSC Division Classifications

Ultra High Performance Concrete	03 31 24
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Packaging and Approximate Coverage*

Size
<i>Planitop HPC Floor 46</i> [NA] consists of a kit that includes:
<i>Planitop HPC Floor 46</i> [NA] (Standard Kit):
5 x 25 kg (55.12 lbs.) bags of mortar <i>Planitop HPC Floor Powder</i>
1 x 4.4 kg (9.7 lbs.) pail of steel fibers <i>Planitop HPC Floor Fibres</i>
1 x 22.7 kg (50 lbs.) bag of aggregate <i>Stone 4/6 mm</i>
Yield for a complete Standard Kit: 0.069 m³ (2.44 ft³)
<i>Planitop HPC Floor 46</i> [NA] (Large Kit):
23 x 25 kg (55.12 lbs.) bags of mortar <i>Planitop HPC Floor Powder</i>
1 x 20 kg (44.1 lbs.) pail of steel fibers <i>Planitop HPC Floor Fibres</i>
5 x 22.7 kg (50 lbs.) bags of aggregate <i>Stone 4/6 mm</i>
Yield for a complete Large Kit: 0.313 m³ (11 ft³)

* Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and setting practices.

