

EXP TOPPING™ [CONCENTRATE]

Pumpable and pourable fast-curing calcium aluminate cement-based self-leveling underlayment binder concentrate

1. PRODUCT NAME

EXP TOPPING (concentrate)

2. MANUFACTURER

EXPERTOP™

Address: 9801, Parkway, Anjou, Quebec Canada H1J 1P3
Sales Agent Representative: Bob Rumbolt
Phone: 647.278.8084
Email: bob@expertopsales.com
Website: www.expertop.ca

3. PRODUCT DESCRIPTION

EXP TOPPING (concentrate) is a high-performance self-leveling underlayment cement binder concentrate, used with appropriate sand and metered water, to provide a smooth and flat surface.

EXP TOPPING (concentrate) is an ultra-fluid product and can be easily pumped from 5 mm (3/16") up to 32 mm (1 1/4") in a single lift. The mixture can be applied over a variety of substrates and conditions (see SUITABLE SUBSTRATES) including surfaces with up to 95% RH per ASTM F2170, and as thermal mass over electric radiant heat systems.

EXP TOPPING (concentrate) is a fast-curing, making it ideal for time-sensitive projects requiring little downtime. Tile, porcelain and natural stone can be installed only 3 hours after application, where wood flooring, commercial carpet, resilient and other floorings can be installed in just 24 hours.

Formulated with aluminous cement, EXP TOPPING (concentrate) prevents the common problems associated with Portland cement, such as destructive pH levels that lead to poor indoor air quality. EXP TOPPING (concentrate) can also block this harmful pH from substrates it covers when applied 5 mm (3/16") thick or greater.

EXP TOPPING (concentrate) is an eco-friendly product that will contribute important points to LEED® projects, inhibits mold growth and has no VOC.

PACKAGING

20 kg (44 lb) bag
1,000 kg (2,205 lb) supersack (by request)

SUITABLE SUBSTRATES

- Concrete
- Cement backer board
- Plywood (exterior-grade)

*When Primed with EXP PRIMER™**

- Lightweight concrete and gypsum substrates
- Ceramic tile and stone
- VCT (Vinyl Composition Tile)
- Adhesive residue (cutback, water-soluble)

** Reference EXP PRIMER technical data sheet for more details.*

LIMITATIONS

- Do not install directly over particleboard, chipboard, hardboard, Luan, OSB and other dimensionally unstable materials.
- Use only when surface temperatures are between 10°C (50°F) and 35°C (95°F).
- Do not use over surfaces that have high or recurring moisture problems and/or hydrostatic conditions.
- Apply only in thickness from 5 mm (3/16") up to 32 mm (1 1/4") deep. Do not use for filling fissures, holes and deep areas. For thinner or thicker applications, contact the EXPERTOP™ technical support for recommendations.
- Use only appropriate sand and specified metered water.
- Use for INTERIOR applications only.
- Not for use as a finished floor surface.
- Do not use for submerged applications or areas subjected to frequent flooding.

SHELF LIFE

Unopened EXP TOPPING (concentrate) has a shelf life up to 6 months when stored off of the ground in a dry environment.

4. TECHNICAL DATA

Technical Data is the result of laboratory testing. Job-site performance may vary due to environmental and surface conditions, installation methods and other factors. Contact the EXPERTOP™ technical support if you have any questions.

Information is subject to change without notification.

EXP TOPPING (concentrate) tested @23° C (73° F) and 50% RH

Working time	> 20 minutes
Walkable time	3 hours
VOC content	0 g/L
Density	2 g/mL
Flexural strength (ASTM C-348) @ 28 days	> 6.7 MPa (1,000 psi)
Tensile bond strength (ASTM D4541 [Concrete]) @ 7 days	> 2.2 MPa (320 si)
Compressive strength (ASTM C-109) @ 28 days	> 31 MPa (4,500 psi)

APPROXIMATE COVERAGES

Coverages are approximate only and based upon a 20 kg (44 lb) bag of EXP TOPPING (concentrate) properly mixed with appropriate sand and metered water. Actual coverages may vary due to environmental and surface conditions, installation methods and other factors. Contact the EXPERTOP technical support if you have any questions.

Thickness	Coverage
6 mm (1/4")	4.5 m ² (48 ft ²)
12 mm (1/2")	2.2 m ² (24 ft ²)
25 mm (1")	1.1 m ² (12 ft ²)

5. INSTALLATION

SURFACE PREPARATION

General Conditions

Surfaces must be properly structured and clean, free of dirt, dust and debris, paints and coatings, oils, tars and waxes, curing products, sealers and release agents, acids, alkalies and cleaning chemicals, and anything else that may adversely affect product bonding. Contact the EXPERTOP technical support if you have any questions.

Concrete

Concrete must be solid (tensile strength >1.2 MPa [175 psi] per ACI 503 R, Appendix A) and properly cured (at least 28 days old) with a slight texture.

Concrete must be dry without moisture or hydrostatic moisture issues. Using a calcium chloride moisture emission test (ASTM F-1869), test the concrete prior to installation to ensure moisture vapor emission does not exceed 1.36 kg per 93 m² (3 lb per 1,000 sq. ft.) per 24 hours. Do not proceed with installation unless moisture and hydrostatic conditions are resolved. Contact the EXPERTOP technical support if you have any questions.

Smooth concrete, or concrete where adhesive residue has been properly removed, must be mechanically roughened using an engineer-approved process, like shot-blasting, scarification, etc., then primed with EXP PRIMER™ to provide an adequate surface for bonding. In some cases, only EXP PRIMER is needed. Reference the product's technical data sheet for additional information.

Overly-dry and porous concrete must be primed with EXP PRIMER to prevent water from being absorbed into the concrete from the self-leveling material and to prevent air bubbles, which can cause weakening or product failure. Reference the EXP PRIMER technical data sheet for additional information.

Concrete slabs on grade must be installed over an appropriate vapor barrier.

Plywood and Cement Backer Board

Plywood and cement backer board substrates must be properly installed and supported by joists spaced 400 mm (16") on center.

Ensure plywood has two properly-installed layers, each at least 16 mm (5/8") thick with a minimum gap of 3 mm (1/8") between the panels and 6mm (1/4") along posts and columns, walls, and openings for plumbing, etc. Non-oxidizing floor screws must be used to fasten panels every 15 cm (6") along edges and around each panel, and at 20 cm (8") in centers. The height difference between adjacent panels must not exceed 0.75 mm (1/32").

EXP PRIMER is recommended for a better wood adhesion and to prevent water from being absorbed into the wood. Reference EXP PRIMER technical data sheet for additional information.

Lightweight Concrete and Gypsum Substrates

Lightweight concrete and gypsum substrates must be properly installed, solid clean and primed with EXP PRIMER. Reference the product's technical data sheet for additional information.

Hard to Bond to Surfaces

EXP TOPPING (concentrate) can also be used over existing hard-to-bond-to surfaces, such as ceramic tile and stone, VCT (Vinyl Composition Tile), and adhesive residue (cutback, water-soluble). In these cases, underlying substrates and existing surfaces must be properly structured and installed, sound, solid, clean and prepared, then primed with EXP PRIMER. Reference the product's technical data sheet for additional information.

Electric Radiant Heat Systems

When using a self-leveling product over an electric heating system (previously checked for good functioning), turn the system off 24 hours prior to the installation and wait at least 2 weeks before turning it back on.

HEALTH AND SAFETY

Refer to the Material Safety Data Sheet (MSDS) for complete details.

MIXING

EXP TOPPING (concentrate) is a cement binder concentrate used only with **clean, calibrated concrete sand and cool, clean water**. Do not mix with additional cement or other additives.

Mixing Ratios

EXP TOPPING (concentrate)	Sand	Water
20 kg (44 lb)	26.5 kg (58.3 lb)	10.2 L (2.7 US gal)
1,000 kg (2,205 lb)	1,325 kg (2,921 lb)	510 L (134.7 US gal)

Note: Water dosage will be affected by sand moisture content. In hot weather conditions, use ice-cold water for mixing to better control working and setting time. Do not use too much water, as it will delay curing, cause segregation and excessive shrinkage, and excess water will resurface and affect the final product.

Acclimate EXP TOPPING (concentrate) and sand to the proper temperatures for application prior to mixing. When mixing, use only clean tools and containers and a clean low speed mixer suited for mortars and concrete.

In a clean mortar mixer or container, measure and pour the proper amount of cold clean water and gradually add EXP TOPPING (concentrate) concentrate. Then, add the appropriate amount of clean, calibrated concrete sand while mixing slowly and repeatedly. Do not over-wet the mix as too much water will delay curing and cause segregation and excessive shrinkage, while excess water will rise to the top and adversely affect the surface.

Mix thoroughly to obtain a uniform, lump-free consistency. Mixing time should not exceed 3 minutes.

Do not let the mixture sit, use within the shortest possible time frame.

APPLICATION

Apply Mixture

Pour mixture onto the substrate from 5 mm (3/16") to a maximum depth of 32 mm (1 1/4"), then use a screeding tool or squeegee to help spread the product. The ultra-fluid characteristics of the mixture will self-level using gravity and leave a smooth finish once cured.

For more detailed information on ways to apply this product (especially when a pump process is being used), please contact the EXPERTOP technical support for proper recommendations and job site field assistance.

Protection and Curing

Avoid foot traffic for a minimum of 3 hours (at room temperature) after application. Protect from any direct air ventilation or heat radiation source, such as direct sunlight, during and after the installation, for a minimum of 24 hours. These conditions could cause the product to cure too quickly, resulting in micro-cracking. **Do not attempt to accelerate curing by using ventilators or heating appliances.**

Ceramic tile and stone can be installed after 3 hours and wood flooring, commercial carpet, resilient and other floorings after 24 hours. Ensure surface is dust-free until final floor covering is installed. Refer to flooring manufacturer's installation instructions.

When used over a properly functioning electric heating system, wait at least 2 weeks prior to turning it back on.

CLEAN UP

If unmixed product is spilled, sweep into an appropriate container and dispose in accordance with appropriate governing environmental regulations. Clean mixed product from tools and hands with water while product is still fresh.

6. AVAILABILITY

EXPERTOP™ products are available in Canada. Contact our Sales Agent Representative Bob Rumbolt by phone at 647.278.8084 or by email at bob@expertopsales.com.

7. WARRANTY

EXPERTOP™ warrants that this product is manufactured using quality raw materials and is of merchantable quality and suitable for the purpose for which it was intended. EXPERTOP™'s liability under this warranty shall be limited to the replacement of its product proven to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use of/or the inability to use this product.

8. MAINTENANCE

Product requires no special maintenance. Do not leave without floor covering or exposed as a resurfacing material.

9. TECHNICAL SERVICE

For more detailed information on this product, please contact our Sales Agent Representative Bob Rumbolt by phone at 647.278.8084 or by email at bob@expertopsales.com.

10. FILING SYSTEM

Additional information is available upon request.

EXPERTOP™ 9801, Parkway, Anjou, Quebec Canada H1J 1P3
Sales Agent Representative: Bob Rumbolt | Phone: 647.278.8084 | Email: bob@expertopsales.com | Website: www.expertop.ca