

## **Q450 Self-levelling Compound: Speed, Strength, and a Superior Bond. Guaranteed.**

Engineered for professionals who demand speed, strength, and a flawless adhesive bond. Q450 Pro-Flow is a high-performance levelling compound specifically formulated for direct-stick and glue-down flooring applications, including high-demand vinyl sheeting.

Its advanced chemistry not only creates a superior surface but also dramatically accelerates project timelines by solving common moisture-related delays.

### **Features & Benefits:**

- **Engineered for Direct-Stick & Glue-Down Flooring**
  - Creates an exceptionally strong, stable, and smooth surface that ensures a tenacious, full-contact bond for adhesives, eliminating failures with LVT, vinyl sheeting, and other glued flooring.
- **Health-Conscious, Ultra-Low VOC Formula**
  - The cured surface features a low-dust formula, preventing loose particles that can compromise adhesive bonds and ensuring a cleaner work environment. This, combined with our ultra-low VOC commitment, makes it a healthier choice.
- **Revolutionary Rapid-Dry Technology**
  - This is the core of its performance. The formula is engineered to achieve a walkable state in approximately 3 hours and a dry state (approx. 3% moisture content) within 24 hours.
- **Eliminate a Step: No Moisture Barrier Needed**
  - Due to its exceptional rapid-dry capabilities, you can apply epoxy coatings or waterproofing membranes directly on top of the cured QX 450 without the time and expense of a separate moisture barrier system (*do not apply waterproofing on substrates with residual humidity >4%*)
- **Industrial-Grade Compressive Strength (35MPa)**
  - Provides a rock-solid foundation that easily withstands heavy point loads and rolling traffic, essential for commercial spaces and for supporting resilient flooring like vinyl sheeting.
- **Fast Reaction, Consistent Results**
  - The formula reacts quickly and consistently upon contact with water, guaranteeing no separation and providing a predictable, reliable set time on every job.

### **Suitable for:**

- Indoor applications
- Residential and commercial applications
- New construction
- Refurbishment of old floors
- Underlayment for carpet, carpet tiles, timber and ceramic tiles
- Suitable for use under epoxy and polyurethane floor coatings
- Suitable for use with under floor heating systems

### **Surface Preparation:**

Concrete floors must be structurally sound, clean and dry. Surface must be mechanically prepared and be free from dust, dirt, wax, grease, asphalt, latex compounds, adhesives, paint, curing and sealing compounds and other contaminants. Concrete must be free from efflorescence and not be subject to hydrostatic pressure.

All concrete sub floors must be fully cured and dry in accordance with AS 1884. Ambient temperature, surfaces and materials should be maintained at temperatures higher than 10°C and below 35°C.

All concrete sub floors must be fully cured and dry in accordance with AS 1884 (Less than 75% relative humidity when measured in accordance with ASTM F2170). Ambient temperature, surfaces and materials should be maintained at temperatures higher than 10°C and below 35°C. For floors with a high humidity content or subject to rising damp, apply QX Vapour Block. Refer to the QX Vapour Block TDS for details.

### **Priming:**

Using a soft brush or broom, prime the prepared concrete area with QX XFlow Primer and allow primer to dry. A second coat of primer may be necessary on areas with very porous surfaces where the initial coat has been completely absorbed. Allow the primer to fully dry to a clean, thin film (approx. 1- 2 hours) before applying Q450. Low temperatures can delay the drying time of primer. Do not apply Q450 until the primer has dried completely.

### **Mixing:**

Place the recommended 4.8-5 litres of potable water into a clean mixing vessel and slowly add the entire 20kg contents of Q450 Pro-Flow while mixing using a heavy duty mechanical forced mixer (600rpm). Mix for approximately 2 – 3 minutes to a lump free consistency. Use mix within 15 minutes after mixing, be sure to only mix a quantity that can be use within this time.

- Do NOT use concrete or masonry mixers to mix Q450.
- Do NOT mix by hand.
- Do NOT attempt to retemper mixed product.
- Do NOT overwater Q450, use only the recommended mix water volume.

**Application:**

Pour or pump the mixed Q450 Pro Flow onto the prepared substrate and spread into place using a long handled gauged spreader. Application shall be continuous into the preceding flowable material to ensure even thickness throughout. Do not fill new material in the middle of proceeding material. Q450 Pro Flow seeks its own level during the first 10-15 minutes and can be applied up to 30mm thick in one application.

**Application over Underfloor Heating:**

The subfloor should have been laid and prepared in accordance with Australian Standard AS 1884. The underfloor heating system should have been commissioned in accordance with the manufacturer's instructions and in accordance with Australian Standard AS 1884. Once the heating system is fully commissioned, application of Q450 should be made in accordance with the information in this TDS and the requirements put down in AS1884. Application of any subsequent floor coverings should be made in accordance with the floor covering and flooring adhesive manufacturers instruction.

**Set Time:**

Allow curing time of 3 hours at 23°C for walkable foot traffic and 12-24 hours at 20°C before applying floor coverings. Drying times will be impacted by air temperature, air flow, relative humidity and layer thickness.

**Coverage:**

20kg bag of Q450 Pro Flow will cover approximately 2.3 sqm at 5mm thickness.

**Clean Up:**

Wash all tools in water immediately after use.

**Packaging:**

20kg bags.

**Shelf Life & Storage:**

12 months from date of production if stored indoors in undamaged and unopened bags. Store in dry conditions, in unopened and undamaged bags and in temperatures below 30°C. If stored in excessive temperature conditions, externally exposed to the elements or in high humidity conditions, the shelf life may be reduced.

**Q450 Pro Flow – Product data**

<b>Compressive Strength</b>	After 1 Day Approx. 15mpa After 7 Days Approx. 25mpa After 28 Days Approx. 25mpa
<b>Tensile Bending Strength</b>	After 1 Day Approx. 4mpa After 7 Days Approx. 5mpa After 28 Days Approx. 7mpa
<b>Color</b>	grey
<b>Mixing ratio</b>	4.8-5.0 Litres of clean, cool water
<b>Working time</b>	20-30 minutes
<b>Pack size</b>	20kg/bag
<b>Shelf life</b>	12 months
<b>Ambient air temperature</b>	10°C-35°C
<b>Coverage</b>	Approximately 1.7kg powder/mm/m <sup>2</sup>
<b>VOC Level</b>	<0.5 mg/m <sup>3</sup>

*Testing Parameters: 23% of water. Laboratory at: 23 +/- 2°C > 50% RH. The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.*

**Precaution:**

- This product is designed as an underlayment and must not be used as trafficable wearing surface.
- Do not use externally or in areas where the underlayment or subfloor is likely to be exposed to submersion, wetting or high levels of humidity.
- Do not apply at a temperature less than 10°C. Consider using cooled water for mixing the product. Do not apply in temperatures above 35°C. And the relative humidity below 75%.

**Important notice:**

A safety Data Sheet (SDS) is available from the QX website (qxmaterial.com.au). Please read the SDS carefully prior to using this product. In an emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia).

**Product disclaimer:**

Recommendations and advice regarding the use of this product are to be taken as a guide only. The manufacturer of this product and any of its affiliate companies cannot be held responsible for any loss or damage arising from the incorrect usage of this product. The use of this product is beyond the manufacturers control, and liability is restricted to the replacement of material should the product be proven faulty. The information contained herein is to the best of our knowledge, true and accurate. We reserve the right to update information without prior notice. No warranty is implied or given to its completeness or accuracy in describing the performance or suitability of the product for a particular application.

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