

# Lambert® Grout 216

Multi-Purpose Class A Non-Shrinkage Cementitious Grout

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**Description** Lambert Grout 216 is a multipurpose non-shrinkage cementitious grout, supplied as a ready to use dry powder. Lambert Grout 216 is based on Portland cement, graded aggregate and chemical additives. The gaseous expansion system compensates for shrinkage and settlement in the plastic state.

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**Uses**

- ❖ Machine foundations
- ❖ Filling the void between a base plate and a substrate
- ❖ All general purpose grouting
- ❖ Joint between pre-cast panels and other joints
- ❖ Concrete anchors
- ❖ Bridge bearings
- ❖ Cavities
- ❖ Grouting in columns
- ❖ Filling core holes, rod holes and defects in concrete
- ❖ Anchoring starter bars, masts and anchor bolts

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**Advantages**

- ❖ Gaseous expansion system compensates for shrinkage and settlement in the plastic state
- ❖ Ready to use, premixed, and requires only the addition of water
- ❖ Can be dry packed, rammed, troweled, poured and pumped
- ❖ Rapid strength development
- ❖ High ultimate strengths and low permeability ensure the durability of the hardener grout
- ❖ No metallic iron content
- ❖ Non-corrosive
- ❖ Non-toxic
- ❖ Develops high early strength without the use of chloride
- ❖ Extended working time and excellent flow characteristic

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**Properties**

Product Type	Grey premixed powder
Application criteria	<ul style="list-style-type: none"> <li>● Maximum thickness per pour is 100 mm and minimum is 10 mm</li> <li>● Minimum application temperature is 10°C</li> <li>● At temperature 20°C and below, setting time and strength development will be slower.</li> </ul>
Shelf life and storage	9 months from date of production when stored in original unopened packaging in a cool, dry place.
Packaging	20 kg bag

**Instructions for use**

Surface preparation	<p>Concrete surfaces should be clean, sound and free from oil, grease, laitance and loosely adhering particles.</p> <p>Metal surfaces (iron and steel) should be free from scale, rust, oil and grease.</p> <p>Pre-soak substrate with water prior to grouting, but be free of any surface water or puddles prior to the application of Lambert Grout 216.</p>						
Consistency of grout mix	<table border="1"> <thead> <tr> <th></th> <th>Water (litres) per 20 kg of Lambert Grout 216</th> </tr> </thead> <tbody> <tr> <td>Flowable</td> <td>3.04– 3.36</td> </tr> <tr> <td>Trowellable</td> <td>2.48 – 2.88</td> </tr> </tbody> </table>		Water (litres) per 20 kg of Lambert Grout 216	Flowable	3.04– 3.36	Trowellable	2.48 – 2.88
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Mixing	Place 70 – 80 % of the pre-measured clean water (depending on consistency required) into a clean container and gradually add the whole bag of Lambert Grout 216 into it while continuously mixing. Add the remaining water until the desired consistency is obtained. Mix for 2 – 3 minutes with a low speed drill (maximum 500 rpm).						

**Application** At 20<sup>0</sup>C place the grout within 25 minutes of mixing to gain full benefit of the expansion process.

After mixing, stir lightly with a spatula for a few seconds to release any entrapped air. The grout is then poured immediately into the prepared formwork.

When carrying out base plate grouting, ensure sufficient pressure head is maintained for uninterrupted mortar flow. For formwork repair, the prepared formwork must be firmly in place and kept watertight.

When placing grout over a large area, it is important to maintain a continuous flow throughout. Work sequence must be properly organized to ensure an uninterrupted flow.

For sections thicker than 100 mm or for large grouting areas, it is necessary to mix Lambert Grout 216 with graded 10 mm silt free aggregates to minimize temperature rise generated during curing stage. The quantity of aggregates should not exceed 1 part aggregates to 1 part Lambert Grout 216 by weight. Other precautions such as the use of chilled water, insulation of the formwork or base plate may be required. Please consult Technical Service Department for assistance.

To further ensure that air entrapped during mixing is allowed to fully escape, it may be necessary to make breather holes. Use steel rods or chains to assist the flow of grout where necessary.

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**Curing** On completion of grouting exposed area should be covered with wet hessian or plastic sheeting to prevent excessive moisture loss. Keep grout covered for a minimum of 24 hours.

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**Cleaning** Clean all tools and equipment with water immediately after use. Hardened mortar can only be mechanically removed.

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**Precautions** As cement is alkaline and may cause irritation, water gloves and goggles during application. If in contact with skin, wash thoroughly with soap and water. If in contact with eyes or mucous membrane, flush immediately with plenty of water and seek medical attention without delay. Use with adequate ventilation.

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**Typical yield**

## Flowable consistency

Lambert Grout 216	20 kg	91 x 20 kg bag
Water	3.36 litre	306 litre
Volume Mortar	11.04 litre	1 m <sup>3</sup>

## Trowellable consistency

Lambert Grout 216	20 kg	96 x 20 kg bag
Water	2.88 litre	277 litre
Volume Mortar	10.4 litre	1 m <sup>3</sup>

**Technical Data**

## Compressive strength

Flowable 60MPa At 28 days

Trowellable 75MPa At 28 days

## Flexural strength

Flowable 10.8MPa At 28 days

Trowellable 12MPa At 28 days

## Bonding strength-Slant Shear Method

Flowable 10MPa At 28 days

Drying Shrinkage &lt;600 micro strain At 56 days

Initial Flow 20-30 seconds initial

Fresh wet density Approximately 2130kg/m<sup>3</sup>  
depending on actual consistency  
used.

## Expansion

Plastic unrestrained 2.0 %

**Notes**

The information, and, in particular, the recommendations relating to the application and end use of Lambert products, are given in good faith based on Lambert's knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respects of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

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