

## MPLMP

### Placing mortar for bed, polymer modified

#### PRODUCT DESCRIPTION

##### MAIN USE

2.1.1. MPLMP - Placing mortar for bed, polymers modified, is a laying mortar based on Portland cement, modified polymer and sand meeting the specifications of the CSA A179-14 standard. MPLMP is mainly used as a thick laying mortar for natural and manufactured paving units. MPLMP can be used as a setting mortar for horizontal residential and commercial paving unit applications as well as a filler material between horizontal pavers. It can also be used as a dry fill setting material in interior and exterior installations allowing for a range of low to heavy traffic densities.

##### AVANTAGES

2.1.2. The use of a pre-packaged and calibrated mortar, whose particle size distribution of the sand and the final composition of the mortar (in particular the proportions of the various binders) are controlled, allows consistency of the properties set out in this technical sheet. As stipulated in the ASTM and ANSI standard, the sand is graded and free from harmful amounts of saline, alkaline, organic or other materials.

#### LIMITATIONS

- 2.2. MPLMP should only be used for horizontal surfaces.
- 2.3. MPLMP should be used exclusively for dry fill installation in interior and exterior installations allowing a range of low to heavy traffic densities.
- 2.4. Any modification made to the composition of the mortar is prohibited and automatically cancels its guarantee.
- 2.5. The addition of additives and/or adjuvants, regardless of their nature, such as setting accelerators, setting retarders, antifreeze, anti-graffiti, waterproofing agents, polymers (latex) or other, is prohibited.
- 2.6. If in doubt about the compatibility of the materials used with MPLMP, consult our technical representatives or our technical department.
- 2.7. Due to the variable absorption rates from one type of element to another, it is recommended to carry out compatibility tests with the mortar.
- 2.8. The minimum thickness is 13 mm (1/2 in).

#### INSTALLATION

##### IMPLEMENTATION CONDITIONS

- 3.1.1. Ensure that the ambient temperature, surfaces, elements and MPLMP are between 5 °C (41 °F) and 35 °C (95 °F), during application and for a period of 48 hours following application.
- 3.1.1. Never place the MPLMP on frozen elements.
- 3.1.2. Some items need to be wet (moistened) in hot weather.

- 3.1.3. When using MPLMP as a thick, reinforced wet setting mortar, use only rigid base diaphragms and install over a reinforced concrete slab poured on grade. Do not install over compacted aggregate. The substrate must be clean and porous. The surface of dry and/or hot slabs must be moistened. Do not allow the formation of water accumulation. Do not use the MPLMP for vertical applications. Cure bedding material 24 hours before allowing light traffic and 14 days before allowing heavy traffic.
- 3.1.4. When using MPLMP as a non-sag (dry consistency) material, it is recommended to use reinforcing wire mesh for installation. Place product in accordance with ANSI standards and local building codes to depths as required by the architect or engineer for the project flooring system.
- 3.1.5. When using MPLMP as a filling material for horizontal joints, use filling techniques similar to the restoration of joints in masonry units.
- 3.1.6. A sample of the proposed product will be provided by the manufacturer for approval by the architect and tested as required. It is necessary to prepare a sample panel with all the materials used in the final project. Retain the mock-up or field sample until the project is complete.

#### SURFACE PREPARATION

##### PREPARE THE CONCRETE SUBSTRATE BEFORE APPLYING MPLMP

- 4.1.1. Remove all unbonded or delaminated materials, dirt, oil, dust, paint, sealant, bitumen or any other product that reduces the adhesion between the substrate and the MPLPM
- 4.1.1. Cleaning the surface with potable water is necessary.
- 4.1.2. Before applying MPLMP, moisten the substrate so that it is in Saturated Surface Dry (SSS) condition and remove excess free water.
- 4.1.3. Refer to the technical data sheet of the manufacturer of the element installed in order to verify the particularities for its installation.

#### MIXING

##### MIX IN SMALL QUANTITY (MINIMUM 1 BAG)

- 5.1.1. Pour 3.15 liters of water per 30 kg (66 lb) bag into a clean container (i.e. 20.0 liter boiler).
- 5.1.2. Gradually add the dry ingredients while mixing at low speed using an industrial-grade drill equipped with a Jiffier-type mixer.
- 5.1.3. Mix for 4 to 5 minutes. Water demand is a function of several factors, if necessary, add water to obtain the desired consistency.

*Note: Never mix less than one bag and always mix full bags.*

##### MIX IN LARGE QUANTITY

- 5.1.4. Use a mortar mixer of suitable capacity (the mixer must be at least 3/4 full). Start the mixer. Pour the required quantity of drinking water, i.e. 3.15 liters of water per 30 kg (66 lb) of dry material.
- 5.1.5. Gradually add the dry material. Mix for 4 to 5 minutes. Water demand is a function of several factors, if necessary, add water to obtain the desired consistency.

### APPLICATION

- 6.1. Spread the fresh mortar in an even layer. Apply mortar to the end of the element and set it in place. Using a level or line, tap the unit level in the mortar bed. Fill all joints. Do not realign the elements once they are in contact with the mortar.

*Note: Mortar should be applied within 1-1/2 hours of mixing, if ambient temperature is at or above 25°C (77°F) and within 2-1/2 hours if temperature is below 25°C (77°F). Mortar not used after this period of time should be discarded.*

### 7. FINISHING

- 7.1. In order to improve their appearance and maximize their resistance to weathering, all joints must be finished with the appropriate tools (metal, plexiglass, etc.)
- 7.2. The finishing must be done as soon as the mortar loses its plasticity, that is to say, as soon as the fingerprint remains marked there. It is impossible to set a precise time for finishing the joint, we must rely here on the judgment of the applicator.

### 8. PROTECTION AND CURING

- 8.1. Protect the work from bad weather, using a tarp, to limit the water content as required by the CSA A371-14 standard.
- 8.2. Protect the finished works against mortar splashes using tarpaulins.

#### 8.3. COLD WEATHER CONDITION

- 8.3.1. Protect from frost above 5 °C (41 °F) and from rain for the first 48 hours after installation.
- 8.3.2. To avoid efflorescence, unless otherwise indicated by the manufacturer of the masonry unit, ensure that they are dry.

#### 8.4. HOT WEATHER CONDITION

- 8.4.1. Protect from sun and wind to prevent the mortar from drying too quickly.

### 9. NETTOYAGE

- 9.1. Clean equipment with water while the mixture is not yet hardened. Once the mixture has hardened, only mechanical cleaning will be effective.
- 9.2. Throughout the work, carefully remove mortar splashes and stains using jute and/or a wooden pallet.
- 9.3. Consult the element manufacturer and cleaning product data sheets when more thorough cleaning is required. Ideally, the masonry mortar should undergo a minimum curing of 28 days before carrying out a washing operation. However, it is recommended to consult the recommendations of the manufacturer of the cleaning products in order to validate the compatibility of the latter with the masonry elements. Avoid using high pressure cleaning or abrasive techniques, such as sandblasting, glass beads or others. Always perform a sample test and wait 3 days before proceeding.

### 10. PACKAGING

- 10.1. This product is packaged in a 30 kg (66 lb) paper bag. A pallet of 30 kg (66 lb) bags contains 63 bags.

### 11. STORAGE

#### 11.1. INDOOR STORAGE

- 11.1.1. Store in a cool, dry place. Avoid placing the bags directly on the ground.

#### 11.2. OUTDOOR STORAGE

- 11.2.1. Cover bags with waterproof wrap. Do not store directly on the ground.

#### 11.3. LIFETIME

- 11.3.1. Storage time is 12 months in unopened, well-protected bags.

### 12. FIRST AID

- 12.1. WEAR IMPERVIOUS GLOVES, such as nitrile, eye protection, protective clothing and rubber boots. Do not breathe dust or swallow it. Wear a NIOSH-approved respirator (mask) such as N95 in poorly ventilated areas, during prolonged or repeated use, or when maximum exposure limits may be exceeded. Do not eat, drink or smoke when this product is in use. Before handling, read and understand the safety information on this label and on the safety data sheet (SDS) available online at [www.daubois.com](http://www.daubois.com).
- 12.2. IF EXPOSED: Wash body and contaminated clothing thoroughly and immediately. In case of eye contact: Rinse cautiously with water for several minutes; remove contact lenses if present if possible; continue rinsing. In case of inhalation: move the person to fresh air and make him comfortable so that he can breathe. If swallowed: rinse mouth; do NOT induce vomiting. In case of burns, irritation or rash: consult a doctor immediately. Seek immediate medical attention if symptoms are severe or persistent..

### 13. TECHNICAL SERVICES

Contact Les Produits Daubois Inc. for further information on application methods or conditions as well as to obtain the most recent version of the technical documents.

Tel: 1-800-561-2664, (514) 328-1253

Fax: (514) 328-7694

Les Produits Daubois Inc.

6155, boul. des Grandes-Prairies, Saint-Léonard, Qc H1P 1A5, Canada

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### 14. WARRANTY

Obtain the applicable LIMITED WARRANTY on

<https://www.daubois.com/fr/produit-garantie.php>. Or send a written request to Les Produits Daubois Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. @Quikrete Canada Holdings, Limited. Manufactured by or under the authority of Les Produits Daubois Inc. ©2022 Quikrete International, Inc..

### 15. CAUTION

It is possible to observe color variations on the final result even if the mortar used has been pre-colored in the factory and complies with the requested specifications. These variations are mainly caused by various implementation situations such as:

- Delay before finishing (smoothing of joints).
- Variable element humidity levels.
- Lack of protection during implementation and work stoppages/interruptions.
- Improper or excessive washing.

The final choice of color retained for the entire work should be based on the result obtained following the production of the sample (standard).

### TECHNICAL DATA

Characteristics	Term	Résultats <sup>1</sup>
Compressive strength, ASTM C-109	1 day	13.7 MPa (2000 Psi)
	3 days	20.6 MPa (3000 Psi)
	7 days	27.5 MPa (4000 Psi)
	28 days	31.0 MPa (4500 Psi)
Water absorption, ANSI A118.7.3.4	28 days	< 5%
Water absorption, ASTM C-413	28 days	< 2%
Bond Strength CSA A23.2-6B (*modified) – Concrete Substrate – Dry Surface	7 days	3.6 MPa (< 520 Psi)
Drying shrinkage, ASTM C-157	28 days	< 0.1%
Bending strength, ANSI A118.7.3.7	28 days	6.8 MPa (1000 Psi)
Water retention, ASTM C-1506	—	88% de l'étalement initial
Air content, ASTM C-231	—	5%
Setting time, ASTM C-191	Initial	4 hours 30 min
	Final	6 hours 45 min

1- Results obtained with a water content of 10.5% (Dry mass) at 20 ° C ±1, ripening of 50% R.H., for a standard sample, mixed to obtain a setting consistency. These results may vary from sample to sample and are indicative of mortar performance. They cannot be used for the acceptance or rejection of the use of the product.

### RENDEMENT

Bed thickness	Approximate Yield	
	Bag of 30.0 kilos (66 lb)	Bag of 1100 kilos (2425 lb)
25 mm (1 in)	0.61 m <sup>2</sup> (6.6 ft <sup>2</sup> )	24 m <sup>2</sup> (263 ft <sup>2</sup> )
50 mm (2 in)	0.31 m <sup>2</sup> (3.3 ft <sup>2</sup> )	12 m <sup>2</sup> (131 ft <sup>2</sup> )
75 mm (3 in)	0.21 m <sup>2</sup> (2.2 ft <sup>2</sup> )	8.1 m <sup>2</sup> (87 ft <sup>2</sup> )
100 mm (4 in)	0.16 m <sup>2</sup> (1.7 ft <sup>2</sup> )	6.0 m <sup>2</sup> (65 ft <sup>2</sup> )

The MPLMP is produced to strict manufacturing standards backed by comprehensive quality control measures. The product is 100% dry, pre-mixed in 30 kg (66 lb) or 1100 Kg (2425 lb) bags, eliminating the need to measure and add raw materials and liquid admixtures on foot. work, which in turn guarantees quality control while increasing the productivity of each site.