1-2.5-8 Coarse Laying Mortar Type O

Lime and cement-based laying mortar

1. PRODUCT DESCRIPTION

1.1. MAIN USE

Mortar 1-2.5-8 Coarse Type O is a mortar based on GUL portland cement, SA hydrated lime, and sand that meets the specifications of CSA A179-14 (2024). Mortar 1-2.5-8 Coarse Type O is mainly used for laying (jointing) masonry units.

The use of an air-entraining agent in Mortar 1-2.5-8 Coarse Type O improves durability. For indoor and outdoor use, it is ideal for brickwork, architectural blocks (clay, concrete, or sand-lime), and artificial stone (limestone, granite, or sandstone). It can also be used as a render to cover foundations.

Note: Mortar 1-2.5-8 Coarse Type O is available in two colors (gray and bone). However, Daubois Products Inc. offers the possibility of developing custom colors (see 11. Technical Service).

1.2. ADVANTAGES

1.2.1. The use of pre-bagged and calibrated mortar, whose sand particle size distribution and final mortar composition (particularly the proportions of binders) are controlled, ensures the consistency of the properties listed in this technical data sheet. As stipulated in CSA A179-14 (2024), the sand is calibrated and free of harmful quantities of saline, alkaline, organic, or other materials.

1.3. LIMITATIONS

1.3.1. Mortar 1-2.5-8 Coarse Type O must be used exclusively for vertical surfaces, not horizontal surfaces (parapets, coping stones, or any protruding surfaces), unless otherwise specified by an architect or engineer.

1.3.2. Mortar 1-2.5-8 Coarse Type O must be used exclusively for the installation of non-load-bearing wall elements above ground level.

1.3.3. Any modification to the composition of the mortar is prohibited and automatically voids its warranty.

1.3.4. The addition of additives and/or admixtures of any kind, such as setting accelerators, setting retarders, antifreeze agents, anti-graffiti agents, waterproofing agents, polymers (latex) or other substances, is prohibited.

1.3.5. Only the addition of colorant1 (on site) is permitted but not recommended.

1.3.6. Due to the varying absorption rates from one type of element to another, it is recommended to conduct compatibility tests with the mortar, mainly regarding the minimum flexural adhesion required by CSA A179-14 (2024).

1.3.7. Mortar 1-2.5-8 Coarse Type O is not designed for repointing. To do so would require a significant reduction in the amount of mixing water, which would alter the physical properties of the product.

1.3.8. Visit the Les Produits Daubois Inc. website (www.daubois.com) for information on grouting products.

2. INSTALLATION

2.1. WORKING CONDITIONS

2.1.1. Ensure that the ambient temperature, surface temperature, masonry temperature, and Mortar 1-2.5-8 Coarse Type O temperature are between 5 °C

2.1.2. (41 °F) and 32 °C (90 °F) during application and for 48 hours after application.

2.1.3. Never apply Mortar 1-2.5-8 Coarse Type O to frozen elements.

2.1.4. Some elements need to be wet (moistened) in hot weather.

2.1.5. Check with the masonry component manufacturer for preconditioning prior to installation. See CSA A82-14 standard.

2.2. SURFACE PREPARATION

Refer to the manufacturer's technical data sheet for specific installation instructions.

3. MIXING

3.1. MIXING SMALL QUANTITIES (1 BAG MINIMUM)

3.1.1. Pour 4.0 liters of potable water per 30 kg (66 lb) bag into a clean, suitable container (i.e., 20.0-liter bucket).

Note: This amount of water is a starting point for mixing.

3.1.2. The texture of the mortar is then adjusted by the mason according to the nature of the work and the ambient conditions, while complying with the mortar spreading specifications prescribed by CSA A179-14 (2024).

3.1.3. Gradually add the dry ingredients while mixing at low speed using an industrial drill equipped with a Jiffler-type agitator.

3.1.4. Mix for 3 to 5 minutes (CSA A179-14 (2024) standard). If necessary, add water to achieve the desired consistency.

3.1.5. Let the mixture rest for 2 to 5 minutes, then mix again for about 1 minute.

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

3.2. MIXING LARGE QUANTITIES

3.2.1. Use a mortar mixer with the appropriate capacity (the mixer must be filled to at least ¾ capacity). Start the mixer. Pour in the required amount of potable water, i.e., 4.0 liters of water per 30 kg (66 lb) of dry material.

3.2.2. Gradually add the dry material. Mix for 3 to 5 minutes (CSA A179-14 (2024) standard). If necessary, add water to obtain the desired consistency.

4. APPLICATION

4.1. Spread the fresh mortar in an even layer. Apply mortar to the end of the element and put it in place. Using a level or a line, level the element in the mortar bed with small, sharp taps.

4.2. Fill all joints. Do not realign masonry units once they are in contact with the mortar.

Note: Mortar must be applied within 1½ hours after mixing if the ambient temperature is 77 °F (25 °C) or higher, and within 2½ hours if the temperature is below 77 °F (25 °C). Any mortar not used after this period of time should be discarded.

5. FINISHING

5.1. To improve their appearance and maximize their weather resistance, all joints must be finished (compacted and smoothed) with the appropriate tools (metal, Plexiglas, etc.).

5.2. Smoothing should always be done by compaction as soon as the mortar loses its plasticity, i.e., as soon as a finger impression remains marked in it.

5.3. It is impossible to specify a precise time for finishing the joint; the mason's judgment must be relied upon in this case.

6. PROTECTION AND CURING

6.1. PRECAUTIONS

6.1.1. Protect structures from the elements with a tarp to limit water content as required by CSA A371-14.

6.1.2. Protect finished work from mortar splashes using tarps.

6.1.3. Protect and cover surrounding areas and objects (windows, openings, metal flashings, spandrels, and other products sensitive to alkaline products).

6.2. COLD WEATHER CONDITIONS

6.2.1. Protect from freezing temperatures below 5 °C (41 °F) and rain for at least the first 48 hours after installation.

6.2.2. It is recommended that freshly completed work be kept sheltered from the elements for a period of 5 days during periods when there is a high risk of frost.

6.3. CONDITIONS IN HOT WEATHER

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

7. CLEANING

7.1. Clean equipment with water while the mixture is still soft. Once the mixture has hardened, only mechanical cleaning will be effective.

7.2. Throughout the work, carefully remove mortar splashes and stains using burlap and/or a wooden trowel.

7.3. Consult the manufacturer of the elements and the technical data sheets for cleaning products when more thorough washing is required. Ideally, masonry mortar should be allowed to cure for at least 28 days before washing. However, it is recommended that you consult the manufacturer's recommendations for cleaning products to ensure that they are compatible with the masonry elements.

7.4. Avoid using high-pressure cleaning or abrasive techniques such as sandblasting, glass beads, or other methods. Always perform a sample test and wait 3 days before proceeding.

8. PACKAGING

This product is packaged in 30 kg (66 lb) paper bags. A pallet of 30 kg (66 lb) bags contains 64 bags.

9. STORAGE

9.1. INDOOR STORAGE

Store in a cool, dry place. Avoid placing bags directly on the floor.

9.2. OUTDOOR STORAGE

Cover bags with a waterproof cover. Do not store directly on the ground.

9.3. SHELF LIFE

The shelf life is 12 months in unopened and well-protected bags.

10. FIRST AID

CAUSES SEVERE BURNS AND SERIOUS EYE DAMAGE. You cannot rely on pain to detect burns caused by cement. Portland cement can cause dermatitis or sensitization. Repeated or prolonged inhalation of dust can cause lung damage or cancer.

WEAR IMPERMEABLE 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 are likely to be exceeded. Do not eat, drink, or smoke when using this product. Before handling, read and understand the safety information on this label and on the Safety Data Sheet available online at www.daubois.com. In case of emergency: 1-800-535-5053.

FIRST AID: Wash contaminated body and clothing thoroughly and immediately. If in eyes: Rinse cautiously with water for several minutes; remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: rinse mouth; do not induce vomiting. If skin burns, irritation, or rash occurs: get medical attention immediately. Consult a doctor immediately if symptoms are severe or persistent. Contains silica sand and Portland cement or masonry or mortar, and may contain hydrated lime or additional cementitious materials such as fly ash/silica fume. Dispose of container and contents in accordance with all regulations.

11. TECHNICAL SERVICE

Les Produits Daubois Inc. offers the option of coloring the mortar at the factory so that it matches the masonry element perfectly. To do so, a representative sample of at least 6 cm^2(1 in^2) of the surface of the element to be matched is required. Once the color matching is complete, Daubois Products Inc. will provide a sample strip measuring 8 cm by 1 cm (3 1/4 in. by 3/8 in.) to its customers for approval.

Les Produits Daubois Inc. also has a sample box containing a range of colors for type N mortar, which is generally available in stock. Contact a sales representative to view the color box, paper chart, or for any other information.

Contact Daubois Products Inc. for more information on application methods or conditions, as well as to obtain the latest version of technical documents.

Tel: 1 (800) 561-2664, (514) 328-1253 Fax: (514) 328-7694

Daubois Products Inc.

6155 Des Grandes-Prairies Blvd., Saint-Léonard, QC, Canada H1P 1A5

http://www.daubois.com

12. WARRANTY

Get 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 license from Les Produits Daubois Inc. ©2025 Quikrete International, Inc.

13. WARNING

Color variations may be observed in the final result even if the mortar used has been pre-colored at the factory and complies with the requested specifications. These variations are mainly caused by various application situations such as:

- Delay before finishing (smoothing joints).
- Variable moisture content of the elements.
- Lack of protection during application and work stoppages/interruptions.
- Inappropriate or excessive washing.

The final choice of color for the entire project should be based on the result obtained after creating a sample (standard) using full bags.

TECHNICAL DATA TABLE

Characteristic	Deadline	Results[1]
Spread, ASTM C-230	—	105% to 115%
Vicat cone penetration, ASTM C-780	—	45 to 55 mm
Compressive strength, ASTM C-109	7 days 28 days 28 days	min. 1.5 MPa (217 psi) min. 2.5 MPa (362 psi) Average value [3] 3.5 MPa (507 psi)
Vapor transmission, ASTM E-96	—	22 perms
Water absorption, ASTM C-1403	24 hours	100 g/100 cm^2
Tensile adhesion to concrete block, CSA A23.2-6B	28 days	0.51 MPa (74 psi)
Drying shrinkage, ASTM C-596	91 days	0.12
Water retention. ASTM C-1506 [2]	—	min. 80% of initial spread
Flexural strength, ASTM C-348	7 days 28 days	1.2 MPa (174 psi) 1.4 MPa (203 psi)
Air content, ASTM C-185	—	Maximum 18% [2] 8 to 12% [3]
Density	—	1980 kg/m^3 (123 lb/ft^3)
Yield from a 30 kg (66 lb) bag	—	0.015 m^3 (0.53 ft^3)
Approximate number of bricks laid per 30 kg bag	—	45 to 50 bricks at 6.5 bricks/ft^2

[1] *Results obtained in the laboratory at 23°C, humidity > 90% RH, for a standard sample mixed to achieve a spread of 110 ± 5%. These results may vary from one sample to another and are indicative of the mortar's performance. They cannot be used to accept or reject the use of the product.*

[2] *Coarse Type O 1-2.5-8 mortar prepared in the laboratory and mixed to obtain a spread of 110 ± 5% that meets the specifications required by CSA A179-14 (2024) for Type O mortar.*

[3] *Average value obtained during quality control analyses. Results may differ from this value but still comply with CSA A179-14 (2024), as stipulated in 1.*

[4] *1-2.5-8 Coarse Type O mortar is formulated to meet the specifications prescribed in Table 6 of CSA A179-14 (2024) for Type O mortar.*

Note: As described in Table 6 of CSA A179-14 (2024), the compressive strength of mortar prepared on site is approximately two-thirds of the compressive strength obtained for the same mortar prepared in a laboratory.