



“Float and Back-butter”

Method for Facades

TDS 127

Irregular and uneven building facades often require one or more layers of plaster, float coat or render to make the surface true and plumb before stone or ceramic tile can be installed by the thin bed method. Labor costs for such work are often excessive, especially for concrete buildings with block/brick infill which might need 1-1½" (25-40mm) of mortar to straighten faces.

4237 Latex Additive can be used to gauge a 1-1½" (25-40mm) thick “float coat” mortar that hangs well on concrete and masonry facades. This “one step” method is twice as fast as installing metal anchors and eliminates the significant cost of stainless steel anchors, metal anchor support frames and epoxy adhesive used in fixing the anchors into the building frame.

In some cases, facades are so irregular that as much as 1.2 lb/ft² (6kg/m²) of a "Float & Back Butter" Mortar, consisting of 4237 Latex Additive and 3701 Mortar Admix is needed. **Even with this amount, the labor savings due to application speed are as much as 40-50% over anchors.**

Preparation:

Clean the wall surface to remove form oil, cement laitance or contamination using the proper cleaning equipment (see TDS 118). Establish elevations, plumb lines and the location of expansion (dilatation) joints. Adjust the width and spacing of such joints to fit the tile module and industry standards. Factory fabricated expansion joints, installed beforehand, can be used as gauging and plumb guides for the finished tile work. Temporarily fasten a wood or metal strip horizontally to support the bottom course of stone or ceramic.

Mortar Mixture:

440 lbs. (200 kg) 226 Thick Bed Mortar
[or 110 lbs. (50kg) portland cement and 330 lbs. (150kg) masonry sand (0.0-2.5mm; ASTM C144)];
55 lbs. (25kg) 4237 Latex Additive*

*Note: during cold weather [$<40^{\circ}\text{F}$ ($<5^{\circ}\text{C}$)], use 4237RS Rapid Latex Additive

Mixing:

Stop the rotating blades of a forced action mortar mixer (do **not** use a rotating drum cement mixer). Charge the mixer with the proper quantity of 4237 Latex Additive. With mixer running, add proper amount of 226 Thick Bed Mortar Mix (or proper amount of portland cement and masonry sand). Run mixer 1 minute or until mortar is wet and plastic. Do **not** overmix - this will beat air into the mortar and weaken it. If necessary, adjust mortar consistency by adding 4237 Latex Additive or 226 Thick Bed Mortar (or portland cement). Discharge mixer promptly

Application:

Apply and work a small quantity of LATICRETE mortar into good contact with the wall surface. Then float as much as 1-1/2" (40 mm) of additional mortar to reach the required thickness. Trowel fresh mortar onto the back of each piece of stone or ceramic. Press the stone or ceramic into the float coat, resting the first course on the temporary support strip. Tap or beat the stone or ceramic until plumb and level. Additional courses may be applied immediately after the first, if spacers are inserted to prevent slippage and maintain uniform joints. Check vertical and horizontal alignment as the work proceeds. Clean mortar from tile faces while fresh with a wet sponge. Use water to clean tools. Spacers and bottom support strip can be removed after 24 hours, except during cold weather [$<40^{\circ}\text{F}$ ($<5^{\circ}\text{C}$)], when they should be left in place until the mortar hardens.

Cautions:

Expansion joints must be provided in accordance with drawings, must go completely through the mortar bed to the supporting wall and must be filled with an appropriate, exterior grade sealant and foam backer strip.

Consumption/Coverage:

Note: mortar consumption/coverage is estimated and may vary due to site conditions.

MORTAR		4237	
<u>THICKNESS</u>	<u>lb/ft²</u>	<u>kg/m²</u>	<u>Latex Additive</u>
3/8" (10mm)	4	20	0.2 qts./ft ² (2.2 l/m ²)
3/4" (20mm)	8	40	0.4 qts./ft ² (4.4 l/m ²)
1¼" (30mm)	12	60	0.6 qts./ft ² (6.6 l/m ²)
1½" (40mm)	16	80	0.8 qts./ft ² (8.8 l/m ²)

Mortar density: approximately 124 lb/ft³ (2,000kg/m³).

Physical Characteristics of Mortar:

Shear Bond Strength (ANSI A118.4; Marble/Marble)

	<u>lb/in.²</u>	<u>MPa</u>	<u>kg/cm²</u>
1 day	>200	>1.38	>13.8
3 days	>250	>1.72	>17.2
28 days	>450	>3.10	>31.0

Technical Data Sheets are subject to change without notice. For latest revision, check our website at <https://laticrete.com>
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LATICRETE INTERNATIONAL, INC. ▪ 1 LATICRETE Park North ▪ Bethany, CT 06524-3423 USA
800.243.4788 ▪ support@laticrete.com ▪ www.laticrete.com

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