ORCO BLOCK & HARDSCAPE
Family Owned Since 1946

Bonding Mortar (Thin Bed)

# OBP VBM® Thin Set



## Technical Data

Satisfies the following:

- **ASTM C270, Modified, Properties**
- **ASTM C109, modified**
  *Standard Test for Compressive Strength of Hydraulic Cement Mortar*
- **ANSI A118.4, Shear Bond (Tile)**
  *Specifications for Improved Modified Dry-Set Cement Mortar*

## Description

An economical dry, pre-blended, modified thin-set bonding mortar with non-sag properties.

## Uses

Thin Set for adhering ceramic tile, quarry tile, thin brick, precast concrete, natural stone, manufactured stone, porcelain, certain glass tiles and similar types of veneers and pavers. Interior and exterior use cases in residential applications.

## Color

Stock colors are Natural Gray (that has no color) and Tan.

## Packaging

- 50 lb sacks (56/pallet)
- Store off ground in covered, cool, clean & dry location to maximize shelf life.

## Approximate Coverage

- 80-95 Sq.Ft in 1/4” x 1/4” x 1/4” configuration (6 x 6 x 6mm)
- 60-70 Sq.Ft in 1/4” x 3/8” x 1/4” configuration (6 x 9.5 x 6mm)
- 35-40 Sq.Ft in 1/2” x 1/2” x 1/2” configuration (13 x 13 x 13mm)

## Safety

Always review Safety Data Sheet (SDS) prior to using this product. Available at ORCO.COM, or contact support.

## Support

For questions, technical support, order inquiries, and product information, call (951) 685-8498 or email INFO@ORCO.COM.

## VBM Thin-Set Advantages

- Good bond strength
- Good water retention properties
- Good tack and non-sag

## ANSI A118.15 Requirements

Glazed Wall Tile:

- 7 days > 300 psi
- Water immersion > 200 psi

Porcelain Tile:

- 7 days > 200 psi
- 28 days > 200 psi

## Mixing & Installation

- Add mortar to clean, potable water and mix approximately 3-5 minutes.
- Mix water 19-20% by weight, (Approx. 4-5 qts/ 50 lb bag).
- Mix at low speed to minimize air entrainment.
- Consistency - wet enough to ooze around veneer but dry enough to hold veneer in place.
- Moisten substrate prior to application.
- Apply < 1/2” thick bonding mortar to substrate or veneer.
- Press firmly into place, ensure veneer has 100% coverage.
- See ORCO VBM Application Guide for additional information.

## Limitations

- Verify substrate is structurally sound and conforms to good engineering practices.
- Compatible Substrates:
  - Lath and Portland cement plaster
  - Concrete block (untreated)
  - Masonry brick (untreated)
  - Concrete (prepared)
  - Cement mortar beds and backer board
- User responsible to verify mortar is applicable for intended application.
- Avoid applications in high heat, wind or cold.
- Do not apply when temperatures are below or expected to fall below 40°F prior to cure
- All surfaces must be sound, clean, and free from any dirt, oil, paint, bond breakers, efflorescence or any contaminants which may hinder bond.
- Substrate deflection under all live, dead and impact loads, including concentrated loads must not exceed L/600, where L= span length.
- Substrate cracks or excessive movement may telegraph through mortar or cause bond failure
- Masonry products and substrate conditions can vary dramatically - Follow proper design and application procedures.
- Always perform quality control testing before and during application.
- Not recommend over particle board, plywood, luan, or hardwood floors
- Not recommended for green marble or water sensitive stone
- Color may vary - jobsite mockups are highly recommended.

## Warranty & Claims

ORCO manufactured articles are warranted for 1 year, conforming to standards and specifications ORCO certifies and publishes at the time of shipment. **ORCO MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSES), OTHER THAN THE FOREGOING EXPRESS WARRANTY.** Products manufactured by others and sold by ORCO are solely warranted by the originating manufacturer. Use or installation of ORCO sourced product by the CUSTOMER shall be an admission by the CUSTOMER and conclusive proof that such articles are in every respect as warranted and shall release ORCO from any and all claims for damage or loss sustained by CUSTOMER. For product not yet installed, CUSTOMER must submit a written breach of WARRANTY notice within 7 calendar days of delivery. Upon ORCO's request, CUSTOMER is responsible for all costs incurred in returning product to the originating ORCO facility for evaluation. If ORCO's investigation supports the claim, the parties agree that CUSTOMER'S sole and exclusive remedies shall be replacement of the defective article or refund of the price of the defective article at ORCO's election. IN NO EVENT SHALL ORCO BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Variations in color or shades of color, texture and site of aggregate are inherent in these products. Exact matches are never guaranteed. No claims will be allowed for these variations. Since natural gray products reflect the natural color of the raw materials used (no color is added during manufacturing), ORCO will reject any claim regarding gray color variation. Efflorescence (white powdery deposit) is a naturally occurring phenomenon and is not considered a defect. Samples of ORCO products are submitted as representative of type, color, shade, and texture. The products subsequently furnished may vary from such samples. ORCO will not be liable for and will not recognize any claims made after the start of installation on products said to be incorrectly sized or shaded, inconsistent texture, not matching prior shipments, or otherwise held to be unsatisfactory. Any charges incidental to inspection or tests made by or on behalf of the CUSTOMER to determine compliance with specifications shall be paid by the CUSTOMER. Natural elements - like sun, wind, and moisture - plus site specific conditions / applications may cause products to fade, which is never warrantable. All product weights and coverage / usage charts and listings are estimated. All product formulations and published product counts per pallet are subject to change without notice. ORCO does not obligate itself to furnish signed receipts for material delivered.

## Caution

This product should only be used outdoors. Protective face and eye protection, impervious gloves, long pants and long sleeve shirts are recommended. Use NIOSH approved mask for silica dust. Prolonged exposure to dust may cause delayed lung disease. Freshly mixed materials may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly. If any materials get into the eyes, rinse immediately and repeatedly with clean potable water and get prompt medical attention. See SDS sheet.

## ⚠ Warning

This product can expose you to Silica, crystalline (airborne particles of respirable size) which is known to the State of California to cause cancer. For more information go to **www.p65Warnings.ca.gov.**

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