

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Housing - Federal Housing Commissioner**

Series and Series Number:
MATERIALS RELEASE NO: 1114e
(Supersedes issue dated
May 18, 2000)

**TO: DIRECTORS, SINGLE FAMILY HOCs
DIRECTORS, MULTIFAMILY HUBs**

ISSUE DATE

March 14, 2007

REVIEW DATE

March 14, 2010

SUBJECT:

1. **Product** "Diamond Wall" Stucco System
2. **Name and address of Manufacturer** Omega Products International, Inc.
P. O. Box 1889
Orange, CA 92668

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: A combination wall and optional insulation finish system for application to exterior walls.

DESCRIPTION:

The Omega Diamond Wall, Diamond Wall Insulation, and Diamond Wall PM Insulating Exterior Stucco Systems are proprietary mixtures of Portland cement, sand, fibers, and proprietary ingredients reinforced with wire fabric or metal lath, and applied to substrates of expanded polystyrene (EPS), extruded polystyrene (XEPS) and polyisocyanurate form plastic insulation boards, Fome-Cor Board Lathing Material, concrete or concrete masonry, wood structural panels, fiberboard, and gypsum sheathing. The exterior coating is a minimum 3/8" thick.

GENERAL CONDITION:

The Diamond Wall System shall be installed or applied in accordance with Omega Products International, Inc., specifications, typical details and local building code requirements. The system shall be installed by an applicator who has signed and submitted the Diamond Wall Information Manual to Omega Products International, Inc.

Omega Products International, Inc. requires that the specified substrate is suitable for the application of the system. A weather resistive barrier shall be provided together with a built-in means of disposing of the leakage.

TABLE 1 Requirements for Diamond Wall Stucco System

<u>Material Requirements (if used)</u>	<u>Values</u>	<u>Product or Design Specifications</u>
Fiber cement board or Gypsum sheathing	compliance	ASTM C-1186
Metal lath	compliance 1" x 20" ga.	FED QQ-L-101C
Polystyrene foam insulation board	acceptable compliance	
Density, minimum	1.5 lbs/cu. ft.	
Thickness, minimum	1 inch	
Sand	compliance	ASTM C-144
Caulks and sealants, minimum	Type S Grade NS 20 year warranty	ASTM C-920
Portland cement	Type I, II-I, or II	ASTM C-150
Coating thickness	3/8" minimum	ASTM C-140 Sec. 7
Surface Impact	no damage with 30 lb weight at 6 ft.	ASTM E-695

INSTALLATION:

The installation of the Diamond Wall system shall be in accordance with the manufacturers installation instructions. The system shall be installed by applicators that have been registered by the manufacturer.

2. The Diamond Wall shall be delivered to the job site in packages with the name of the manufacturer, address, installation instructions, compliance to this MR and with a warranty statement.

3. Diamond Wall system is a cement based material. The coating is composed of 80 lbs. of material added to 4.5 - 6.0 gallons of water and 180 - 240 pounds of sand.
4. The substrate surface shall be determined by the applicator to be free of release agents and other residues and in all other ways suitable for application of the system. The system shall only be applied to those substrates approved by the manufacturer.
5. No additives, or materials of any kind, such as binders, antifreeze agents, accelerators, fillers, etc. except specified amounts of clean water, shall be allowed unless specifically approved in writing by the manufacturer.
6. The ambient temperature shall be 40° Fahrenheit or greater and rising at the time of application. The ambient temperature shall be 40° Fahrenheit or greater and shall be protected against hot, windy, dry conditions 24 hours thereafter. The manufacturer shall be responsible for making any disputed determinations.
7. The polystyrene board shall not be used in contact with chimneys or other surfaces which could heat the board to a temperature greater than 149° Fahrenheit. Provide clearance from heat sources in conformance with the National Fire Protection Association publication NFPA No. 89M.
8. The polystyrene insulation board shall be coated so that no portion is exposed. The requirements shall be carefully observed at the base of the insulation, around all doors and windows, around all wall penetrations for utilities and other wall penetrations or openings.
9. All areas where the system joins other materials or terminates shall be protected from moisture intrusion with a product or method specified by manufacturer. The surfaces to receive sealant and sealant prime coat shall cure a full, 14 to 21 days, prior to installation of sealant prime coat and sealant.
10. No sealant shall be applied to the system until it has cured 14 to 21 days. Backer rod may be installed to prevent water intrusion during curing.
1. All joints shall be made so that the caulking and sealing cements can be removed and replaced. The sealant and caulks shall have a 20 year performance warranty. It should be noted that the caulks and sealants have to be periodically replaced by the owner or as specified by the manufacturer depending on the conditions of caulks, sealants or adhesive.

12. The exterior cementitious coating shall be applied in one coat to a minimum 3/8 inch thickness. The metal lath shall be embedded in the coating. Fasteners for lath shall penetrate 1 inch minimum into wood studs. Flashing, corner reinforcement, and metal trim shall be installed as set forth by Omega Products International, Inc. The stucco shall be applied by applicators approved by Omega Products International, Inc. at a minimum ambient temperature of 40° Fahrenheit and shall be protected against hot, windy, dry conditions. Woven wire, 1 inch, 20 gauge galvanized stucco netting lath shall be applied tightly over substrate using 11 gauge galvanized roofing nails with 7/16 inch head spaced 6" on center or 16 gauge, galvanized staples spaced six inches on center with a minimum one inch penetration. Staples shall have a minimum crown width of 7/8 inch. Care shall be taken to avoid over-driving fasteners. Lath shall be applied with 1/2 inch end and side laps. Lath shall be pulled tight so the furring will be flush against the substrate.

IDENTIFICATION AND LABELING:

Omega Products International shall certify that the products covered under this MR conform to the requirements of the MR. Each product certified as conforming to this MR shall be marked with the following information:

1. The name or Trademark of Omega Products International
2. The product name
3. MR 1114
4. Manufacturing Plant
5. Date of Manufacture

PRODUCT CERTIFICATION:

Omega Products International, Inc. utilizes the AC-10 guideline from ICC-ES for all Diamond Wall quality control purposes.

MANUFACTURING LOCATIONS:

The products covered under this MR will be produced at the following plants:

Omega Products International, Inc.
1681 California Avenue
Corona, CA 92881
(931) 737-7447
Plant Manager: Lutz Lampater

Omega Products International, Inc.
3362 Fitzgerald Road
Rancho Cordova, CA 92881
(916) 635-3335
Plant Manager: Rich Gregory

Omega Products International, Inc.
5576 Wynn Road
Las Vegas, NV 89118
(702) 739-9040
Plant Manager: Mike Martin

WARRANTY:

Omega Products International, Inc., shall warrant the Diamond Wall system for seven (7) years against faulty performance. The warranty shall include correction of delamination, chipping, peeling, blistering, flaking, and other serious deterioration of the system. Should any such defects occur, Omega Products International, Inc. shall make a pro rata allowance for replacement, or pay the owner the amount of the allowance. Omega Products International, Inc. shall not be liable for damages or defects resulting from misuse, natural catastrophes (other than hail), casualty or other causes beyond the control of Omega Products International, Inc.

The installation of the Diamond Wall system shall be in accordance with the Omega Products International, Inc. application instructions and the plans and specifications approved by Omega Products International, Inc. If Omega Products International, Inc. finds that the installation deviates significantly from the application instructions and the approved plans and specification, Omega Products International, Inc. shall notify the owner, HUD and the builder that the installation is not satisfactory.

A copy of the warranty shall be given to the owner and to the local HUD Office upon completion of the property.

This warranty does not relieve the builder, in any way, of its responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.

3. When requested, provide the FHA Standards, Office of Manufactured Housing Programs, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to:

U. S. Department of Housing and Urban Development
FHA Standards, Office of Manufactured Housing Programs
451 7th Street, SW, Room 9168
Washington, DC 20410-8000

Appropriate user fee shall be sent to:

U. S. Department of Housing and Urban Development
Miscellaneous Income – Technical Suitability of Products Fees
Bank of America
P. O. Box 198762
Atlanta, GA 30384-8762

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,

2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm, and is not transferable to any person or successor entity.
