SECTION 07 32 13

CLAY ROOF TILES

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* CERAMICA VEREA USA ; Clay Roof Tiles.
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This section is based on the products of CERAMICA VEREA USA , which is located at:
7275 N.W. 61 St.
Miami, FL 33166
Tel: 786-641-9154
Email: [request info (rooftile@hotmail.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=CERAMICA+VEREA+USA++&coid=49857&rep=&fax=&message=RE:%20Spec%20Question%20(07320ver):%20%20&mf=)
Web: [www.vereaclaytile.com](http://www.vereaclaytile.com)
 [ [Click Here](http://www.arcat.com/arcatcos/cos49/arc49857.html) ] for additional information.
Verea clay roof tile is the finest roof tile from Spain. We provide superior European quality at an incredible value and give end users the ability to enjoy the superior characteristics of clay roof tile products while being very reasonably priced . The color permanence, durability, and sustainability of clay roof tile are simply not possible with asphalt shingles, concrete roof tile, or metal roof panels.
We offer a variety of profiles, colors, and textures to compliment a wide range of architectural styles We have several stocking distributors throughout the US so product availability is a non issue. Our network of reps will assist you with selecting the appropriate tile for a given job and we strive to provide the best customer service in the industry..

1. GENERAL
	1. SECTION INCLUDES
		1. Clay roof tiles and accessories.
	2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 06 10 00 - Rough Carpentry.
		2. Section 07 22 16 - Roof Board Insulation.
		3. Section 07 62 00 - Sheet Metal Flashing and Trim.
		4. Section 07 71 23 - Manufactured Gutters and Downspouts.
		5. Section 07 72 63 - Waste Containment Assemblies.
		6. Section 08 60 00 - Roof Windows and Skylights.
		7. Division 15 Mechanical.
		8. Division 16 Electrical.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete any references below not cited in the text below. Add others as required.

* + 1. ASTM International:
			1. ASTM C91 - Standard Specification for Masonry Cement.
			2. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar.
			3. ASTM C1167 - Standard Specification for Clay Roof Tiles.
			4. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials.
		2. International Standards Association (ISO):
			1. ISO 9001 - Quality Management Systems.
			2. ISO 14001 - Environmental Management.

\*\* NOTE TO SPECIFIER \*\* Miami-Dade County Notice of Acceptance (NOA) apply only to projects and jurisdictions that require these approvals for hurricane zones, wind speeds, impact resistance or similar which may be located outside of Florida. Roof assembly design and materials must exactly match the tested assemblies. Confirm with the project architect. Delete if not required.

* + 1. Miami-Dade County Approvals:
			1. NOA No.: 13-0226.01 Clay Barrel Roof Tile.
			2. NOA No.: 13-0226.02 Clay Spanish "S" Roof Tile.
			3. NOA No.: 14-0107.03 Verea Flat Tile.
		2. Florida Roofing, Sheet Metal and Air Conditioning Contractors Association Inc. (FRSA) and Tile Roofing Institute (TRI):
			1. Concrete and Clay Roof Tile Installation Manual.
			2. Mechanically Fastened Tile Guidelines.
		3. Florida Building Code Test Protocols, Roofing Application Standard (RAS):
			1. RAS-120 - Mortar and Adhesive Set Tile Applications..
			2. Florida Building Code Approval No. FL17152-R1.
		4. Western States Roofing Contractors Association (WSRCA) and Tile Roofing Institute (TRI):
			1. Installation Manual for Moderate Climate Regions.
		5. Canadian National Standards Association (CAN/CSA):
			1. CAN/CSA-A220.1 - Installation of Concrete Roof Tiles.
	1. SUBMITTALS
		1. Submit in accordance with Division 01 Section "Submittal Procedures".
		2. Product Data: Submit manufacturers current published data on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
		3. Certificates:
			1. Manufacturer and independent testing agency test certifications or compliance reports.
		4. Shop Drawings:
			1. Dimensioned scale drawings and details indicating tile layout, location of cut outs, penetrations and roof mounted equipment, special shapes and trims, with all thicknesses and interface between materials and adjacent construction.
			2. Size and location of flashing, fasteners, joint locations, installation details, tile layouts, wind pressures and thermal movements.
			3. Installation details including flashing, roof edges, roof slope limitations, penetrations, and drainage paths.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected. Specify colors at the end of Part 2.

* + 1. Selection and Range Samples: Three to five full size units to demonstrate manufacturers full range of colors and textures available.
		2. Verification Samples: Three to five full size units indicating full range of color and texture to be expected in the final installation.
		3. Qualifications: For installer and manufacturer.
		4. Closeout Submittals:
			1. Maintenance instructions.
			2. Warranty.
	1. QUALITY ASSURANCE
		1. Clay roofing tile materials and installation shall meet or exceed the following:
			1. Local building code requirements.
			2. Freeze-Thaw Cycles: Minimum 150.
			3. Transverse Breaking Strength: Minimum 800 pounds (362 kg).
			4. Recycled Content: Minimum 25 percent.
		2. Qualifications Manufacturing plant shall comply with ISO 9001 and 14001 requirements.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up:
			1. Provide mock-up of each type of assembly including associated components, accessories, and methods of adjoining construction.
			2. Minimum size: 9 x 9 feet (3 x 3 meters).
			3. Accepted mock-up may remain as part of the completed work.
	1. DELIVERY, STORAGE AND HANDLING
		1. Coordinate delivery schedule with the General Contractor and project schedule to minimize on site storage.
		2. Do not exceed structural loading with workers or installation materials. Install temporary battens where required.
	2. WARRANTY
		1. Product Warranty: Manufacturers standard warranty against deficiencies in materials or fabrication.
			1. Warranty Period: 50 years.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: CERAMICA VEREA USA , which is located at: 7275 N.W. 61 St.; Miami, FL 33166; Tel: 786-641-9154; Email: [request info (rooftile@hotmail.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=CERAMICA+VEREA+USA++&coid=49857&rep=&fax=&message=RE:%20Spec%20Question%20(07320ver):%20%20&mf=); Web: [www.vereaclaytile.com](http://www.vereaclaytile.com)
	2. STILES
		1. Description: One-piece overlapping units to meet ASTM C1167, Grade I.
			1. Dimensions: 19-3/4 inch long by 11-1/3 inch wide by 3 inch high (501 mm long by 287 mm wide by 76 mm high).
			2. Weight: 7.9 pounds (3.58 kg).
			3. Pieces per 100 square feet (9.29 square meters) with 3 inch (76 mm) overlap: 88.

\*\* NOTE TO SPECIFIER \*\* Select color. Delete colors not required.

* + - 1. Provide in the following color:
				1. Red.
				2. Brown.
				3. Graphite.
				4. Vintage.
				5. Fume.
				6. Jacobea.
				7. Aneja.
				8. Santiago.
				9. Peach.
				10. Art Deco Blue.
				11. Art Deco Black.
				12. Art Deco White.
				13. Art Deco Dark Green.
				14. Art Deco Green.
	1. BARREL TILES
		1. Description: One-piece overlapping units to meet ASTM C1167, Grade I.
			1. Dimensions: 19-3/4 inch long by 8-1/4 inch wide by 3 inch high (501 mm long by 209 mm wide by 76 mm high).
			2. Weight: 5.2 pounds (2.36 kg).
			3. Pieces per 100 square feet (9.29 square meters) with 3 inch (76 mm) overlap: 154.

\*\* NOTE TO SPECIFIER \*\* Select color. Delete colors not required.

* + - 1. Provide in the following color:
				1. Red.
				2. Brown.
				3. Graphite.
				4. Vintage.
				5. Fume.
				6. Jacobea.
				7. Aneja.
				8. Santiago.
				9. Peach.
				10. Art Deco Green.
				11. Art Deco White.
				12. Art Deco Blue.
				13. Art Deco Gray.
				14. Art Deco Black.
	1. FLAT PROFILE TILES
		1. Description: Overlapping flat tiles to meet ASTM C1167, Grade 1.
			1. Dimensions: 15.9 inch long by 10.14inch wide by 1 inch high (404 mm long by 258 mm wide by 25.4 mm high).
			2. Weight: 5.5 pounds (2.95 kg).
			3. Pieces per 100 square feet (9.29 square meters) with 3 inch (76 mm) overlap: 128.

\*\* NOTE TO SPECIFIER \*\* Select color. Delete colors not required.

* + - 1. Provide in the following color:
				1. Red.
				2. Brown.
				3. Graphite.
	1. ACCESSORIES

\*\* NOTE TO SPECIFIER \*\* Select accessories. Delete accessories not required.

* + 1. Substrate Materials:
			1. Decking: Solid, structural material adequate to meet project loading requirements.
			2. Battens: Decay resistant, nominal 1 x 2 inches (25 x 50 mm), not bowed or twisted.
			3. Nailer Boards: Decay resistant, nominal 2 inches (50 mm) by sufficient height to satisfy project conditions, not bowed or twisted.
		2. Underlayment System: Self-adhered membrane, minimum 40 mils thickness.

\*\* NOTE TO SPECIFIER \*\* Select mortar, adhesive, or mechanical attachment based on project details. Delete installation materials and fasteners not to be used.

* + 1. Mortar: Factory premixed, bagged, and approved by the local building authority. Job site mixtures will be permitted for cosmetic purposes only.
			1. Cement: To ASTM C91, Type M.
			2. Sand: to ASTM C144, uniformly graded, clean and free from organic materials.
			3. Lightweight Aggregate: to ASTM C332.
		2. Adhesive: Provide 2-Component Foam Roof Tile Adhesive AH-160 by 3M or equivalent and approved by the roofing tile manufacturer.
		3. Fasteners:
			1. Tile Fasteners: Compatible with substrate materials.
				1. Screws: Corrosion resistant, minimum #8 course thread, of sufficient length to penetrate minimum 3/4 inch (19 mm) into or through thickness of the roof deck or battens.
				2. Nails: Corrosion resistant, of sufficient length to penetrate minimum 3/4 inch (19 mm) into or through thickness of the roof deck or battens.
		4. Provide manufacturer's accessory trim and clay roof pieces for use at hips, rakes, ridges, and valley terminations manufactured for each tile profile, including but not limited to the following:
			1. Hip / Ridge tiles.
			2. 3-Way ridge tiles.
			3. 4-Way ridge tiles.
			4. Hip starters.
			5. Ridge ends.
			6. Precut double eave tiles.
			7. 90 degree rakes.
			8. Under ridges.
			9. Ventilated barrels.
			10. Ventilated S tiles.
			11. Barrel bird stops.
			12. S-Tile bird stops.
			13. Chimney pieces.
			14. Hurricane clips.

\*\* NOTE TO SPECIFIER \*\* Select eave closures. Delete types not required.

* + - 1. Stainless steel eave closures.
			2. Copper eave closures.
			3. Prefabricated EPDM synthetic rubber eave closures.
			4. Prefabricated clay eave closures.

\*\* NOTE TO SPECIFIER \*\* Select stainless steel or copper flashings. Delete type not required.

* + - 1. Preformed Stainless Steel Flashings.
			2. Preformed Copper Flashings.

\*\* NOTE TO SPECIFIER \*\* Select stainless steel or copper edge returns. Delete type not required.

* + - 1. Stainless Steel Edge Returns.
			2. Copper Edge Returns.
1. EXECUTION
	1. EXAMINATION
		1. Verification of Conditions:
			1. Confirm work by others is installed per the project requirements. Do not cover work by others prior to inspection or acceptance.
			2. Inspect seams, penetrations and details, identify defects in writing to the Architect.
			3. Do not install over wet surfaces.
		2. Do not proceed until unacceptable conditions are corrected.
	2. PREPARATION
		1. Clean and prepare substructure in accordance with manufacturer's instructions.
		2. Protect underlayment during tile loading and stacking process. Immediately repair with like materials.
	3. INSTALLATION
		1. Install underlayment in accordance with the manufacturers instructions.
		2. Install flashing in accordance with FRSA/TRI Model Tile Guidelines and adjacent material manufacturers.
			1. Where pan flashing is used, provide of sufficient size to direct water back onto the roof tiles.
			2. Seal around pipes, vents, and other penetrations utilizing manufacturer's recommended accessories and details.
		3. Install clay perimeter and field tiles, components, and accessories in accordance with Roofing Application Standard RAS-120.
		4. Unless otherwise indicated on engineered shop drawings, provide minimum tile head lap of 3 inches (76.2 mm).
		5. Ensure proper ventilation is provided in the final installation.
	4. CLEANING AND PROTECTION
		1. Clean and protect tiles in accordance with the manufacturers instructions for the duration of the construction period.

END OF SECTION