GLADDING, McBEAN
DIVISION OF BASALITE BUILDING PRODUCTS, LLC
601 7th Street
Lincoln, CA 95648
www.gladdingmcbean.com

GLADDING, McBEAN CLAY ROOFING TILE

CSI Section:
07 32 13 Clay Roof Tiles

1.0 RECOGNITION

The Gladding, McBean clay roofing tiles recognized in this report have been evaluated for weather resistance, wind uplift resistance, and fire classification and found to comply with IBC Chapter 15 and IRC Chapter 9 for use as a component in a Class A, B, or C roof covering. The following code editions are recognized:

- 2015, 2012, 2009, 2006 International Building Code® (IBC)
- 2015, 2012, 2009, 2006 International Residential Code® (IRC)

2.0 LIMITATIONS

Use of the Gladding, McBean clay roofing tiles recognized in this report are subject to the following limitations:

2.1 The roof tiles shall be manufactured, identified, and installed in accordance with this report, the applicable code, and the Roof Tile Installation Manual. In the event of a conflict, this report governs.

2.2 Gladding, McBean's "clay roof tile shall be installed on roof slopes of 2½ units vertical in 12 units horizontal (21-percent slope) or greater." IBC Section 1507.3.2 and IRC Section R95.3.2, as applicable.

2.3 The supporting structure shall be designed to support the loads and is beyond the scope of this report.

3.0 PRODUCT USE

3.1 General: Gladding, McBean's clay roof tiles recognized in this report are identified in Table 2 and Figures 1 through 5 of this report.

These tiles and their accessory trim pieces:

- Comply with ASTM C1167;
- Provide a Class A Fire Classification when tested on combustible decks in accordance with ASTM E108.

3.2 Anchoring: Gladding, McBean's clay roof tiles can be anchored by fasteners complying with Section 1507.3.6 of the IBC or R905.3.6 of the IRC, as applicable.

3.3 Wind uplift resistance is addressed in Section 4.0 of this report.

4.0 PRODUCT DESCRIPTION

4.1 General: Gladding, McBean's roof tile installation shall be in accordance with the applicable code, the Concrete and Clay Roof Tile Installation Manual for Moderate Climate Regions, dated July 2015, published by the Tile Roofing Institute and the Western States Roofing Contractors Association, and this report. In the event of a conflict, provisions of this report govern. The TRI manual is available for download attached to ER-2015 from the UES website at www.uniform-es.org.

4.2 Attachment: Tile shall be attached to the roof structure based on the applicable code as noted in Table 1 of this report:

TABLE 1 – Attachment Design

Applicable Code	Criteria for Applicability	Design Information Location
2015 or 2012 IBC	Ultimate Design Wind Speeds (V_{ult}) ≤ 130 MPH and Mean Roof Height ≤ 60 feet	Roof Tile Installation Manual & Table 1507.3.7 of the IBC
2009 or 2006 IBC	Basic Wind Speed (3 sec gust) ≤ 100 mph and Mean Roof Height ≤ 60 feet	
2015, 2012, 2009 or 2006 IRC	Mean Roof Height ≤ 40 feet	Roof Tile Installation Manual & Section R905.3.7

4.3 Fire Classification: Gladding, McBean's roof tiles, installed in accordance with this evaluation report, are Class A fire-retardant roof coverings in accordance with Section 1505.2 of the IBC and Section R902.1 of the IRC, as applicable.

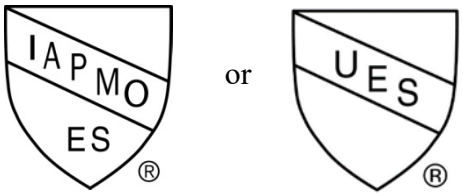
4.4 Reroofing Applications: Reroofing applications shall follow the requirements of the Concrete and Clay Roof Tile Installation Manual for Moderate Climate Regions. In addition, Section 1511 of the 2015 IBC, Section 1510 of the 2012, 2009, and 2006 IBC or Section R908 of the 2015 IRC, Section R907 of the 2012, 2009, and 2006 IRC, as applicable, shall be met.

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

Produced by International Association of Plumbing and Mechanical Officials. All rights reserved. Printed in the United States. Ph: 1-877-4IESRPT • Fax: 909.472.4171 web: www.uniform-es.org • 4755 East Philadelphia Street, Ontario, California 91761-2816 – USA

5.0 IDENTIFICATION

Shipping pallets are identified with the report holder's name (Gladding, McBean), manufacturing address, product name, installed weight, approved inspection agency, and evaluation report number (ER-510). Either IAPMO UES Mark of Conformity may also be used as shown below:



IAPMO UES ER-510

6.0 SUBSTANTIATING DATA

Data in accordance with ICC-ES AC180, dated February 2012 (editorially revised April 2015), manufacturer's descriptive literature, and installation instructions. Test results are from laboratories in compliance with ISO/IEC 17025.

Gladding, McBean's clay roof tiles are manufactured in Lincoln, California, under a quality control program.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Gladding, McBean's clay roof tiles to assess its conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org

TABLE 2 – Gladding, McBean Clay Roof Tiles										
Tile		**See Figure No's.**	**Installed Dry Weight** (psf)	**Center-to-Center Spacing** (inch)	**Head Lap** (inch)	**Dimensions** (inch)				**Tile Type/Grade [1]**
						Length	**Width**	**Thickness**	**Height**	
Cordova [2]		1	10.3	11.5	3	18	8	½	$2^{5}/_{8}$	Type I-High Profile/ Grade 1
Lincoln Interlocking		2	9.2	8.8	3	14	9	½	1¼	Type III-Flat Profile/ Grade 1
Placer Interlocking		3	11.2	9.8	3	15	10	¾	-	Type III – Flat Profile/ Grade 1
Italian [3]		4	10.4 [3]	19.0 [3]	4	18	12	⅝	2.0	Type III-Flat Profile/ Grade 1
Cotswold Shingles	6.5	5	8.9 to 11.4	Varies	Random, generally 8 inches	14	6.5	⅝	-	Type III-Flat Profile/ Grade 1
	7.25					14	7.25		-	Type III-Flat Profile/ Grade 1
	8.5					14	8.5		-	Type III-Flat Profile/ Grade 1
	9					14	9.0		-	Type III-Flat Profile/ Grade 1

For **SI:** 1 inch = 25.4 mm, 1 psf = 4.88 kg/m²

[1] Tile type and grade are based on ASTM C1167.

[2] Alternative: center-to-center spacing 10.75 inches o.c. with 4 inch head lap and an installed dry weight of 11.3 psf.

[3] See Figure 4 for installed weights and coverage when combined with other tile covers or pans.

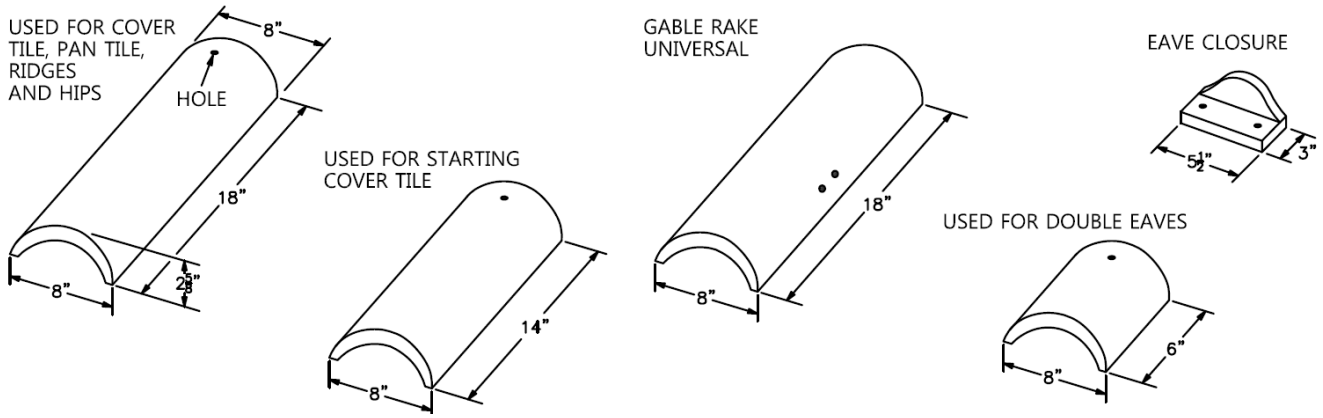
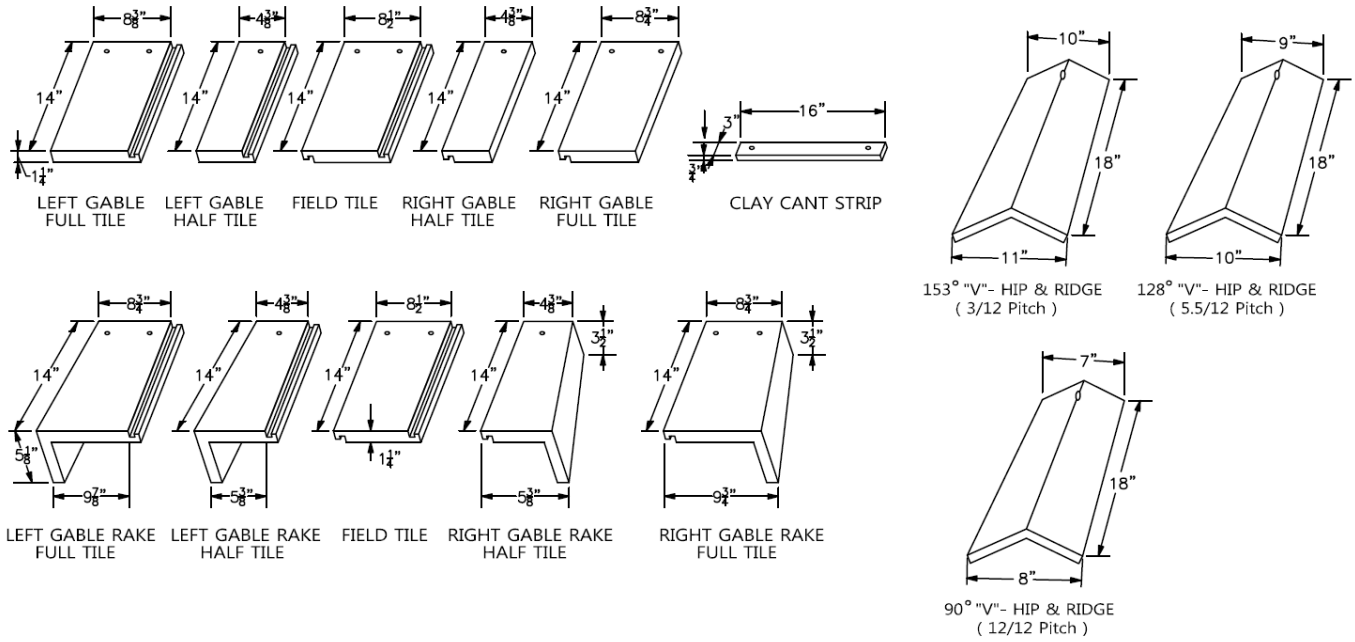


FIGURE 1 – CORDOVA CLAY ROOF TILE



"V" – Tile Hip & Ridge

Angle	Roof Pitch
153° … ….	3/12
128° …….	5½/12
90° …… .	12/12

FIGURE 2 – LINCOLN INTERLOCKING CLAY ROOF TILE

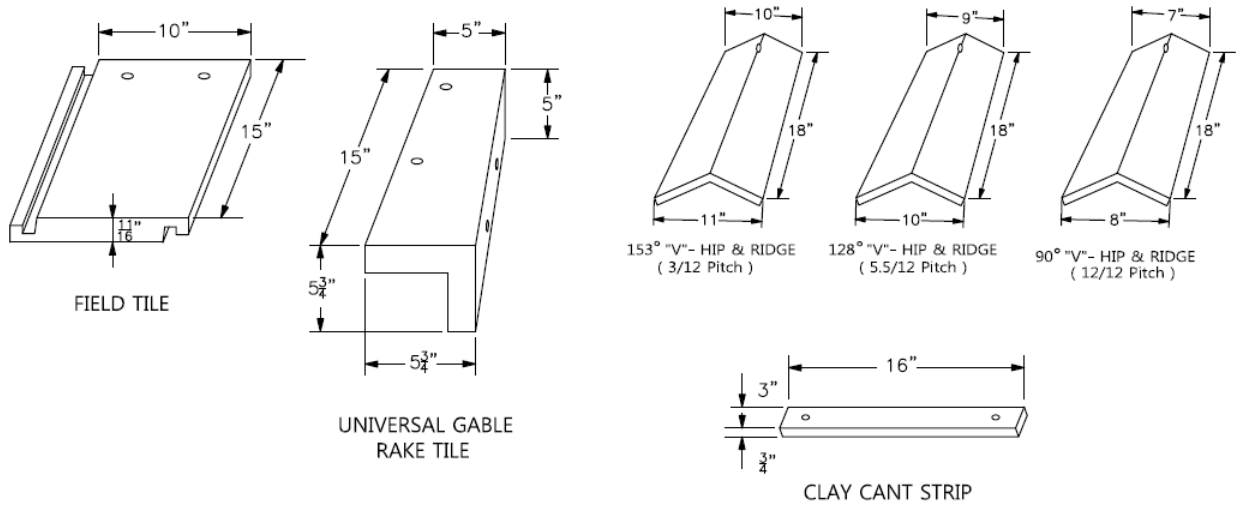


FIGURE 3 – PLACER INTERLOCKING CLAY ROOF TILE

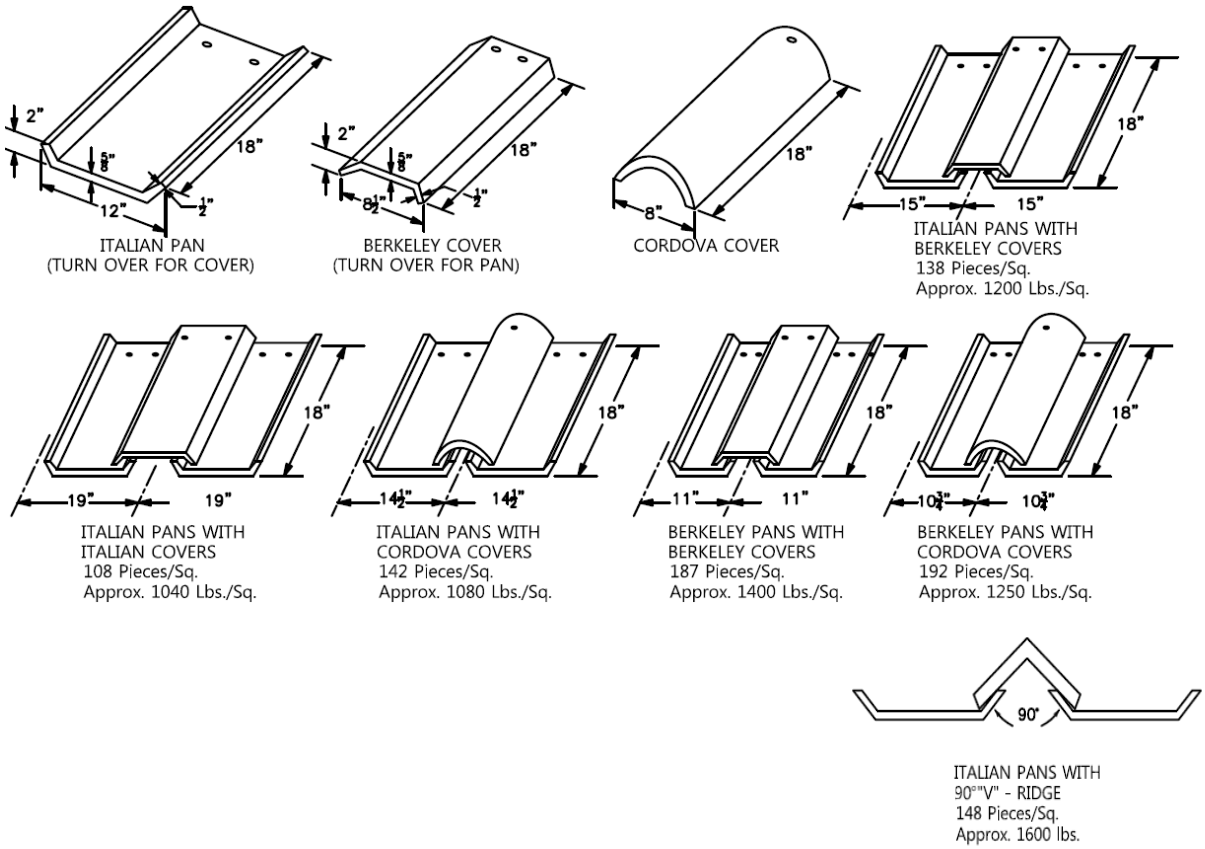


FIGURE 4 – ITALIAN CLAY ROOF TILE

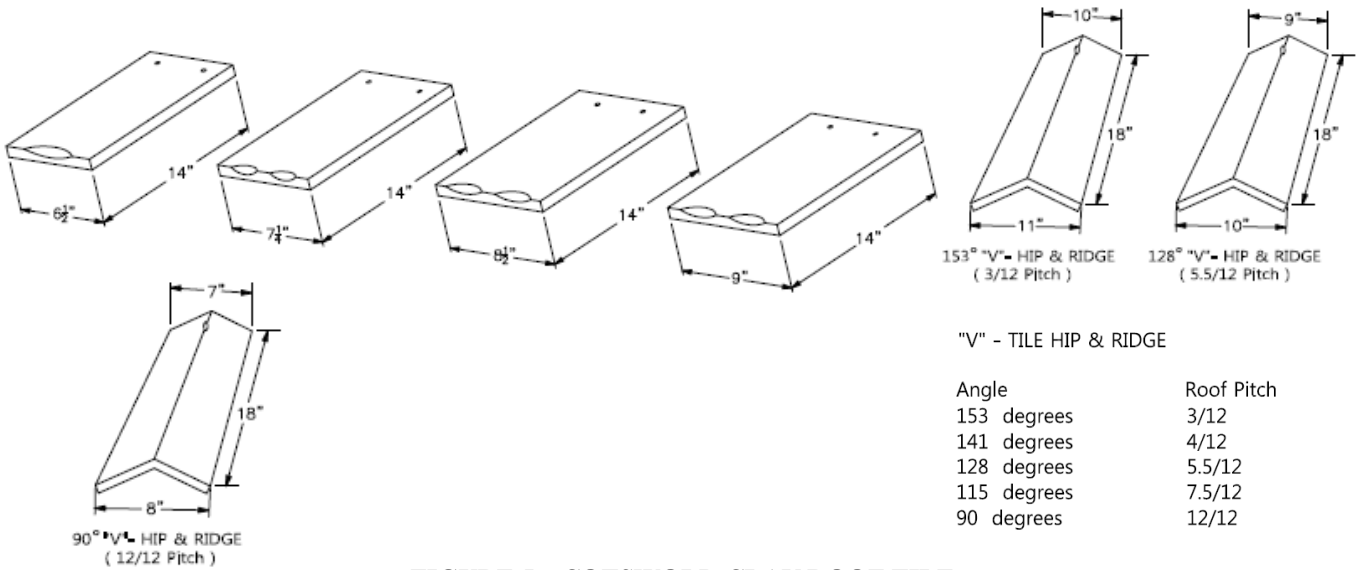


FIGURE 5 – COTSWOLD CLAY ROOF TILE