

Code Compliance Research Report **CCRR-1055**

Re-Issue Date: 01-01-2017 Renewal Date: 01-01-2018

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DIVISION: 07 00 00 - THERMAL AND MOISTURE

PROTECTION

Section: 07 30 05 – Roofing Felt and Underlayment

REPORT HOLDER:

Marco Industries 4150 S. 100th E. Avenue, Suite 301 Tulsa, Oklahoma 74146-3650 (918) 622-4535 https://marcoindustries.com

REPORT SUBJECT:

HydraShell Silver and HydraShell **Platinum Roofing Underlayments**

1.0 SCOPE OF EVALUATION

This Research Report addresses compliance with the following Codes:

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

2.0 USES

HydraShell HydraShell Silver and Platinum underlayments are used in the field of the roof as an alternative to the ASTM D226, Type I and Type II, roof underlayments specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

The underlayments may be used in areas of the roof required by IBC Section 1507 or IRC Section R905 to have an ice barrier roof underlayment, when installed as noted in Section 4.2.

The underlayments may be used as components of classified assemblies when installed as described in this report.

The underlayments have been evaluated for the following properties:

PROPERTY	IBC SECTION	IRC SECTION
Physical Properties	104.11, 1506 and 1507	R104.11, R904 and R905
Fire Classification	1505	R902.1
Ice Barrier	1507	R905

Referenced sections apply to 2015, 2012, and 2009 IBC and IRC

3.0 DESCRIPTION

HydraShell Silver is a mechanically attached synthetic underlayment comprised of an embossed non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 2.24 pounds per 100 square feet, and it is available in rolls 48 inches wide by 250 feet long.

HydraShell Platinum is a mechanically attached synthetic underlayment comprised of an embossed non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 3.37 pounds per 100 square feet, and it is available in rolls 48 inches wide by 250 feet long.

4.0 INSTALLATION

4.1 General:

Installation of the underlayments must comply with the applicable Code, this report, and the report holder's published installation instructions.

The underlayments must be installed in accordance with the subsections of IBC Section 1507 and IRC Section R905 applicable to the roof covering being installed. The underlayments must be laid with the print side up, with laps as required by the applicable evaluation report, or manufacturer's instructions, whichever is more restrictive.

The roof covering may be installed immediately following the underlayment application and the underlayment must be covered within the time designated in the report holder's published installation instructions.

4.2 Ice Barrier:

In areas of the roof required by IBC Section 1507 or IRC Section R905 to have an ice barrier, two layers of HydraShell Silver or HydraShell Platinum underlayment, solidly cemented together with a low solvent based roofing cement complying with ASTM D4586 Type 1 (asbestos free), may be used provided the ice barrier extends up the roof a minimum distance of 24 inches (610 mm) inside the interior wall line of the building. The underlayment installed in the field of the roof must overlap the ice barrier.









4.3 Fire Classification:

The roof underlayments may be used as a component of a classified roof assembly when specifically recognized as such in a listing approved by the Code official. The underlayments may also be used as an alternative to the underlayments specified in the Code for roof coverings permitted under the Exceptions to IBC Section 1505.2 and IRC Section R902.1, and may be used where non-classified roofing is permitted in IBC Section 1505.5.

5.0 CONDITIONS OF USE

The underlayments described in this Research Report comply with, or are suitable alternatives to, what is specified in those Codes listed in Sections 1.0 and 2.0 of this report, subject to the following conditions:

- **5.1** Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict between the manufacturer's instructions and this report, this report governs.
- 5.2 Installation is limited to use with approved mechanically attached roof covering systems.
- 5.3 Installation is limited to roof systems that do not involve hot asphalt or coal-tar pitch.
- **5.4** Installation is limited to roofs with a slope of 2:12 (17%) or greater.
- **5.5** Attic ventilation must be provided in accordance with the applicable Code since there are no requirements to evaluate vapor permeability of the underlayment.
- 5.6 The underlayments are manufactured under a quality control program with inspections by Intertek Testing Services NA Inc. (AA-647).

6.0 SUPPORTING EVIDENCE

- **6.1** Reports of tests in accordance with ASTM E108.
- 6.2 Data in accordance with ICC-ES Acceptance Criteria for Roof Underlayments (AC188), dated February 2012 (editorially revised December 2015).
- 6.3 Intertek Listing Report titled "Marco Industries -HydraShell Roofing Underlayments".

7.0 IDENTIFICATION

The HydraShell Silver and HydraShell Platinum underlayments are imprinted with the report holder's name, the Intertek Mark, and the Code Compliance Research Report number (CCRR-1055). Each roll of the product is also labeled with installation instructions, roll dimensions, and weight.

8.0 OTHER CODES

This section is not applicable.

9.0 CODE COMPLIANCE RESEARCH REPORT USE

- 9.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.
- 9.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek Testing.
- **9.3** Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

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