



Most Widely Accepted and Trusted

ICC-ES Report

ESR-3610

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

Issued 09/2016

This report is subject to renewal 09/2017.

DIVISION: 06 00 00—WOODS, PLASTIC, AND COMPOSITES

SECTION: 06 05 23.13—NAILS

REPORT HOLDER:

FASTENING CARE

**“MPROVE” – BRAND NAME
12010 WOODRUFF AVENUE, UNIT C
DOWNEY, CALIFORNIA 90241**

EVALUATION SUBJECT:

FASTENING CARE (MPROVE) STEEL NAILS



Look for the trusted marks of Conformity!

“2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence”



A Subsidiary of

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



ICC-ES Evaluation Report**ESR-3610**

Issued September 2016

This report is subject to renewal September 2017.www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

**DIVISION: 06 00 00—WOOD, PLASTIC, AND
COMPOSITES**
Section: 06 05 23.13—Nails**REPORT HOLDER:****FASTENING CARE**
“MPROVE” - BRAND NAME
12010 WOODRUFF AVENUE, UNIT C
DOWNEY, CALIFORNIA 90241
(562) 923-4300
www.fasteningcare.com**EVALUATION SUBJECT:****FASTENING CARE (MPROVE) STEEL NAILS****1.0 EVALUATION SCOPE****Compliance with the following codes:**

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

Property evaluated:

- Bending yield strength
- Material requirements and tolerances
- Corrosion

2.0 USES

The Fastening Care nails are used in engineered or prescriptive connections.

3.0 DESCRIPTION

The Fastening Care nails are formed from carbon steel wire; have full round heads (see Figure 1); have either smooth, screw, or ring shanks; and have either a bright finish (non-galvanized) or a hot-dipped galvanized (HDG) coating. The HDG coating complies with ASTM A153, Class D, and the requirements ASTM F1667 Section 10.1.

4.0 DESIGN AND INSTALLATION**4.1 Design:**

The Fastening Care nails are used in engineered connections designed in accordance with the ANSI/AWC National Design Specification (NDS) for Wood Construction using the bending yield strengths (F_y) provided in Table 1.

Select Fastening Care nails, noted in Table 1, are used in the prescriptive designs described in the IBC, IRC, NDS,

and the AWC Special Design Provisions for Wind and Seismic (SDPWS), where compliance with ASTM F1667, NDS Table L4, and SDPWS Table A1 is required.

4.2 Installation:

The Fastening Care nails must be installed in accordance with this report, the report holder's published installation instructions, the approved plans, the applicable code (IBC or IRC), and the applicable design specification (NDS or SDPWS).

The Fastening Care nails may be used with power tools recommended by the report holder.

HDG Fastening Care nails may be installed in chemically treated wood, such as pressure-, preservative-, or fire-retardant-treated wood, or in exterior or exposed conditions in accordance with 2015 IBC Section 2304.10.5 (2012 IBC Section 2304.9.5) and IRC Section R317.3.

5.0 CONDITIONS OF USE

The Fastening Care nails described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Fastening Care nails must be installed in accordance with this report; the report holder's published installation instructions; the approved plans, if applicable; and the applicable provisions of the code. In the case of a conflict amongst these documents, the most restrictive requirements govern.

5.2 Use of the BRT Fastening Care nails, which have a non-galvanized finish, in chemically treated wood, such as pressure-, preservative-, or fire-retardant-treated wood, or in exterior or exposed conditions, is not permitted.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Nails (AC116), dated June 2014 (editorially revised April 2015).

7.0 IDENTIFICATION

Nails are packaged in containers or cartons bearing the report holder's name (Fastening Care) or the Brand name (Mprove), the evaluation report number (ESR-3610), and the nail description [shank type, length and diameter, and hardened (if applicable)]. Coated nails are identified on the nail carton or other packaging material by the designation “HDG (Hot Dipped Galvanized)”.

TABLE 1—FASTENING CARE (MPROVE) NAILS WITH SMOOTH, RING, OR SCREW SHANKS

NOMINAL SHANK DIAMETER (inch)	NOMINAL HEAD DIAMETER (inch)	LENGTHS (inch)	FINISH/ COATING ¹	PACKAGING	FOR USE WITH THE NDS BENDING YIELD STRENGTH, F_{yb} (psi) ²	FOR USE WITH THE PRESCRIPTIVE REQUIREMENTS OF THE IBC, IRC, NDS AND SPDWS ³ CLASSIFICATION PER ASTM F1667
Full Round Head						
0.113	0.275	2 to 2 ¹ / ₂	BRT & HDG	Wire Coil, Plastic Strip, Paper Tape, Bulk	100,000	6d common (2" x 0.113")
0.120	0.275	2 to 3 ¹ / ₂	BRT & HDG	Wire Coil, Plastic Strip, Paper Tape, Bulk	100,000	-
0.131	0.280	2 ³ / ₈ to 4	BRT & HDG	Wire Coil, Plastic Strip, Paper Tape, Bulk	100,000	8d common (2 ¹ / ₂ " x 0.131")
0.148	0.285	1 ¹ / ₂ to 5 ¹ / ₈	BRT & HDG	Wire Coil, Plastic Strip, Paper Tape, Bulk	90,000	-
0.162	0.290	2 ¹ / ₂ to 6 ¹ / ₄	BRT & HDG	Wire Coil, Plastic Strip, Paper Tape, Bulk	90,000	-
Full Round Head (Hardened)						
0.131	0.282	1 ½ & 2 ¹ / ₂	BRT & HDG	Plastic Strip, Paper Tape, Bulk	130,000	8d common (2 ¹ / ₂ " x 0.131")
0.148	0.282	1 ¹ / ₂ & 2 ¹ / ₂	BRT & HDG	Plastic Strip, Paper Tape, Bulk	115,000	-
0.162	0.282	2 ¹ / ₂	BRT & HDG	Plastic Strip, Paper Tape, Bulk	115,000	-
Offset Head						
0.113	0.255	2 to 3 ¹ / ₄	BRT & HDG	Paper Tape	100,000	-
0.120	0.255	2 to 3 ¹ / ₂	BRT & HDG	Paper Tape	100,000	-
0.131	0.255	2 ³ / ₈ to 4	BRT & HDG	Paper Tape	100,000	-
Clipped Head						
0.113	0.270/0.195 ⁴	2 to 3 ¹ / ₄	BRT & HDG	Paper Tape	100,000	-
0.120	0.275/0.197	2 to 3 ¹ / ₂	BRT & HDG	Paper Tape	100,000	-
0.131	0.275/0.197	2 ³ / ₈ to 4	BRT & HDG	Paper Tape	100,000	-

For SI: 1 inch = 25.4 mm, 1 psi = 6.89 kPa,

¹Finish/Coating: BRT (non-galvanized), HDG (Hot dipped galvanized)

²The F_{yb} values comply with IBC Section 2303.6.

³Nail sizes listed comply with ASTM F1667 Table 15, NDS Table L4, and SDPWS Table A1 for common nails and may be used to meet the prescriptive requirements of the IBC, IRC, NDS, and SDPWS, as applicable. The nails must have the same length as the prescriptive requirements.

⁴The first number is Head 1 and the second number is Head 2 as shown in Figure 1.

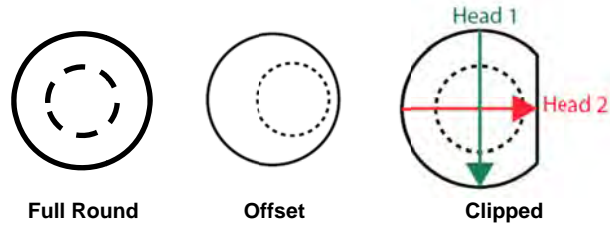


FIGURE 1—NAIL HEAD STYLES

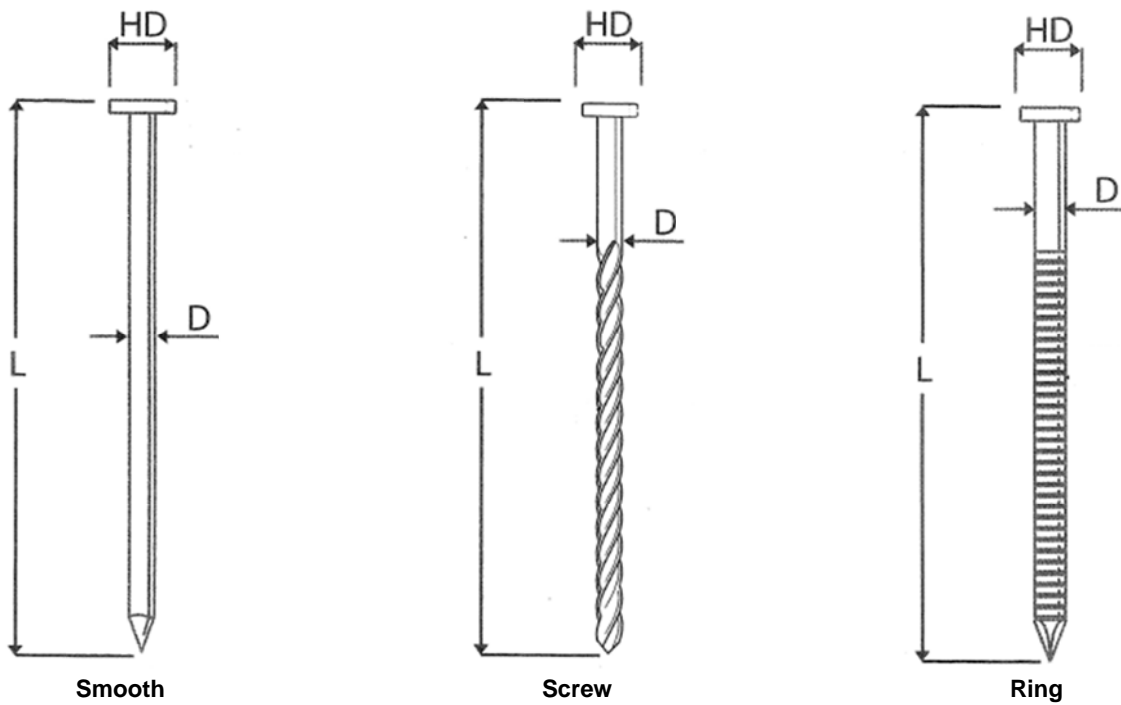


FIGURE 2—SHANK STYLES