DIVISION: 05 00 00—METALS
SECTION: 05 05 23—METAL FASTENINGS
DIVISION: 09 00 00—FINISHES
SECTION: 09 22 16.23—FASTENERS

REPORT HOLDER:
JAACO CORPORATION

EVALUATION SUBJECT:
JAACO NAILPRO HARDENED BALLISTIC PINS
FOR ATTACHING GYPSUM SHEATHING TO COLD-FORMED STEEL FRAMING
3.2 Sheathing:
The sheathing must be USG Securock gypsum sheathing with a minimum thickness of \(\frac{1}{2}\) inch (12.7 mm).

3.3 Framing:
CFS framing members must be manufactured from ASTM A653 SS designation, Grade 33, steel, with a minimum G60 coating in accordance with ASTM A653.

CFS wall studs must be C-shaped members with a minimum uncoated base-steel thickness of 0.0428 inch (1.087 mm), a minimum flange width of \(\frac{3}{8}\) inches (41.3 mm), a minimum overall depth of \(\frac{3}{8}\) inches (92.1 mm), and a minimum flange stiffener (lip) length of \(\frac{1}{2}\) inch (12.7 mm).

CFS wall tracks must be C-shaped members with a minimum uncoated base-steel thickness of 0.0428 inch (1.087 mm), a minimum flange width of \(\frac{1}{2}\) inches (38 mm) and a minimum inside depth equal to the overall depth of the CFS wall studs.
5.0 CONDITIONS OF USE

The Jaaco NailPro hardened ballistic pins 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 pins must be installed in accordance with the manufacturer’s installation instructions and this report. In the event of a conflict between this report and the manufacturer’s published installation instructions, this report governs.

5.2 Allowable negative transverse load on gypsum sheathing attached to CFS wall studs using the knurled-shank pins described in this report must be limited to the value noted in Table 1. Calculations justifying that the applied loads are less than the maximum allowable loads noted in Table 1 of this report must be submitted to the building official for approval. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

5.3 Use of the pins described in this report in a lateral-force-resisting system is beyond the scope of this report.

5.4 For exterior wall applications, an approved water-resistive barrier and exterior wall covering must be installed over the gypsum sheathing in accordance with IBC Sections 1404.2 and 1405 or IRC Sections R703.2 and R703, as applicable.

5.5 Gypsum sheathing must be the material noted in Table 1 of this report, complying with ASTM C1177.

5.6 The pins are manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Pneumatic- or Gas-power-driven Pin Fasteners Used to Attach Gypsum Panels to Cold-formed Steel Framing (AC259) dated June 2004 (editorially revised March 2007).

7.0 IDENTIFICATION

7.1 Hardened Ballistic Pin:

Each carton and packaging unit of the Jaaco NailPro hardened ballistic pins described in this report must be identified by a label bearing the name and address of the report holder (Jaaco Corporation); the product trade name (NailPro); model number (NP100K); nominal pin size and length; and the ICC-ES evaluation report number (ESR-2962). Each pin head must bear a marking as shown in Figure 1.

7.2 Sheathing:

Gypsum sheathing must be identified with the sheathing name and the applicable national standard.

7.3 The report holder’s contact information is the following:

JAACO CORPORATION
18080 NE 68TH STREET, SUITE C-130
REDMOND, WASHINGTON 98052
(425) 952-4205
www.jaaco.com
jaaco@qwestoffice.net
### TABLE 1—ALLOWABLE NEGATIVE TRANSVERSE LOAD
FOR GYPSUM SHEATHING ATTACHED TO COLD-FORMED STEEL (CFS) FRAMING
USING NAILPRO NP100K PINS\(^1,2,3\)

<table>
<thead>
<tr>
<th>SHEATHING(^4)</th>
<th>CFS FRAMING THICKNESS(^6) (in.)</th>
<th>MAXIMUM STUD SPACING (in.)</th>
<th>FASTENER SPACING(^7) (in.)</th>
<th>ALLOWABLE LOAD(^8) (psf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{1}{2})-inch-thick USG Securock Gypsum Sheathing(^5)</td>
<td>0.0428</td>
<td>24</td>
<td>8</td>
<td>7.5</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

\(^1\)The maximum wall height-to-width aspect ratio is 2:1.

\(^2\)The pins must be power-driven to a depth such that the tip of the pin protrudes from the framing a minimum of \(\frac{1}{2}\) inch.

\(^3\)The minimum distance from the center of the pin to the edge or end of the gypsum sheathing must be \(\frac{1}{2}\) inch.

\(^4\)The sheathing thickness shown is the minimum thickness for the gypsum sheathing described in this report. A greater thickness of the same type of gypsum sheathing may be used with no increase in allowable negative transverse load.

\(^5\)Must comply with ASTM C1177.

\(^6\)The CFS framing thickness is the minimum base-steel thickness (uncoated) for CFS framing described in this report.

\(^7\)The spacing is the maximum on-center spacing of pins installed at the perimeter and in the field of the gypsum wall assembly.

\(^8\)Allowable negative transverse load is for wall assemblies sheathed with gypsum sheathing attached by using knurled-shank power-driven pins on the exterior side of the walls.

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**FIGURE 1—JAACO NAILPRO HARDENED BALLISTIC PIN AND PIN HEAD MARK**

- a. Knurled Shank Pin
- b. Pin Head Marking