Listings 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 listing 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 listing, or as to any product covered by the listing.

Copyright © 2020 ICC Evaluation Service, LLC. All rights reserved.
FIGURE 1—WOOD-KNOCKER II+ CAST-IN-PLACE INSERTS FOR FORM POUR CONCRETE
Before Setting (head plate starting position) and After Setting (head plate and nails down)

FIGURE 2—BANG-IT+ CAST-IN-PLACE INSERTS FOR CONCRETE FILLED STEEL DECK FLOOR AND ROOF ASSEMBLIES

WOOD-KNOCKER II+

1/4-INCH Brown
3/8-INCH Green
5/8-INCH Gray
3/4-INCH Yellow
1-INCH Red
1 1/4-INCH Purple

FIGURE 3—WOOD-KNOCKER II+ CONCRETE INSERTS

1/4-INCH Brown
3/8-INCH Green
M10 Green
M12 Gray
5/8-INCH Yellow
3/4-INCH Yellow
1-1/4-INCH Red
1-1/4-INCH Purple

FIGURE 4—BANG-IT+ INSERTS FOR CONCRETE-FILLED STEEL DECKS

Identification:

1. The inserts are identified by packaging labeled with the insert size, lot number, company name, listing report number (ELC-3657), and the ICC-ES listing mark. The inserts have the letters Wood-Knocker or Bang-It+, as applicable, and the specific size embossed atop the head of the insert, visible prior to installation for verification.

2. The report holder’s contact information is the following:

DEWALT
701 EAST JOPPA ROAD
TOWSON, MARYLAND 21286
(800) 524-3244
www.dewalt.com
engineering@powers.com
Installation: The installation parameters are provided in Figure 5A and 5B. Installation of the inserts must be in accordance with the manufacturer’s published installation instruction (MPII) as provided in the packaging and described in and Figure 5A and 5B.

<table>
<thead>
<tr>
<th>WOOD-KNOCKER II+</th>
<th>POSITION</th>
<th>DRIVE</th>
<th>PREPARE</th>
<th>ATTACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Position insert on formwork, plastic down.</td>
<td>2.) Drive insert down until head contacts plastic.</td>
<td>3.) After formwork removal, remove nails as necessary (e.g. flush mounted fixtures).</td>
<td>4.) Install threaded steel element (rod/bolt) into the insert by pushing through plastic center (thread seal). Attach fixture as applicable (e.g. seismic brace).</td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 5A—WOOD KNOCKER II+ CONCRETE INSERTS, MANUFACTURER PUBLISHED INSTALLATION INSTRUCTIONS (MPII)**

<table>
<thead>
<tr>
<th>BANG-IT+</th>
<th>CREATE HOLE</th>
<th>POSITION</th>
<th>PREPARE</th>
<th>ATTACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Cut (e.g. drill/punch) a hole in the steel deck to the hole size required by the insert.</td>
<td>2.) Place the plastic sleeve of the insert through hole in steel deck.</td>
<td>3.) Step on or impact the insert head to engage. Optionally, base plate of insert can also be screwed to steel deck.</td>
<td>4.) Install threaded steel element (rod/bolt) into the insert. Trim away plastic sleeve for shear load applications and attach fixture as applicable (e.g. seismic brace).</td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 5B—BANG-IT+ CONCRETE INSERTS FOR STEEL DECK, MANUFACTURER PUBLISHED INSTALLATION INSTRUCTIONS (MPII)**

Anchor setting information:

**FIGURE 6—WOOD-KNOCKER II+ INSERTS INSTALLED IN FORM POUR CONCRETE FLOOR AND ROOF ASSEMBLIES**

**FIGURE 7A—BANG-IT+ INSERTS INSTALLED IN SOFFIT OF CONCRETE FILLED STEEL DECK FLOOR AND ROOF ASSEMBLIES**
Inserts may be placed in the upper flute or lower flute of the steel deck assembly. Inserts in the lower flute require a minimum 37mm (1.5–inch) of concrete topping thickness (min. thick in Figures) from the top of the upper flute. Upper flute installations require a minimum 74mm (3-inch) concrete topping thickness from the top of the upper flute. Inserts in upper flute may be installed anywhere across upper flute.

Axial spacing for Bang-It+ inserts along the lower flute length shall be minimum 3hef.

Upper flute Bang-It+ inserts are not subject to steel deck dimension limitations or the minimum steel deck gauge limitations.

Inserts in the lower flute of Figure 7A may be installed with a maximum 29mm (1 1/8 –inch) offset in either direction from the center of the flute. The offset distance may be increased for flute widths greater than those shown provided the minimum lower flute edge distance of 29mm (1 1/8 –inch) is also satisfied.

Inserts in the lower flute of Figure 7B may be installed with a maximum 3mm (1/8 –inch) offset in either direction from the center of the flute. The offset distance may be increased for flute widths greater than those shown provided the minimum lower flute edge distance of 19mm (3/4 –inch) is also satisfied.

Lower flute installations of Figure 7B with flute widths greater than 44mm (1 3/4 –inch) are permitted.

Lower flute installations of Figure 7B in flute depths greater than 38mm (1 1/2 –inch) are permitted provided the minimum edge distance of 19mm (3/4 –inch) is met and the minimum lower flute width is increased proportionally [e.g. applicable to a lower flute depth of 51mm (2-inch) with a minimum lower flute width of 57mm (2 1/4 –inch)].

Inserts in the lower flute of Figure 7C may be installed with a maximum 30mm (1 1/16 –inch) offset in either direction from the center of the flute.

Ultimate Limit States Design:

Design resistance of anchors for compliance with the 2015 NBCC must be determined in accordance with CSA A23.3-14 Annex D, and this listing report.

Design resistance of anchors for compliance with the 2010 NBCC must be determined in accordance with CSA A23.3-04 Annex D, and this listing report.

Material resistance factors must be φc = 0.65 and φs = 0.85 in accordance with CSA A23.3 (-14, -04) Sections 8.4.2 and 8.4.3, and resistance modification factor, R, as given in CSA A23.3-14 Section D.5.3, or CSA A23.3-04 Section D.5.4, and noted in Tables 1, 2 and 4 of this listing report, must be used for load combinations calculated in accordance with Division B, Part 4, Section 4.1.3 of the 2015 and 2010 NBCC, or Annex C of CSA A23.3 (-14, -04). The nominal strength Nsa or Vsa, in Tables 1, 2, and 4 of this listing report must be multiplied by φs and R to determine the factored resistance Nsar or Vsar.
TABLE 1—WOOD KNOCKER II+ INSERT DESIGN INFORMATION

<table>
<thead>
<tr>
<th>DESIGN INFORMATION</th>
<th>SYMBOL</th>
<th>UNITS</th>
<th>1/4-inch</th>
<th>3/8-inch</th>
<th>M10</th>
<th>M12</th>
<th>1/2-inch</th>
<th>5/8-inch</th>
<th>3/4-inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert O.D.</td>
<td>$d_a$</td>
<td>mm</td>
<td>18</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insert head net bearing area</td>
<td>$A_{brg}$</td>
<td>mm²</td>
<td>762</td>
<td>839</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective embedment depth</td>
<td>$h_{ef}$</td>
<td>mm</td>
<td>45</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum member thickness</td>
<td>$h_{min}$</td>
<td>mm</td>
<td>89</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum spacing and edge distances</td>
<td>$s_{min}$, $c_{min}$</td>
<td>-</td>
<td>See CSA A23.3 (-14, -04) Section D.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness factor for cracked concrete</td>
<td>$k_c$</td>
<td>SI</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modification factor for tension strength in uncracked concrete</td>
<td>$\psi_{C,N}$</td>
<td>-</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal tension strength of single insert as governed by steel strength</td>
<td>$N_{sa,insert}$</td>
<td>kN</td>
<td>45.7</td>
<td>40.1</td>
<td>56.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal tension strength of single insert as governed by steel strength, seismic</td>
<td>$N_{sa,insert,eq}$</td>
<td>kN</td>
<td>45.7</td>
<td>40.1</td>
<td>56.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal steel shear strength of single insert</td>
<td>$V_{sa,insert}$</td>
<td>kN</td>
<td>31.9</td>
<td>31.9</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal steel shear strength of single insert, seismic</td>
<td>$V_{sa,insert,eq}$</td>
<td>kN</td>
<td>31.9</td>
<td>31.9</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance modification factor for tension, steel failure modes</td>
<td>$R$</td>
<td>-</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance modification factor for shear, steel failure modes</td>
<td>$R$</td>
<td>-</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance modification factor for tension and shear, concrete failure modes, Condition B8</td>
<td>$R$</td>
<td>-</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 pound = 0.00445 kN, 1 psi = 0.006895 MPa. For pound-inch unit: 1 mm = 0.03937 inches.

Concrete must have a compressive strength $f'_c$ of 17.2 MPa minimum. Installation must comply with Figure 5A and this listing report.

Design of headed cast-in specialty inserts shall be in accordance with the provisions of CSA A23.3 (-14, -04) Annex D for cast-in headed anchors. Concrete breakout strength must also be in accordance with Figure 6.

The values of the material resistance factors $\phi_c$ and $\phi_s$, and resistance modification factor, $R$, applies when the load combinations of Division B, Part 4, Section 4.1.3 of the 2015 NBCC or 2010 NBCC, or Annex C of CSA A23.3 (-14, -04) are used. The $R$ values correspond to brittle steel elements.

Insert O.D. is the outside diameter of the headed insert body.

Minimum spacing distance between anchors and minimum edge distance for cast-in headed Wood Knocker II+ anchors shall be in accordance with CSA A23.3 (-14, -04) Section D.9.

Only the largest size of threaded rod or bolt for the 1/4- & 3/8-inch multi insert (i.e. 1/2-inch diameter) must be used for applications resisting shear loads.

The strengths shown in the table are for inserts only. Design professional is responsible for checking threaded rod or bolt strength in tension, shear, and combined tension and shear, as applicable. See Table 5 for steel design information for common threaded rod elements.

Condition B applies where supplemental reinforcement is not provided or where pullout governs, as set forth in CSA A23.3-14 D.5.3(c) or CSA A23.3-04 D.5.4(c).
TABLE 2—BANG-IT+ INSERT DESIGN INFORMATION\(^{1,2,3,4,5,6,7,8}\)

<table>
<thead>
<tr>
<th>DESIGN INFORMATION SYMBOL</th>
<th>UNITS</th>
<th>1/4-inch</th>
<th>3/8-inch</th>
<th>M10</th>
<th>M12</th>
<th>5/8-inch</th>
<th>3/4-inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert O.D. (d_a)</td>
<td>mm</td>
<td>18</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insert head net bearing area (A_{net})</td>
<td>mm(^2)</td>
<td>762</td>
<td>839</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective embedment depth (h_{ef})</td>
<td>mm</td>
<td>45</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum member thickness (h_{min})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum spacing and edge distances Upper flute (s_{min}, c_{min})</td>
<td>-</td>
<td>See CSA A23.3 (-14, -04) Section D.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower flute (s_{min}, c_{min})</td>
<td>-</td>
<td>See Figures 7A, 7B and 7C as applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness factor for cracked concrete (k_c)</td>
<td>SI</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modification factor for tension strength in uncracked concrete (\Psi_{C,N})</td>
<td>-</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Figures 7A, 7B & 7C

Nominal tension strength of single insert as governed by steel strength \(N_{as,insert}\) kN 46.4 43.8 53.3 \(N_{as,insert,eq}\) kN 46.4 43.8 53.3

Resistance modification factor for tension, steel failure modes \(R\) - 0.70

Resistance modification factor for tension, concrete failure modes, Condition B\(^8\) \(R\) - 1.00

For SI: 1 inch = 25.4 mm, 1 pound = 4.45 N, 1 psi = 0.006895 MPa. For pound-inch unit: 1 mm = 0.03937 inches.

\(^1\)Concrete must have a compressive strength \(f'c\) of 17.2MPa minimum. Installation must comply with Figure 5B and this listing report.
\(^2\)Design of headed cast-in specialty inserts shall be in accordance with the provisions of CSA A23.3 (-14, -04) Annex D for cast-in headed anchors. Concrete breakout strength must also be in accordance with Figures 7A, 7B, 7C, and 8, as applicable.
\(^3\)The values of the material resistance factors \(\phi_c\) and \(\phi_s\), and resistance modification factor, \(R\), applies when the load combinations of Division B, Part 4, Section 4.1.3 of the 2015 NBCC or 2010 NBCC, or Annex C of CSA A23.3 (-14, -04) are used. The \(R\) values correspond to brittle steel elements.
\(^4\)Insert O.D. is the outside diameter of the headed insert body.
\(^5\)Minimum spacing distance between anchors and minimum edge distances for cast-in headed Bang-It+ anchors shall be in accordance with Figures 7A, 7B or 7C, and CSA A23.3 (-14, -04) Section D.9, as applicable, and noted provisions.
\(^6\)The strengths shown in the table are for inserts only. Design professional is responsible for checking threaded rod strength, as applicable. See Table 4 for steel design information for common threaded rod elements.
\(^7\)The tabulated insert strength values are applicable to installations in the lower flute or upper flute of the steel deck profiles; see Figures 7A, 7B and 7C.
\(^8\)Condition B applies where supplemental reinforcement is not provided or where pullout governs, as set forth in CSA A23.3-14 D.5.3(c) or CSA A23.3-04 D.5.4(c).

TABLE 3—SPECIFICATIONS AND PHYSICAL PROPERTIES OF COMMON CARBON STEEL THREADED ROD ELEMENTS\(^1\)

<table>
<thead>
<tr>
<th>THREADED ROD SPECIFICATION</th>
<th>UNITS</th>
<th>MIN. SPECIFIED ULTIMATE STRENGTH, (f_{ut}) MPa</th>
<th>MIN. SPECIFIED YIELD STRENGTH 0.2 PERCENT OFFSET, (f_{ys}) MPa</th>
<th>ELONGATION MINIMUM PERCENT</th>
<th>REDUCTION OF AREA MIN. PERCENT</th>
<th>RELATED NUT SPECIFICATION(^8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTM A36/A36M(^2) and F1554(^4) Grade 36</td>
<td>MPa</td>
<td>400</td>
<td>248</td>
<td>1.61</td>
<td>23</td>
<td>ASTM A194 / A563 Grade A</td>
</tr>
<tr>
<td>ISO 898-1(^3) Class 4.6</td>
<td>MPa</td>
<td>400</td>
<td>240</td>
<td>1.67</td>
<td>22</td>
<td>ISO 4032 Grade 4</td>
</tr>
<tr>
<td>ASTM F1554(^3) Grade 105</td>
<td>MPa</td>
<td>862</td>
<td>724</td>
<td>1.19</td>
<td>15</td>
<td>ASTM A194 / A563 Grade DH</td>
</tr>
<tr>
<td>ASTM A193/A193M(^3) Grade 87</td>
<td>MPa</td>
<td>860</td>
<td>720</td>
<td>1.19</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 pound = 4.45 N, 1 psi = 0.006897 MPa. For pound-inch unit: 1 mm = 0.03937 inch, 1 MPa = 145.0 psi.

\(^1\)Inserts may be used in conjunction with all grades of continuously threaded carbon steels (all-thread) that comply with code reference standards and that have thread characteristics comparable with ANSI B1.1 UNC Coarse Thread Series or ANSI B1.13M M Profile Metric Coarse Thread Series. Tabulated values correspond to anchor diameters included in this report.
\(^3\)Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength.
\(^4\)Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High Temperature or High Pressure Service and Other Special Purpose Applications.
\(^5\)Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs.
\(^6\)Based on 2-inch (50 mm) gauge length except ASTM A193, which are based on a gauge length of 4d.
\(^7\)Minimum percent reduction of area not reported in the referenced standard.
\(^8\)Where nuts are applicable, nuts of other grades and style having specified proof load stress greater than the specified grade and style are also suitable.
## TABLE 4—STEEL DESIGN INFORMATION FOR COMMON THREADED ROD ELEMENTS USED WITH CONCRETE INSERTS\(^{1,2,3,4}\)

<table>
<thead>
<tr>
<th>DESIGN INFORMATION</th>
<th>SYMBOL</th>
<th>UNITS</th>
<th>1/4-inch</th>
<th>3/8-inch</th>
<th>M10</th>
<th>M12</th>
<th>1/2-inch</th>
<th>5/8-inch</th>
<th>3/4-inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threaded rod nominal outside diameter</td>
<td>(d_{rod})</td>
<td>mm (in.)</td>
<td>6.4 (0.250)</td>
<td>9.5 (0.375)</td>
<td>10 (0.394)</td>
<td>12 (0.472)</td>
<td>12.7 (0.500)</td>
<td>15.9 (0.625)</td>
<td>19.1 (0.750)</td>
</tr>
<tr>
<td>Threaded rod effective cross-sectional area</td>
<td>(A_{se})</td>
<td>mm(^2) (in(^2))</td>
<td>21 (0.032)</td>
<td>50 (0.078)</td>
<td>58 (0.090)</td>
<td>85 (0.131)</td>
<td>92 (0.142)</td>
<td>146 (0.226)</td>
<td>216 (0.335)</td>
</tr>
</tbody>
</table>

### ASTM A36
- Nominal tension strength of threaded rod as governed by steel strength:
  \(N_{sa,rod,A36}\) kN 8.2 20 23.2 33.8 36.6 58.3 86.3
- Nominal shear strength of threaded rod as governed by steel strength:
  \(V_{sa,rod,A36}\) kN 4.9 12.0 13.9 20.3 22.0 35.0 51.8
- Resistance modification factor for tension \(R\) - 0.80
- Resistance modification factor for shear \(R\) - 0.75

### ASTM A193, Grade B7
- Nominal tension strength of threaded rod as governed by steel strength:
  \(N_{sa,rod,B7}\) kN 17.7 43.1 50.1 72.9 78.9 125.7 186.0
- Nominal shear strength of threaded rod as governed by steel strength:
  \(V_{sa,rod,B7}\) kN 10.6 25.9 30.0 43.7 47.3 75.4 111.6
- Resistance modification factor for tension \(R\) - 0.80
- Resistance modification factor for shear \(R\) - 0.75

For SI: 1 inch = 25.4 mm, 1 pound = 0.00445 kN, 1 in\(^2\) = 645.2 mm\(^2\). For pound-inch unit: 1 mm = 0.03937 inches.

\(^{1}\) Values provided for steel element material types, or equivalent, based on minimum specified strengths; \(N_{sa,rod}\) and \(V_{sa,rod}\) calculated in accordance with CSA A23.3-14 Eq. D.2 and Eq. D.31, as applicable.

\(^{2}\) \(N_{sa,rod}\) shall be the lower of the \(N_{sa,rod,R}\) or \(N_{sa,insert,R}\) for static steel strength in tension; for seismic loading \(N_{sa,eq,R}\) shall be the lower of the \(N_{sa,rod,eq,R}\) or \(N_{sa,insert,eq,R}\).

\(^{3}\) \(V_{sa,rod}\) shall be the lower of the \(V_{sa,rod,R}\) or \(V_{sa,insert,R}\) for static steel strength in tension; for seismic loading \(V_{sa,eq,R}\) shall be the lower of the \(V_{sa,rod,eq,R}\) or \(V_{sa,insert,eq,R}\).

\(^{4}\) The value of the material resistance factors \(\phi_c\) and \(\phi_s\), and resistance modification factor, \(R\), applies when the load combinations of Division B, Part 4, Section 4.1.3 of the 2015 NBCC or Annex C of CSA A23.3-14 are used. The \(R\) values correspond to ductile steel elements.

---

**FIGURE 8—IDEALIZATION OF CONCRETE FILLED STEEL DECKS FOR DETERMINATION OF CONCRETE BREAKOUT STRENGTH IN ACCORDANCE WITH ACI 318**

[Image: Idealization of Steel Deck Profile (e.g. see Figures 4A and 4C)]

[Image: Idealization of Steel Deck Profile (e.g. see Figure 4B)]
Conditions of listing:

1. The listing report addresses only conformance with the standards and code sections noted above.
2. Approval of the product's use is the sole responsibility of the local code official.
3. The listing report applies only to the materials tested and as submitted for review by ICC-ES.
4. Specialty insert sizes, dimensions, minimum embedment depths, and other installation parameters are as set forth in this listing report.
5. Specialty inserts must be limited to use in cracked and uncracked normal-weight concrete, sand-lightweight concrete and all-lightweight concrete having a specified compressive strength, $f'_c$, of 17.2 MPa to 68.9 MPa for the Wood-Knocker inserts, and in cracked and uncracked normal-weight or sand-lightweight concrete filled steel deck assemblies having a specified compressive strength, 17.2 MPa to 68.9 MPa for the Bang-It+ inserts.
6. The values of $f'_c$ used for calculation purposes must not exceed 68.9 MPa.
7. Limit states design values must be established in accordance with this listing report.
8. The use of fatigue or shock loading for these anchors under such conditions is beyond the scope of this listing report.
9. Anchors may be used to resist short-term loading due to wind or seismic forces in locations designed according to NBCC 2015.
10. Where not otherwise prohibited in the code as referenced in CSA A23.3-14, Wood-Knocker® II+ concrete inserts and Bang-It®+ concrete inserts are permitted for use with fire-resistance-rated construction provided that at least one of the following conditions is fulfilled:
   a. Anchors are used to resist wind or seismic forces only.
   b. Anchors that support a fire-resistance-rated envelope or a fire-resistance-rated membrane are protected by approved fire-resistance-rated materials, or have been evaluated for resistance to fire exposure in accordance with recognized standards.
   c. Anchors are used to support nonstructural elements.
11. Use of zinc-coated carbon steel anchors is limited to dry, interior locations.