



# PRODUCT REPORT®

## **IB Series I-Joists IB EWP Inc.**

## **PR-L330(C)**

Revised September 30, 2026

Products: IB Series Prefabricated Wood I-Joists  
IB EWP Inc., 480 rue Jocelyn-Bastille C.P. 10, Pohénégamook, Quebec, G0L 1J0, Canada  
[www.ibewp.com](http://www.ibewp.com)

1. Basis of the product report:
  - 2020 and 2025 National Building Code of Canada (NBC): Clause 1.2.1.1 of Division A, and Clauses 4.1, 4.3.1.1, and 9.23.4.2 of Division B
  - CSA O86-19 and CSA O86-24 Engineering Design in Wood
  - ASTM D5055-16 recognized in CAN/CSA O86-19
  - APA PRI-400CA Performance Standard for Residential I-Joists (Limit States Design)
  - APA Reports T2000P-42A, T2001P-53, T2001P-63, T2001P-78, T2002P-65, T2003P-17, T2003P-18A, T2003P-52, T2005P-01A, T2005P-40B, T2005P-99A, T2006P-36, T2006P-43, T2006P-53, T2008P-37, T2009P-34A, T2010P-06, T2010P-49A, T2013P-31, T2014P-10, T2019P-25A, T2019P-40, and T2021P-34, T2025P-31, and other qualification data
2. Product description:

IB Series I-Joists covered in this report, as described in Table 1, are made with lumber flanges and OSB web in accordance with the in-plant manufacturing standard approved by APA.
3. Design properties:

Tables 2 through 4 list the Limit States Design (LSD) properties for IB Series I-Joists. The maximum design spans for IB Series I-Joists shall be in accordance with the recommendations provided by the manufacturer ([www.ibewp.com](http://www.ibewp.com)) and with APA Standard PRI-400CA, *Performance Standard for Residential I-Joists (Limit States Design)* ([www.apawood.org/resource-library](http://www.apawood.org/resource-library)), for depths contained in the PRI Series.
4. Product installation:

IB Series I-Joists shall be installed in accordance with the recommendations provided by the manufacturer (see link above). Permissible web holes and cantilever reinforcements shall be in accordance with the recommendations provided by the manufacturer.
5. Fire-rated assemblies:

Fire-rated assemblies shall be constructed in accordance with the recommendations provided by the manufacturer (see link above), APA Product Report PR-S330, or Table 9.10.3.1.-B of the NBC or the calculation method specified in Appendix D-2.3 of the NBC.
6. Limitations:
  - a) IB Series I-Joists shall be designed in accordance with the code using the design properties specified in this report.
  - b) IB Series I-Joists are limited to dry service conditions as defined in CSA O86, at which the average equilibrium moisture content of solid-sawn lumber over a year is 15% or less and does not exceed 19%.
  - c) All IB Series I-Joists are produced at IB EWP Inc. facility in Pohénégamook, Quebec, under a quality assurance program audited by APA.
  - d) This report is subject to re-examination in one year.

7. Identification:

The IB Series prefabricated wood I-joists described in this report are identified by a label bearing the manufacturer's name (IB EWP Inc.) and/or trademark, the APA assigned plant number (1135), the I-joist depth and series, the APA logo, the report number PR-L330 or PR-L330C, and a means of identifying the date of manufacture.

Table 1. Description of IB Series I-Joists<sup>(a)</sup>

| Joist Series | Joist Depths, mm (in.)        | Flanges         |                 |                 | Web      |                     |
|--------------|-------------------------------|-----------------|-----------------|-----------------|----------|---------------------|
|              |                               | Material        | Dimension       |                 | Material | Thickness, mm (in.) |
|              |                               |                 | Depth, mm (in.) | Width, mm (in.) |          |                     |
| IB200        | 241 – 302<br>(9-1/2 – 11-7/8) | Proprietary SPF | 38<br>(1-1/2)   | 64<br>(2-1/2)   | OSB      | 9.5<br>(3/8)        |
| IB400        | 200 – 406<br>(7-7/8 – 16)     | Proprietary SPF | 38<br>(1-1/2)   | 64<br>(2-1/2)   | OSB      | 9.5<br>(3/8)        |
| IB600        | 200 – 508<br>(7-7/8 – 20)     | MSR             | 38<br>(1-1/2)   | 64<br>(2-1/2)   | OSB      | 9.5<br>(3/8)        |
| IB700        | 241 – 406<br>(9-1/2 – 16)     | MSR             | 38<br>(1-1/2)   | 89<br>(3-1/2)   | OSB      | 9.5<br>(3/8)        |
| IB800        | 200 – 508<br>(7-7/8 – 20)     | MSR             | 38<br>(1-1/2)   | 89<br>(3-1/2)   | OSB      | 9.5<br>(3/8)        |
| IB900x       | 200 – 610<br>(7-7/8 – 24)     | MSR             | 38<br>(1-1/2)   | 89<br>(3-1/2)   | OSB      | 11<br>(7/16)        |

<sup>(a)</sup> Referenced dimensions are nominal. Tolerances are as specified in the in-plant quality manual.

Table 2. Factored Resistances of IB Series I-Joists <sup>(a)</sup>

| Joist Series | Joist Depth, mm (in.) | Also Qualified for | $EI^{(b)}$ ,<br>$10^6 \text{ kN} \cdot \text{mm}^2$<br>( $10^6 \text{ lbf} \cdot \text{in.}^2$ ) | $M_r^{(c)}$ ,<br>N-m<br>(lbf-ft) | $V_r^{(d)}$ ,<br>N<br>(lbf) | $VLC_r^{(e)}$ ,<br>kN/m<br>(plf) | $K^{(f)}$ ,<br>$10^6 \text{ N}$<br>( $10^6 \text{ lbf}$ ) |
|--------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------------------------------------|
| IB200        | 241 (9-1/2)           | NA                 | 416 (145)                                                                                        | 5,840 (4,308)                    | 8,320 (1,870)               | 42.3 (2,900)                     | 21.97 (4.94)                                              |
|              | 302 (11-7/8)          | NA                 | 726 (253)                                                                                        | 7,565 (5,580)                    | 10,391 (2,336)              | 42.3 (2,900)                     | 27.49 (6.18)                                              |
| IB400        | 200 (7-7/8)           | NA                 | 353 (123)                                                                                        | 5,040 (3,717)                    | 8,109 (1,823)               | 42.3 (2,900)                     | 18.24 (4.10)                                              |
|              | 219 (8-5/8)           | NA                 | 439 (153)                                                                                        | 5,626 (4,150)                    | 8,109 (1,823)               | 42.3 (2,900)                     | 19.97 (4.49)                                              |
|              | 235 (9-1/4)           | NA                 | 531 (185)                                                                                        | 6,122 (4,515)                    | 8,109 (1,823)               | 42.3 (2,900)                     | 21.40 (4.81)                                              |
|              | 241 (9-1/2)           | PRI-40             | 568 (198)                                                                                        | 6,314 (4,657)                    | 8,320 (1,870)               | 42.3 (2,900)                     | 21.97 (4.94)                                              |
|              | 286 (11-1/4)          | NA                 | 849 (296)                                                                                        | 7,690 (5,672)                    | 9,864 (2,218)               | 42.3 (2,900)                     | 26.02 (5.85)                                              |
|              | 302 (11-7/8)          | PRI-40             | 964 (336)                                                                                        | 8,186 (6,038)                    | 10,391 (2,336)              | 42.3 (2,900)                     | 27.49 (6.18)                                              |
|              | 356 (14)              | PRI-40             | 1,418 (494)                                                                                      | 9,854 (7,268)                    | 12,286 (2,762)              | 42.3 (2,900)                     | 32.38 (7.28)                                              |
|              | 406 (16)              | PRI-40             | 1,931 (673)                                                                                      | 11,422 (8,424)                   | 14,042 (3,157)              | 42.3 (2,900)                     | 37.01 (8.32)                                              |
| IB600        | 200 (7-7/8)           | NA                 | 416 (145)                                                                                        | 6,945 (5,123)                    | 8,109 (1,823)               | 42.3 (2,900)                     | 18.24 (4.10)                                              |
|              | 219 (8-5/8)           | NA                 | 519 (181)                                                                                        | 7,757 (5,721)                    | 8,109 (1,823)               | 42.3 (2,900)                     | 19.97 (4.49)                                              |
|              | 235 (9-1/4)           | NA                 | 631 (220)                                                                                        | 8,434 (6,221)                    | 9,478 (2,131)               | 42.3 (2,900)                     | 21.40 (4.81)                                              |
|              | 241 (9-1/2)           | PRI-60             | 674 (235)                                                                                        | 8,704 (6,420)                    | 9,619 (2,162)               | 42.3 (2,900)                     | 21.97 (4.94)                                              |
|              | 286 (11-1/4)          | NA                 | 1,022 (356)                                                                                      | 10,598 (7,817)                   | 10,637 (2,391)              | 42.3 (2,900)                     | 26.02 (5.85)                                              |
|              | 302 (11-7/8)          | PRI-60             | 1,145 (399)                                                                                      | 11,275 (8,316)                   | 11,023 (2,478)              | 42.3 (2,900)                     | 27.49 (6.18)                                              |
|              | 356 (14)              | PRI-60             | 1,679 (585)                                                                                      | 13,575 (10,012)                  | 12,286 (2,762)              | 42.3 (2,900)                     | 32.38 (7.28)                                              |
|              | 406 (16)              | PRI-60             | 2,293 (799)                                                                                      | 15,740 (11,609)                  | 14,042 (3,157)              | 42.3 (2,900)                     | 37.01 (8.32)                                              |
|              | 457 (18)              | NA                 | 3,002 (1,046)                                                                                    | 17,803 (13,131)                  | 15,797 (3,551)              | 37.0 (2,538)                     | 41.64 (9.36)                                              |
|              | 508 (20)              | NA                 | 3,742 (1,304)                                                                                    | 19,697 (14,528)                  | 17,552 (3,946)              | 31.7 (2,175)                     | 46.26 (10.40)                                             |
| IB700        | 241 (9-1/2)           | NA                 | 775 (270)                                                                                        | 8,941 (6,595)                    | 9,829 (2,210)               | 42.3 (2,900)                     | 21.97 (4.94)                                              |
|              | 302 (11-7/8)          | NA                 | 1,311 (457)                                                                                      | 11,590 (8,549)                   | 11,374 (2,557)              | 42.3 (2,900)                     | 27.49 (6.18)                                              |
|              | 356 (14)              | NA                 | 1,917 (668)                                                                                      | 13,958 (10,295)                  | 12,743 (2,865)              | 42.3 (2,900)                     | 32.38 (7.28)                                              |
|              | 406 (16)              | NA                 | 2,600 (906)                                                                                      | 16,179 (11,933)                  | 14,042 (3,157)              | 42.3 (2,900)                     | 37.01 (8.32)                                              |

(Footnotes on following page)

Table 2. Factored Resistances of IB Series I-Joists <sup>(a)</sup> (Continued)

| Joist Series | Joist Depth, mm (in.) | Also Qualified for | EI <sup>(b)</sup> , 10 <sup>6</sup> kN – mm <sup>2</sup> (10 <sup>6</sup> lbf-in. <sup>2</sup> ) | M <sub>r</sub> <sup>(c)</sup> , N-m (lbf-ft) | V <sub>r</sub> <sup>(d)</sup> , N (lbf) | VLC <sub>r</sub> <sup>(e)</sup> , kN/m (plf) | K <sup>(f)</sup> , 10 <sup>6</sup> N (10 <sup>6</sup> lbf) |
|--------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------|----------------------------------------------|------------------------------------------------------------|
| IB800        | 200 (7-7/8)           | NA                 | 585 (204)                                                                                        | 9,831 (7,252)                                | 8,109 (1,823)                           | 42.3 (2,900)                                 | 18.24 (4.10)                                               |
|              | 219 (8-5/8)           | NA                 | 729 (254)                                                                                        | 10,981 (8,100)                               | 8,109 (1,823)                           | 42.3 (2,900)                                 | 19.97 (4.49)                                               |
|              | 235 (9-1/4)           | NA                 | 881 (307)                                                                                        | 11,940 (8,806)                               | 9,759 (2,194)                           | 42.3 (2,900)                                 | 21.40 (4.81)                                               |
|              | 241 (9-1/2)           | NA                 | 936 (326)                                                                                        | 12,324 (9,090)                               | 9,864 (2,218)                           | 42.3 (2,900)                                 | 21.97 (4.94)                                               |
|              | 286 (11-1/4)          | NA                 | 1,415 (493)                                                                                      | 15,007 (11,069)                              | 10,812 (2,431)                          | 42.3 (2,900)                                 | 26.02 (5.85)                                               |
|              | 302 (11-7/8)          | PRI-80             | 1,584 (552)                                                                                      | 15,965 (11,775)                              | 11,163 (2,510)                          | 42.3 (2,900)                                 | 27.49 (6.18)                                               |
|              | 356 (14)              | PRI-80             | 2,316 (807)                                                                                      | 19,235 (14,187)                              | 12,883 (2,896)                          | 42.3 (2,900)                                 | 32.38 (7.28)                                               |
|              | 406 (16)              | PRI-80             | 3,139 (1,094)                                                                                    | 22,302 (16,449)                              | 14,533 (3,267)                          | 42.3 (2,900)                                 | 37.01 (8.32)                                               |
|              | 457 (18)              | NA                 | 4,147 (1,445)                                                                                    | 25,109 (18,519)                              | 16,148 (3,630)                          | 38.3 (2,625)                                 | 41.64 (9.36)                                               |
|              | 508 (20)              | NA                 | 5,163 (1,799)                                                                                    | 27,917 (20,591)                              | 18,254 (4,104)                          | 34.4 (2,356)                                 | 46.26 (10.40)                                              |
| IB900x       | 200 (7-7/8)           | NA                 | 620 (216)                                                                                        | 12,097 (8,923)                               | 9,548 (2,147)                           | 42.3 (2,900)                                 | 22.42 (5.04)                                               |
|              | 219 (8-5/8)           | NA                 | 775 (270)                                                                                        | 13,507 (9,963)                               | 10,285 (2,312)                          | 42.3 (2,900)                                 | 24.55 (5.52)                                               |
|              | 241 (9-1/2)           | NA                 | 976 (340)                                                                                        | 15,164 (11,185)                              | 11,163 (2,510)                          | 42.3 (2,900)                                 | 27.04 (6.08)                                               |
|              | 302 (11-7/8)          | NA                 | 1,644 (573)                                                                                      | 19,651 (14,495)                              | 13,515 (3,038)                          | 42.3 (2,900)                                 | 33.80 (7.60)                                               |
|              | 356 (14)              | PRI-90             | 2,399 (836)                                                                                      | 23,654 (17,447)                              | 14,919 (3,354)                          | 42.3 (2,900)                                 | 39.85 (8.96)                                               |
|              | 406 (16)              | PRI-90             | 3,246 (1,131)                                                                                    | 27,431 (20,233)                              | 16,358 (3,677)                          | 42.3 (2,900)                                 | 45.55 (10.24)                                              |
|              | 457 (18)              | NA                 | 4,227 (1,473)                                                                                    | 31,016 (22,877)                              | 17,622 (3,962)                          | 38.3 (2,625)                                 | 51.24 (11.52)                                              |
|              | 508 (20)              | NA                 | 5,349 (1,864)                                                                                    | 34,331 (25,322)                              | 18,921 (4,254)                          | 34.4 (2,356)                                 | 56.94 (12.80)                                              |
|              | 559 (22)              | NA                 | 6,612 (2,304)                                                                                    | 37,611 (27,742)                              | 20,185 (4,538)                          | 26.5 (1,813)                                 | 62.63 (14.08)                                              |
|              | 610 (24)              | NA                 | 8,018 (2,794)                                                                                    | 40,847 (30,129)                              | 21,484 (4,830)                          | 26.5 (1,813)                                 | 68.32 (15.36)                                              |

<sup>(a)</sup> All factored resistance values include the resistance factor specified in CSA-O86. The tabulated values are for the standard term of load duration ( $K_D = 1.0$ ). All values, except for EI, VLC<sub>r</sub>, and K, are permitted to be adjusted for other load durations as permitted by the code.

<sup>(b)</sup> Bending stiffness (EI) of the I-joist

<sup>(c)</sup> Factored moment resistance (M<sub>r</sub>) of the I-joist.

<sup>(d)</sup> Factored shear resistance (V<sub>r</sub>) of the I-joist.

<sup>(e)</sup> Factored uniform vertical load resistance (VLC<sub>r</sub>) of the I-joist.

- <sup>(f)</sup> Coefficient of shear deflection (K). For calculating uniform load and center-point load deflections of the I-joists in a simple-span application, use Eqs. 1 and 2.

$$\text{Uniform Load:} \quad \delta = \frac{5 \omega L^4}{384 EI} + \frac{\omega L^2}{K} \quad [1]$$

$$\text{Center-Point Load:} \quad \delta = \frac{PL^3}{48 EI} + \frac{2 PL}{K} \quad [2]$$

where  $\delta$  = calculated deflection (mm or in.),  $\omega$  = unfactored uniform load (kN/mm or lbf/in.),  
 $P$  = unfactored concentrated load (kN or lbf),  $L$  = design span (mm or in.),  
 $EI$  = bending stiffness of the I-joist (kN-mm<sup>2</sup> or lbf-in.<sup>2</sup>), and  $K$  = coefficient of shear deflection (kN or lbf).

Table 3. Additional Factored Resistances of IB Series I-Joists <sup>(a,b,c)</sup>

| Joist Series | Joist Depth, mm (in.) | Also Qualified for | Factored End Reactions, N (lbf) |                   |                           |                   |                           |                   |                           |                   |                        |                   |
|--------------|-----------------------|--------------------|---------------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|------------------------|-------------------|
|              |                       |                    | 38 mm (1-1/2 in.) Bearing       |                   | 44 mm (1-3/4 in.) Bearing |                   | 70 mm (2-3/4 in.) Bearing |                   | 89 mm (3-1/2 in.) Bearing |                   | 102 mm (4 in.) Bearing |                   |
|              |                       |                    | No B.S.                         | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                | B.S.              |
| IB200        | 241 (9-1/2)           | NA                 | 7,863<br>(1,768)                | 8,320<br>(1,870)  | 7,898<br>(1,776)          | 8,320<br>(1,870)  | 8,109<br>(1,823)          | 8,320<br>(1,870)  | 8,214<br>(1,847)          | 8,320<br>(1,870)  | 8,320<br>(1,870)       | 8,320<br>(1,870)  |
|              | 302 (11-7/8)          | NA                 | 8,425<br>(1,894)                | 9,970<br>(2,241)  | 8,636<br>(1,941)          | 10,005<br>(2,249) | 9,408<br>(2,115)          | 10,180<br>(2,289) | 10,005<br>(2,249)         | 10,321<br>(2,320) | 10,391<br>(2,336)      | 10,391<br>(2,336) |
| IB400        | 200 (7-7/8)           | NA                 | 6,705<br>(1,507)                | 7,407<br>(1,665)  | 6,845<br>(1,539)          | 7,477<br>(1,681)  | 7,407<br>(1,665)          | 7,758<br>(1,744)  | 7,828<br>(1,760)          | 7,969<br>(1,792)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 219 (8-5/8)           | NA                 | 7,477<br>(1,681)                | 7,793<br>(1,752)  | 7,547<br>(1,697)          | 7,828<br>(1,760)  | 7,793<br>(1,752)          | 7,934<br>(1,784)  | 7,969<br>(1,792)          | 8,039<br>(1,807)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 235 (9-1/4)           | NA                 | 7,793<br>(1,752)                | 8,109<br>(1,823)  | 7,828<br>(1,760)          | 8,109<br>(1,823)  | 8,109<br>(1,823)          | 8,109<br>(1,823)  | 8,109<br>(1,823)          | 8,109<br>(1,823)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 241 (9-1/2)           | PRI-40             | 7,863<br>(1,768)                | 8,320<br>(1,870)  | 7,934<br>(1,784)          | 8,320<br>(1,870)  | 8,320<br>(1,870)          | 8,320<br>(1,870)  | 8,320<br>(1,870)          | 8,320<br>(1,870)  | 8,320<br>(1,870)       | 8,320<br>(1,870)  |
|              | 286 (11-1/4)          | NA                 | 8,249<br>(1,854)                | 9,513<br>(2,139)  | 8,460<br>(1,902)          | 9,548<br>(2,146)  | 9,408<br>(2,115)          | 9,864<br>(2,218)  | 9,864<br>(2,218)          | 9,864<br>(2,218)  | 9,864<br>(2,218)       | 9,864<br>(2,218)  |
|              | 302 (11-7/8)          | PRI-40             | 8,425<br>(1,894)                | 9,970<br>(2,241)  | 8,636<br>(1,941)          | 10,040<br>(2,257) | 9,619<br>(2,162)          | 10,391<br>(2,336) | 10,285<br>(2,312)         | 10,391<br>(2,336) | 10,391<br>(2,336)      | 10,391<br>(2,336) |
|              | 356 (14)              | PRI-40             | 8,846<br>(1,989)                | 11,444<br>(2,573) | 9,092<br>(2,044)          | 11,549<br>(2,596) | 10,215<br>(2,296)         | 12,286<br>(2,762) | 10,882<br>(2,446)         | 12,286<br>(2,762) | 10,882<br>(2,446)      | 12,286<br>(2,762) |
|              | 406 (16)              | PRI-40             | 9,303<br>(2,091)                | 12,813<br>(2,880) | 9,513<br>(2,139)          | 12,953<br>(2,912) | 10,215<br>(2,296)         | 14,042<br>(3,157) | 10,882<br>(2,446)         | 14,042<br>(3,157) | 10,882<br>(2,446)      | 14,042<br>(3,157) |
| IB600        | 200 (7-7/8)           | NA                 | 6,705<br>(1,507)                | 7,407<br>(1,665)  | 6,845<br>(1,539)          | 7,477<br>(1,681)  | 7,407<br>(1,665)          | 7,758<br>(1,744)  | 7,828<br>(1,760)          | 7,969<br>(1,792)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 219 (8-5/8)           | NA                 | 7,477<br>(1,681)                | 7,793<br>(1,752)  | 7,547<br>(1,697)          | 7,828<br>(1,760)  | 7,793<br>(1,752)          | 7,934<br>(1,784)  | 7,969<br>(1,792)          | 8,039<br>(1,807)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 235 (9-1/4)           | NA                 | 7,793<br>(1,752)                | 8,109<br>(1,823)  | 7,934<br>(1,784)          | 9,478<br>(2,131)  | 8,109<br>(1,823)          | 9,478<br>(2,131)  | 8,109<br>(1,823)          | 9,478<br>(2,131)  | 8,109<br>(1,823)       | 9,478<br>(2,131)  |
|              | 241 (9-1/2)           | PRI-60             | 7,863<br>(1,768)                | 8,320<br>(1,870)  | 8,004<br>(1,799)          | 9,619<br>(2,162)  | 8,320<br>(1,870)          | 9,619<br>(2,162)  | 8,320<br>(1,870)          | 9,619<br>(2,162)  | 8,320<br>(1,870)       | 9,619<br>(2,162)  |
|              | 286 (11-1/4)          | NA                 | 8,249<br>(1,854)                | 9,513<br>(2,139)  | 8,530<br>(1,918)          | 10,637<br>(2,391) | 9,408<br>(2,115)          | 10,637<br>(2,391) | 9,864<br>(2,218)          | 10,637<br>(2,391) | 9,864<br>(2,218)       | 10,637<br>(2,391) |
|              | 302 (11-7/8)          | PRI-60             | 8,425<br>(1,894)                | 9,970<br>(2,241)  | 8,706<br>(1,957)          | 11,023<br>(2,478) | 9,619<br>(2,162)          | 11,023<br>(2,478) | 10,285<br>(2,312)         | 11,023<br>(2,478) | 10,391<br>(2,336)      | 11,023<br>(2,478) |
|              | 356 (14)              | PRI-60             | 8,846<br>(1,989)                | 11,444<br>(2,573) | 9,373<br>(2,107)          | 12,286<br>(2,762) | 10,250<br>(2,304)         | 12,286<br>(2,762) | 10,882<br>(2,446)         | 12,286<br>(2,762) | 10,882<br>(2,446)      | 12,286<br>(2,762) |
|              | 406 (16)              | PRI-60             | 9,303<br>(2,091)                | 12,813<br>(2,880) | 9,970<br>(2,241)          | 13,515<br>(3,038) | 10,496<br>(2,360)         | 13,831<br>(3,109) | 10,882<br>(2,446)         | 14,042<br>(3,157) | 10,882<br>(2,446)      | 14,042<br>(3,157) |
|              | 457 (18)              | NA                 | NA                              | NA                | 10,566<br>(2,375)         | 14,709<br>(3,307) | 10,742<br>(2,415)         | 15,340<br>(3,449) | 10,882<br>(2,446)         | 15,797<br>(3,551) | 10,882<br>(2,446)      | 15,797<br>(3,551) |
|              | 508 (20)              | NA                 | NA                              | NA                | 10,882<br>(2,446)         | 15,867<br>(3,567) | 10,882<br>(2,446)         | 16,815<br>(3,780) | 10,882<br>(2,446)         | 17,552<br>(3,946) | 10,882<br>(2,446)      | 17,552<br>(3,946) |

(Footnotes on the following page)

Table 3. Additional Factored Resistances of IB Series I-Joists <sup>(a,b,c)</sup> (Continued)

| Joist Series | Joist Depth, mm (in.) | Also Qualified for | Factored End Reactions, N (lbf) |                   |                           |                   |                           |                   |                           |                   |                        |                   |
|--------------|-----------------------|--------------------|---------------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|------------------------|-------------------|
|              |                       |                    | 38 mm (1-1/2 in.) Bearing       |                   | 44 mm (1-3/4 in.) Bearing |                   | 70 mm (2-3/4 in.) Bearing |                   | 89 mm (3-1/2 in.) Bearing |                   | 102 mm (4 in.) Bearing |                   |
|              |                       |                    | No B.S.                         | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                | B.S.              |
| IB700        | 241 (9-1/2)           | NA                 | 8,074<br>(1,815)                | 9,583<br>(2,155)  | 8,249<br>(1,855)          | 9,619<br>(2,162)  | 8,952<br>(2,012)          | 9,724<br>(2,186)  | 9,478<br>(2,131)          | 9,794<br>(2,202)  | 9,829<br>(2,210)       | 9,829<br>(2,210)  |
|              | 302 (11-7/8)          | NA                 | 8,671<br>(1,949)                | 10,988<br>(2,470) | 8,881<br>(1,997)          | 11,058<br>(2,486) | 9,654<br>(2,170)          | 11,198<br>(2,518) | 10,285<br>(2,312)         | 11,304<br>(2,541) | 10,672<br>(2,399)      | 11,374<br>(2,557) |
|              | 356 (14)              | NA                 | 9,232<br>(2,076)                | 12,251<br>(2,754) | 9,443<br>(2,123)          | 12,322<br>(2,770) | 10,250<br>(2,304)         | 12,532<br>(2,817) | 10,952<br>(2,462)         | 12,673<br>(2,849) | 11,409<br>(2,565)      | 12,743<br>(2,865) |
|              | 406 (16)              | NA                 | 9,724<br>(2,186)                | 13,445<br>(3,023) | 9,970<br>(2,241)          | 13,515<br>(3,038) | 10,917<br>(2,454)         | 14,042<br>(3,157) | 11,619<br>(2,612)         | 14,042<br>(3,157) | 12,111<br>(2,723)      | 14,042<br>(3,157) |
| IB800        | 200 (7-7/8)           | NA                 | 6,705<br>(1,507)                | 7,407<br>(1,665)  | 6,845<br>(1,539)          | 7,477<br>(1,681)  | 7,407<br>(1,665)          | 7,758<br>(1,744)  | 7,828<br>(1,760)          | 7,969<br>(1,792)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 219 (8-5/8)           | NA                 | 7,477<br>(1,681)                | 7,793<br>(1,752)  | 7,547<br>(1,697)          | 7,828<br>(1,760)  | 7,793<br>(1,752)          | 7,934<br>(1,784)  | 7,969<br>(1,792)          | 8,039<br>(1,807)  | 8,109<br>(1,823)       | 8,109<br>(1,823)  |
|              | 235 (9-1/4)           | NA                 | 7,793<br>(1,752)                | 8,109<br>(1,823)  | 7,934<br>(1,784)          | 9,689<br>(2,178)  | 8,109<br>(1,823)          | 9,689<br>(2,178)  | 8,109<br>(1,823)          | 9,689<br>(2,178)  | 8,109<br>(1,823)       | 9,759<br>(2,194)  |
|              | 241 (9-1/2)           | NA                 | 7,863<br>(1,768)                | 8,320<br>(1,870)  | 8,004<br>(1,799)          | 9,864<br>(2,218)  | 8,320<br>(1,870)          | 9,864<br>(2,218)  | 8,320<br>(1,870)          | 9,864<br>(2,218)  | 8,320<br>(1,870)       | 9,864<br>(2,218)  |
|              | 286 (11-1/4)          | NA                 | 8,249<br>(1,854)                | 9,513<br>(2,139)  | 8,530<br>(1,918)          | 10,812<br>(2,431) | 9,408<br>(2,115)          | 10,812<br>(2,431) | 9,864<br>(2,218)          | 10,812<br>(2,431) | 9,864<br>(2,218)       | 10,812<br>(2,431) |
|              | 302 (11-7/8)          | PRI-80             | 8,846<br>(1,989)                | 11,163<br>(2,510) | 9,057<br>(2,036)          | 11,163<br>(2,510) | 9,864<br>(2,218)          | 11,163<br>(2,510) | 10,461<br>(2,352)         | 11,163<br>(2,510) | 10,882<br>(2,446)      | 11,163<br>(2,510) |
|              | 356 (14)              | PRI-80             | 9,373<br>(2,107)                | 12,602<br>(2,833) | 9,583<br>(2,155)          | 12,637<br>(2,841) | 10,321<br>(2,320)         | 12,743<br>(2,865) | 10,882<br>(2,446)         | 12,848<br>(2,889) | 11,233<br>(2,525)      | 12,883<br>(2,896) |
|              | 406 (16)              | PRI-80             | 9,899<br>(2,226)                | 13,971<br>(3,141) | 10,075<br>(2,265)         | 14,042<br>(3,157) | 10,742<br>(2,415)         | 14,252<br>(3,204) | 10,882<br>(2,446)         | 14,428<br>(3,244) | 11,233<br>(2,525)      | 14,533<br>(3,267) |
|              | 457 (18)              | NA                 | NA                              | NA                | 10,566<br>(2,376)         | 15,937<br>(3,583) | 10,742<br>(2,415)         | 16,043<br>(3,610) | 10,882<br>(2,446)         | 16,148<br>(3,630) | 11,233<br>(2,525)      | 16,148<br>(3,630) |
|              | 508 (20)              | NA                 | NA                              | NA                | 10,882<br>(2,447)         | 17,271<br>(3,883) | 10,882<br>(2,446)         | 17,833<br>(4,010) | 10,882<br>(2,446)         | 18,254<br>(4,104) | 11,584<br>(2,604)      | 18,254<br>(4,104) |

(Footnotes on the following page)

Table 3. Additional Factored Resistances of IB Series I-Joists <sup>(a,b,c)</sup> (Continued)

| Joist Series | Joist Depth, mm (in.) | Also Qualified for | Factored End Reactions, N (lbf) |                   |                           |                   |                           |                   |                           |                   |                        |                   |
|--------------|-----------------------|--------------------|---------------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|---------------------------|-------------------|------------------------|-------------------|
|              |                       |                    | 38 mm (1-1/2 in.) Bearing       |                   | 44 mm (1-3/4 in.) Bearing |                   | 70 mm (2-3/4 in.) Bearing |                   | 89 mm (3-1/2 in.) Bearing |                   | 102 mm (4 in.) Bearing |                   |
|              |                       |                    | No B.S.                         | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                   | B.S.              | No B.S.                | B.S.              |
| IB900x       | 200 (7-7/8)           | NA                 | 8,811<br>(1,981)                | 8,952<br>(2,012)  | 8,881<br>(1,997)          | 9,022<br>(2,028)  | 9,197<br>(2,068)          | 9,267<br>(2,084)  | 9,408<br>(2,115)          | 9,443<br>(2,123)  | 9,548<br>(2,147)       | 9,548<br>(2,147)  |
|              | 219 (8-5/8)           | NA                 | 9,022<br>(2,028)                | 9,373<br>(2,107)  | 9,162<br>(2,060)          | 9,478<br>(2,131)  | 9,654<br>(2,170)          | 9,864<br>(2,218)  | 10,005<br>(2,249)         | 10,110<br>(2,273) | 10,250<br>(2,304)      | 10,285<br>(2,312) |
|              | 241 (9-1/2)           | NA                 | 9,267<br>(2,084)                | 9,864<br>(2,218)  | 9,443<br>(2,123)          | 10,005<br>(2,249) | 10,180<br>(2,289)         | 10,531<br>(2,368) | 10,707<br>(2,407)         | 10,917<br>(2,454) | 11,058<br>(2,486)      | 11,163<br>(2,510) |
|              | 302 (11-7/8)          | NA                 | 9,829<br>(2,210)                | 11,233<br>(2,525) | 9,829<br>(2,210)          | 11,479<br>(2,581) | 11,444<br>(2,573)         | 12,392<br>(2,786) | 12,567<br>(2,825)         | 13,059<br>(2,936) | 13,234<br>(2,975)      | 13,515<br>(3,038) |
|              | 356 (14)              | PRI-90             | 9,829<br>(2,210)                | 12,637<br>(2,841) | 9,829<br>(2,210)          | 12,637<br>(2,841) | 11,444<br>(2,573)         | 13,129<br>(2,952) | 12,673<br>(2,849)         | 13,761<br>(3,094) | 13,234<br>(2,975)      | 14,919<br>(3,354) |
|              | 406 (16)              | PRI-90             | 9,970<br>(2,241)                | 13,971<br>(3,141) | 10,075<br>(2,265)         | 14,042<br>(3,157) | 11,514<br>(2,588)         | 15,376<br>(3,457) | 12,673<br>(2,849)         | 16,358<br>(3,677) | 13,234<br>(2,975)      | 16,358<br>(3,677) |
|              | 457 (18)              | NA                 | NA                              | NA                | 10,566<br>(2,375)         | 15,937<br>(3,583) | 11,233<br>(2,525)         | 16,885<br>(3,796) | 11,760<br>(2,644)         | 17,622<br>(3,962) | 13,234<br>(2,975)      | 17,622<br>(3,962) |
|              | 508 (20)              | NA                 | NA                              | NA                | 10,672<br>(2,399)         | 17,341<br>(3,898) | 11,233<br>(2,525)         | 18,184<br>(4,088) | 11,760<br>(2,644)         | 18,816<br>(4,230) | 13,234<br>(2,975)      | 18,921<br>(4,254) |
|              | 559 (22)              | NA                 | NA                              | NA                | 10,321<br>(2,320)         | 18,219<br>(4,096) | 11,128<br>(2,502)         | 19,132<br>(4,301) | 11,760<br>(2,644)         | 19,799<br>(4,451) | 13,094<br>(2,944)      | 20,185<br>(4,538) |
|              | 610 (24)              | NA                 | NA                              | NA                | 10,321<br>(2,320)         | 20,220<br>(4,546) | 11,128<br>(2,502)         | 20,536<br>(4,617) | 11,760<br>(2,644)         | 20,782<br>(4,672) | 12,788<br>(2,873)      | 21,484<br>(4,830) |

- (a) The tabulated values are for the standard term of load duration ( $K_D = 1.0$ ). All values are permitted to be adjusted for other load durations as permitted by the code provided that the adjusted values do not exceed the factored compressive resistance perpendicular to grain ( $Q_r$ ) of the bearing plate supporting the I-joist in accordance with CSA O86.
- (b) Interpolation between bearing lengths is permitted.
- (c) Bearing stiffeners shall be installed in accordance with the recommendations provided by the manufacturer.

Table 4. Additional Factored Resistances of IB Series I-Joists <sup>(a,b,c)</sup>

| Joist Series | Joist Depth, mm (in.) | Permitted to Be Labeled as | Factored Intermediate Reactions, N (lbf) |                |                           |                |
|--------------|-----------------------|----------------------------|------------------------------------------|----------------|---------------------------|----------------|
|              |                       |                            | 89 mm (3-1/2 in.) Bearing                |                | 140 mm (5-1/2 in) Bearing |                |
|              |                       |                            | No Stiffeners                            | Stiffeners     | No Stiffeners             | Stiffeners     |
| IB200        | 241 (9-1/2)           | NA                         | 16,920 (3,804)                           | 17,025 (3,828) | 18,079 (4,064)            | 18,079 (4,064) |
|              | 302 (11-7/8)          | NA                         | 21,062 (4,735)                           | 21,062 (4,735) | 22,572 (5,075)            | 22,572 (5,075) |
| IB400        | 200 (7-7/8)           | NA                         | 15,165 (3,409)                           | 15,481 (3,480) | 16,218 (3,646)            | 16,499 (3,709) |
|              | 219 (8-5/8)           | NA                         | 15,165 (3,409)                           | 16,043 (3,607) | 16,218 (3,646)            | 16,639 (3,741) |
|              | 235 (9-1/4)           | NA                         | 15,165 (3,409)                           | 16,534 (3,717) | 16,218 (3,646)            | 16,639 (3,741) |
|              | 241 (9-1/2)           | PRI-40                     | 15,165 (3,409)                           | 16,639 (3,741) | 16,639 (3,741)            | 16,639 (3,741) |
|              | 286 (11-1/4)          | NA                         | 17,552 (3,946)                           | 19,623 (4,411) | 19,728 (4,435)            | 19,728 (4,435) |
|              | 302 (11-7/8)          | PRI-40                     | 17,552 (3,946)                           | 19,658 (4,419) | 19,728 (4,435)            | 20,782 (4,672) |
|              | 356 (14)              | PRI-40                     | 17,552 (3,946)                           | 19,833 (4,459) | 21,765 (4,893)            | 24,257 (5,453) |
|              | 406 (16)              | PRI-40                     | 17,552 (3,946)                           | 20,009 (4,498) | 21,765 (4,893)            | 25,626 (5,761) |
| IB600        | 200 (7-7/8)           | NA                         | 15,165 (3,409)                           | 15,481 (3,480) | 16,218 (3,646)            | 16,499 (3,709) |
|              | 219 (8-5/8)           | NA                         | 15,165 (3,409)                           | 16,043 (3,607) | 16,218 (3,646)            | 17,517 (3,938) |
|              | 235 (9-1/4)           | NA                         | 15,165 (3,409)                           | 18,956 (4,261) | 16,218 (3,646)            | 18,956 (4,261) |
|              | 241 (9-1/2)           | PRI-60                     | 15,165 (3,409)                           | 19,237 (4,325) | 16,639 (3,741)            | 19,237 (4,325) |
|              | 286 (11-1/4)          | NA                         | 17,552 (3,946)                           | 21,273 (4,782) | 19,728 (4,435)            | 21,273 (4,782) |
|              | 302 (11-7/8)          | PRI-60                     | 17,552 (3,946)                           | 21,589 (4,853) | 19,728 (4,435)            | 22,045 (4,956) |
|              | 356 (14)              | PRI-60                     | 17,552 (3,946)                           | 22,572 (5,074) | 21,765 (4,893)            | 24,257 (5,453) |
|              | 406 (16)              | PRI-60                     | 17,552 (3,946)                           | 23,520 (5,288) | 21,765 (4,893)            | 25,626 (5,761) |
|              | 457 (18)              | NA                         | 17,552 (3,946)                           | 24,046 (5,406) | 21,765 (4,893)            | 26,223 (5,895) |
|              | 508 (20)              | NA                         | 17,552 (3,946)                           | 24,222 (5,445) | 21,765 (4,893)            | 26,820 (6,029) |
| IB700        | 241 (9-1/2)           | NA                         | 17,552 (3,946)                           | 19,658 (4,420) | 17,552 (3,946)            | 19,658 (4,420) |
|              | 302 (11-7/8)          | NA                         | 17,552 (3,946)                           | 22,747 (5,114) | 20,431 (4,593)            | 22,747 (5,114) |
|              | 356 (14)              | NA                         | 17,552 (3,946)                           | 25,486 (5,730) | 21,765 (4,893)            | 25,486 (5,730) |
|              | 406 (16)              | NA                         | 17,552 (3,946)                           | 28,083 (6,314) | 21,765 (4,893)            | 28,083 (6,314) |
| IB800        | 200 (7-7/8)           | NA                         | 15,235 (3,425)                           | 15,481 (3,480) | 16,218 (3,646)            | 16,499 (3,709) |
|              | 219 (8-5/8)           | NA                         | 15,270 (3,433)                           | 16,043 (3,607) | 16,218 (3,646)            | 17,517 (3,938) |
|              | 235 (9-1/4)           | NA                         | 16,218 (3,646)                           | 18,956 (4,261) | 16,218 (3,646)            | 18,956 (4,261) |
|              | 241 (9-1/2)           | NA                         | 17,341 (3,898)                           | 19,237 (4,325) | 17,341 (3,898)            | 19,237 (4,325) |
|              | 286 (11-1/4)          | NA                         | 19,728 (4,435)                           | 21,273 (4,782) | 19,728 (4,435)            | 21,273 (4,782) |
|              | 302 (11-7/8)          | PRI-80                     | 19,764 (4,443)                           | 22,326 (5,019) | 22,045 (4,956)            | 22,326 (5,019) |
|              | 356 (14)              | PRI-80                     | 21,765 (4,893)                           | 25,275 (5,682) | 23,239 (5,225)            | 25,731 (5,785) |
|              | 406 (16)              | PRI-80                     | 21,765 (4,893)                           | 28,083 (6,313) | 23,450 (5,272)            | 28,785 (6,472) |
|              | 457 (18)              | NA                         | 21,765 (4,893)                           | 29,663 (6,669) | 21,765 (4,893)            | 29,663 (6,669) |
|              | 508 (20)              | NA                         | 21,765 (4,893)                           | 30,541 (6,866) | 21,765 (4,893)            | 30,541 (6,866) |
| IB900x       | 200 (7-7/8)           | NA                         | 19,904 (4,475)                           | 21,765 (4,893) | 20,044 (4,506)            | 22,116 (4,972) |
|              | 219 (8-5/8)           | NA                         | 20,606 (4,633)                           | 22,116 (4,972) | 20,711 (4,656)            | 22,396 (5,035) |
|              | 241 (9-1/2)           | NA                         | 21,378 (4,806)                           | 22,502 (5,059) | 21,484 (4,830)            | 22,712 (5,106) |
|              | 302 (11-7/8)          | NA                         | 23,555 (5,295)                           | 23,555 (5,295) | 23,555 (5,295)            | 23,555 (5,295) |
|              | 356 (14)              | PRI-90                     | 23,555 (5,295)                           | 25,275 (5,682) | 23,555 (5,295)            | 25,731 (5,785) |
|              | 406 (16)              | PRI-90                     | 23,555 (5,295)                           | 28,083 (6,314) | 23,555 (5,295)            | 28,785 (6,472) |
|              | 457 (18)              | NA                         | 23,555 (5,295)                           | 29,979 (6,740) | 23,555 (5,295)            | 32,577 (7,324) |
|              | 508 (20)              | NA                         | 23,555 (5,295)                           | 32,296 (7,260) | 23,555 (5,295)            | 33,770 (7,592) |
|              | 559 (22)              | NA                         | 23,555 (5,295)                           | 34,086 (7,663) | 23,555 (5,295)            | 34,191 (7,687) |
|              | 610 (24)              | NA                         | 23,555 (5,295)                           | 34,577 (7,774) | 23,555 (5,295)            | 34,577 (7,774) |

- (a) The tabulated values are for the standard term of load duration ( $K_D = 1.0$ ). All values are permitted to be adjusted for other load durations as permitted by the code provided that the adjusted values do not exceed the factored compressive resistance perpendicular to grain ( $Q_r$ ) of the bearing plate supporting the I-joist in accordance with CSA O86.
- (b) Interpolation between bearing lengths is permitted.
- (c) Bearing stiffeners shall be installed in accordance with the recommendations provided by the manufacturer.

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