1.0 EVALUATION SCOPE

Compliance with the following code:

2018 and 2015 International Building Code® (IBC)

For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see
ESR-2012 LABC Supplement.

For evaluation of compliance with codes adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architects (DSA), see the
ESR-2012 CBC Supplement.

Properties evaluated:

- Structural
- Fire resistance

2.0 USES

2.1 CEMCO Slotted Track (CST, CST-300, and CST-325), CEMCO Slotted Track with Drift Slots (CST-W), FAS Track 1000 (FAST 1000), FAS J-Track (FASJ):

The CST, CST-300, CST-325, CST-W, FAST 1000, and FASJ deflection tracks that are recognized for use in interior, one- and two-hour fire-resistance-rated, nonload-bearing, light-gage steel framed wall assemblies, as described in this report, forming a fire-resistive joint at the top of the wall capable of accommodating vertical movement of the building caused by thermal, seismic, wind or other loads. For fire-resistance-rated construction, the CST, CST-300, CST-325, CST-W, FAST 1000, and FASJ are used in assemblies as described in Section 4.2 of this report.

2.2 CEMCO Slotted Track (CST, CST-300, CST-325), CEMCO Slotted Track with Drift Slots (CST-W), CEMCO Slotted Track with Drift Slots (CST-W), FAS Track 1000 (FAST 1000), FAS J-Track (FASJ) Expansion Joint System:

The CST, CST-300, CST-325, CST-W, FAST 1000, and FASJ expansion joint systems provide positive attachment of wall studs to top track in fire-resistance-rated joints designed to accommodate vertical movement, in compliance with Section 715.2 of the IBC.

When installed in accordance with Figures 10 through 19, the systems are designed for an allowable total vertical movement of:

- 1 1/2 inches (+/- 3/4 inch) [38.1 mm (+/-19.05 mm)] for the CST, CST-W and FASJ;
- 2 inches (+/- 1 inch) [50.8 mm (+/- 25.4 mm)] for the CST-300 and CST-325;
- and 1 inch (±1/2 inch) [25.4 mm (±12.7 mm)] for the FAST 1000 system.

3.0 DESCRIPTION

3.1 General:

The CEMCO Head of Wall deflection slotted track joint systems consist of the CST, CST-300, CST-325, CTS-W, FAST 1000 or FASJ track and either the Mesh Angle or Deflection Drift Angle. See Table 1 for manufacturing locations.

3.2 Components:

3.2.1 CST and CST-W: The CST deflection tracks are U-shaped channel sections with slotted flanges and are formed from cold-formed sheet steel. The CST sections have widths of 2\(\frac{1}{2}\), 3\(\frac{3}{4}\), 4, 6, and 8 inches (64, 92, 102, 152 and 203 mm) and are cold-formed from steel having design thicknesses of 0.0188, 0.0312, 0.0346, 0.0451, 0.0566, and 0.0713 inch [0.48, 0.79, 0.88, 1.15, 1.44, and 1.81 mm (18, 30, 33, 43, 54, and 68 mils)]. The track legs (flanges) are 2\(\frac{1}{2}\) inches (63.5 mm) in length, and have 3\(\frac{3}{4}\)-inch-wide-by-1\(\frac{1}{2}\)-inch-long (6.4 mm by 38 mm) vertical slots spaced 1 inch (25.4 mm) on center along the length of the section.

The CST-W deflection tracks are the same as the CST deflection tracks, except they have drift slots 2\(\frac{1}{2}\) inches...
(64 mm) long spaced 4 inches (102 mm) on center staggered on either side of the centerline of the web. Six-inch-drift (152 mm) slots are available at special request for track widths of 33/8, 4, 6 and 8 inches (92, 102, 152 and 203 mm).

Figure 1 provides details of the CST and CST-W sections. The CST and CST-W section designations are shown in Table 2.

The allowable lateral load for the CST is shown in Table 3. The allowable lateral load for the CST-W is shown in Table 5.

The 54 and 68 mil deflection tracks are formed from steel complying with ASTM A1003 ST50H or ASTM A653 SS, Grade 50, Class 1. The 18, 30, 33 and 43 mil deflection tracks are formed from steel complying with ASTM A653 SS, Grade 33. The 18, 30, and 33 mil steel sections have a G40 or greater galvanized coating, while 43, 54, and 68 mil steel sections have G60 or greater galvanized coatings.

3.2.2 CST-300 and CST-325:

The CST-300 deflection tracks are U-shaped channel sections with slotted flanges and are formed from cold-formed sheet steel. The CST-300 sections have widths of 33/8, 4, 6, and 8 inches (92, 102, 152 and 203 mm) and are cold-formed from steel having design thicknesses of 0.0346, 0.0451, 0.0566, and 0.0713 inch [0.879, 1.146, 1.438, and 1.81 mm (33, 43, 54, and 68 mils)]. The track legs (flanges) are 3 inches (76.2 mm) in length and have 1/4-inch-wide-by-2-inch-long (6.4 mm by 50.8 mm) vertical slots spaced 1 inch (25.4 mm) on center along the length of the section. The spacing from the top of the vertical slot to the web and the bottom of the slot to the end of the flange are both 1/2-inch (12.7 mm).

The CST-325 deflection tracks are the same as the CST-300 deflection tracks, except they have different flange dimensions. The CST-325 sections have widths of 33/8, 4, 6 and 8 inches (92, 102, 152 and 203 mm). The track legs (flanges) are 3-1/4 inches (82.55 mm) in length and have 1/4-inch-wide-by-2-inch-long (6.4 mm by 50.8 mm) vertical slots spaced 1 inch (25.4 mm) on center along the length of the section. The spacing from the top of the vertical slot to the web is 1 inch (25.4 mm) and the bottom of the slot to the end of the flange is 1 1/2 inches (38.1 mm).

Figure 2 and Figure 3 provide details of the CST-300 and CST-325 sections respectively. The CST-300 and CST-325 section designations are shown in Table 2.

The allowable lateral load for the CST-300 is shown in Table 6. The allowable lateral load for the CST-325 is shown in Table 7.

The 54 and 68 mil deflection tracks are formed from steel complying with ASTM A1003 ST50H or ASTM A653 SS, Grade 50, Class 1. The 33 and 43 mil deflection tracks are formed from steel complying with ASTM A1003 ST33H or ASTM A653 SS, Grade 33. The 33 mil steel sections have a G40 or greater galvanized coating, while 43, 54, and 68 mil steel sections have G60 or greater galvanized coatings.

3.2.4 FASJ:

The FASJ deflection tracks are J-shaped (unsymmetrical) channel sections formed from cold-formed sheet steel and have a factory affixed strip of intumescent material along the web. The FASJ deflection tracks have widths of 33/8, 4, and 6 inches (64, 102 and 152 mm) and are cold-formed from steel having a design thickness of 0.0346 inches [0.879 mm (33 mil)]. The longer track leg (flange) is 2 1/2 inches (64 mm) long and the shorter leg is 1 1/2 inches (38 mm) in length. Figure 6 provides details of the FASJ section.

3.2.5 Deflection Drift Angle and Mesh Angle:

The Deflection Drift Angle (DDA) is a 1/4-by-2 1/2-inch (19 by 64 mm) angle and the DDA-1 is a 1/2-by-1 1/4-inch (16 by 32 mm) angle. The DDA and DDA-1 angles are sold steel angles with a factory affixed strip of intumescent material along the long leg. See Figure 7 for an illustration of the Deflection Drift Angle. The Deflection Drift Angle section designations are shown in Table 2.

The Mesh Angle is a 1 1/2-by-2 3/4-inch (38 by 70 mm) angle, with a portion of the long leg being an expanded mesh. See Figure 8 for an illustration of the Mesh Angle.

3.2.6 CEMCO FAS Strap (FASTP):

The FASTP is a flat steel strap with two 1/4-inch V-grooves. The FASTP is cold-formed to a width of 10 1/2 inches (259 mm) and has a factory affixed strip of intumescent material along the edges parallel to the grooves. The straps have design thicknesses of 0.0346, 0.0451, 0.0566 and 0.0713 inch [0.879, 1.146, 1.438, or 1.81 mm (33, 43, 54, or 68 mils)]. See Figure 9 for an illustration of the FASTP.

The FASTP straps are formed from steel complying with ASTM A1003 ST50H or ASTM A653 SS, Grade 50, Class 1. Straps cold-formed from steel design thicknesses of 0.0346 and 0.0451 inch [0.879 and 1.146 mm (33 and 43 mils)] comply with ASTM A1003 ST33H or ASTM A653 SS, Grade 33. Straps having steel thickness of 0.0346 inches (33 mils) have a minimum G40 galvanized coating while straps having steel design thicknesses of 0.0451, 0.0566, and 0.0713 inches (43, 54, and 68 mils) have a minimum G60 galvanized coating.

3.2.7 Hotrod Type-X:

The Hotrod Type-X is a 1/4” by 1” (12.7 mm, 25.4 mm) compressible intumescent firestopper. The Hotrod Type-X
has a rectangular profile with an easily compressible foam backer rod which fits into the deflection gap between the edge of the drywall and adjoining structure and has a factory affixed strip of intumescent material along the top. See Figure 4 for illustration of the Hotrod Type-X.

3.2.8 Gypsum Wallboard: The 5/8-inch-thick (15.9 mm), Type X gypsum wallboard must comply with ASTM C1396.

3.2.9 Fire Protection Material: The fire-protection material used must be Monokote MK-6, manufactured by W.R. Grace & Company; CAFCO Blaze Shield II, manufactured by Isolatek International; the Rectorseal Company Intumescent BlazeSeal strip factory adhered to the FAST 1000 (Figure 5); FASJ (Figure 6), DDA or DDA-1 (Figure 7); or mineral fiber rockwool insulation with a density of 4 pcf (64 kg/m³), complying with ASTM C665-12.

3.2.10 Fasteners: Fasteners used to attach the tops of the studs to the CST, CST-300, CST-325, CST-W, FAST 1000, or FASJ tracks must be minimum No. 8 by 9/16-inch-long (14.3 mm), wafer-head, self-piercing tapping or self-drilling tapping, as applicable, steel screws complying with ASTM C1513-13.

4.0 INSTALLATION

4.1 CST, CST-300, CST-325, CST-W, FAST 1000, FASJ Expansion Joint Systems:
The attachment of the CST, CST-300, CST-325, CST-W, or FAST 1000 tracks to the studs is accomplished by using fasteners described in Section 3.2.8 and as shown in Figures 10 through 19. The screws must be installed into each side of the CST, CST-300, CST-325, CST-W, or FAST 1000 through the center of the slots designed for upward and downward movement, without affecting the positive attachment of the stud framing members. The fasteners must penetrate the stud section a minimum of three threads. The vertical leg of the Deflection Drift Angle, or Mesh angle must be in contact with the surface of the gypsum wallboard, and the horizontal leg must be attached to the structural assembly above the wall using minimum No. 6 by 1 1/4-inch-long (28.6 mm) drywall screws. There must not be any attachment through the slotted track that will impair movement.

4.2 Fire-resistance-rated Construction:
The CST, CST-300, CST-325, FAST 1000 and FASJ expansion joint systems used in fire-resistance-rated wall assemblies must be limited to assemblies in Table 721.1 (2) of the IBC which consist of minimum 18 mil (No. 25 gage) [0.0188 inch (0.457 mm) base-metal thickness], minimum 3 1/2-inch-deep (88.9 mm) steel framing and 5/8-inch-thick (15.9 mm), Type X, gypsum board. The fire-resistance rating of the wall assembly is maintained when the CST, CST-300, CST-325, FAST 1000, or FASJ expansion joint systems are installed in accordance with Figures 10 through 19 of this report and are approved by the code official. The fire-protection materials, either W.R. Grace & Company Monokote MK-6 or Isolatek International CAFCO Blaze-Shield II, must be used and installed in accordance with the Design No. specified in Figures 10, 11, 14, and 15.

Fire protection material is provided for the FAST 1000 and FASJ tracks by an adhered intumescent strip that covers a portion of the web as shown in Figures 2 and 3. Mineral fiber rockwool insulation must be installed as shown in Figures 10, 11, 15, 17, and 19.

See Figures 10, 11, 15, 16, 17, 18, and 19 for joint systems with the head of the wall at the concrete deck.

See Figures 12 and 13 for a joint system with the head of the wall offset and parallel under the fluted steel deck.

5.0 CONDITIONS OF USE

The CEMCO CST, CST-300, CST-325, CST-W, FAST 1000, and FASJ expansion joint systems described in this report comply with, or are suitable alternatives to what is specified in, the codes noted in Section 1.0 of this report, subject to the following conditions:

5.1 The CST, CST-300, CST-325, CST-W, FAST 1000, FASJ, DDA, Mesh Angle and FASTP must be installed and identified in accordance with this report, the applicable code and the report holder’s or additional listee’s published installation instructions. In the event of a conflict between this report and the report holder’s or additional listee’s published installation instructions, this report governs.

5.2 Recognized fire-resistance-rated wall assemblies incorporating the CST, CST-300, CST-325, CST-W, Hotrod Type-X, FAST 1000, FASJ, DDA, DDA-1, Mesh Angle and FASTP are limited to the assemblies described in Figures 10 through 19 of this report, as applicable.

5.3 Complete plans, details and calculations for each project, verifying compliance with this report, must be submitted to the code 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.

5.4 The minimum uncoated steel thickness of cold-formed members, as delivered to the jobsite, must be at least 95 percent of the design base-metal thickness as specified in this report. The design of the steel studs to be used in the expansion joint systems is outside the scope of this report and must be submitted to the code official for approval.

5.5 Products are manufactured by the companies and locations noted in Table 1 under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Cold-Formed Steel Framing Members (AC46), dated October 2019.

6.2 Test reports in accordance with UL 2079.

7.0 IDENTIFICATION

7.1 Each CST, CST-300, CST-325, CST-W, FAST 1000, and FASJ section is identified with the manufacturer’s initials (CEMCO), “CST”, “CST-300”, “CST-325”, “CST-W”, “FAST 1000”, or “FASJ”, respectively, the minimum base steel thickness, the minimum yield strength (if over 33 ksi), the galvanization coating designation (if G60 or greater), the designation “NS” (if G40 is used), and the evaluation report number (ICC-ES ESR-2012). In addition, each pallet of track is identified with the report holder’s company name and the section designation.

The Deflection Drift Angle (DDA or DDA-1), Mesh angle and FASTP are identified with the report
holder's initials (CEMCO), the product name and the evaluation report number (ESR-2012).

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

CALIFORNIA EXPANDED METAL PRODUCTS COMPANY
13191 CROSSROADS PARKWAY NORTH,
SUITE 325
CITY OF INDUSTRY, CALIFORNIA 91746
(800) 416-2278
www.cemcosteel.com

<table>
<thead>
<tr>
<th>MANUFACTURING LOCATION</th>
<th>PRODUCTS</th>
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<tr>
<td>CEMCO – City of Industry City of Industry, CA 91746</td>
<td>CST, CST-W, &amp; Hotrod Type X</td>
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<tr>
<td>CEMCO – Fort Worth Fort Worth, TX 76140</td>
<td>FAST 1000, FASJ, FASTP, DDA, DDA-1, &amp; Hotrod Type X</td>
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<tr>
<td>CEMCO – Pittsburg Pittsburg, CA 94565</td>
<td>CST, CST-W, FAST 1000, FASJ, FASTP, DDA, DDA-1, CST-300, CST-325</td>
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<td>CEMCO - Denver Denver, CO 80204</td>
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<table>
<thead>
<tr>
<th>CST(^1) and CST-W(^2)</th>
<th>FAST 1000</th>
<th>FASJ</th>
<th>CST-300</th>
<th>CST-325</th>
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</table>

\(^1\)Refer to Table 3 for additional information.

\(^2\)CTS-W is the CST with drift slots placed in the web except that the CST-W is not available in 2.5”width. Refer to Table 5 for additional information.
**TABLE 3—CST SLOTTED TRACK ALLOWABLE LOADS**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESIGN THICKNESS (in)</th>
<th>MINIMUM THICKNESS (in)</th>
<th>YIELD (ksi)</th>
<th>COATING</th>
<th>WEB SIZES (in)</th>
<th>GAP² (in)</th>
<th>ALLOWABLE LOAD³ PER STUD (lb)</th>
<th>LOAD AT ¹/₈ INCH DEFLECTION⁴ (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>0.0188</td>
<td>0.0179</td>
<td>33</td>
<td>G40</td>
<td>⁵/₈, ⁶/₈, ⁸/₈</td>
<td>⁵/₈</td>
<td>80</td>
<td>20</td>
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<tr>
<td>30</td>
<td>0.0312</td>
<td>0.0296</td>
<td>33</td>
<td>G40</td>
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<td>⁵/₈</td>
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<td>45</td>
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<td>33</td>
<td>0.0346</td>
<td>0.0329</td>
<td>33</td>
<td>G40</td>
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<td>150</td>
<td>40</td>
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<td>43</td>
<td>0.0451</td>
<td>0.0428</td>
<td>33</td>
<td>G60</td>
<td>⁵/₈, ⁶/₈, ⁸/₈</td>
<td>⁵/₈</td>
<td>220</td>
<td>65</td>
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<td>54</td>
<td>0.0566</td>
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<td>50</td>
<td>G60</td>
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<td>355</td>
<td>125</td>
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<td>68</td>
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<td>G60</td>
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<td>⁵/₈</td>
<td>380</td>
<td>200</td>
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For SI: 1 inch = 25.4mm, 1 lbf = 4.448 N, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.5939 N/m

¹See the last two digits in the section designation in Table 2.
²The gap is the maximum distance between end of the stud and the web of the track.
³Loads are allowable strength loads (ASD). For load and resistance factor design (LRFD) multiply by 1.54.
⁴Deflection is the deflection of the edge of the flange away from the web of the CST.

---

**TABLE 4—FAST 1000 SLOTTED TRACK ALLOWABLE LOADS**

<table>
<thead>
<tr>
<th>MODEL NO.¹</th>
<th>DESIGN THICKNESS (in)</th>
<th>MINIMUM THICKNESS (in)</th>
<th>YIELD (ksi)</th>
<th>COATING</th>
<th>WEB SIZES (in)</th>
<th>GAP² (in)</th>
<th>ALLOWABLE LOAD³ PER STUD (lb)</th>
<th>LOAD AT ¹/₈ INCH DEFLECTION⁴ (lb)</th>
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<tbody>
<tr>
<td>33</td>
<td>0.0346</td>
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<td>33</td>
<td>G40</td>
<td>⁵/₈, ⁶/₈, ⁸/₈</td>
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<td>43</td>
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For SI: 1 inch = 25.4mm, 1 lbf = 4.448 N, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.5939 N/m

¹See the last two digits in the section designation in Table 2.
²The gap is the maximum distance between end of the stud and the web of the track.
³Loads are allowable strength loads (ASD). For load and resistance factor design (LRFD) multiply by 1.54.
⁴Deflection is the deflection of the edge of the flange away from the web of the FAS Track 1000.
### TABLE 5—CST-W SLOTTED TRACK ALLOWABLE LOADS

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<tr>
<th>MODEL NO.</th>
<th>DESIGN THICKNESS (in)</th>
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<th>YIELD (ksi)</th>
<th>COATING</th>
<th>WEB SIZES (in)</th>
<th>GAP² (in)</th>
<th>ALLOWABLE LOAD³ PER STUD (lb)</th>
<th>LOAD AT 1/8 INCH DEFLECTION⁴ (lb)</th>
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<td>43</td>
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<td>2 1/2 3 3/8 4 6 8</td>
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<td>50</td>
<td>G60</td>
<td>2 1/2 3 3/8 4 6 8</td>
<td>5/8</td>
<td>280</td>
<td>95</td>
</tr>
<tr>
<td>68</td>
<td>0.0713</td>
<td>0.0677</td>
<td>50</td>
<td>G60</td>
<td>3 3/8 4 6 8</td>
<td>5/8</td>
<td>365</td>
<td>210</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4mm, 1 lbf = 4.448 N, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.5939 N/m

¹See the last two digits in the section designation in Table 2.
²The gap is the maximum distance between end of the stud and the web of the track.
³Loads are allowable strength loads (ASD). For load and resistance factor design (LRFD) multiply by 1.54.
⁴Deflection is the deflection of the edge of the flange away from the web of the CST-W.

### TABLE 6—CST-SLOTTED TRACK ALLOWABLE LOADS (3” Flange)

<table>
<thead>
<tr>
<th>MODEL NO.¹</th>
<th>DESIGN THICKNESS (in)</th>
<th>MINIMUM THICKNESS (in)</th>
<th>YIELD (ksi)</th>
<th>COATING</th>
<th>WEB SIZES (in)</th>
<th>GAP² (in)</th>
<th>ALLOWABLE LOAD³ PER STUD (lb)</th>
<th>LOAD AT 1/8 INCH DEFLECTION⁴ (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>0.0346</td>
<td>0.0329</td>
<td>33</td>
<td>G40</td>
<td>3 3/8 4 6 8</td>
<td>3/4</td>
<td>140</td>
<td>110</td>
</tr>
<tr>
<td>43</td>
<td>0.0451</td>
<td>0.0428</td>
<td>33</td>
<td>G60</td>
<td>3 3/8 4 6 8</td>
<td>3/4</td>
<td>250</td>
<td>210</td>
</tr>
<tr>
<td>54</td>
<td>0.0566</td>
<td>0.0538</td>
<td>50</td>
<td>G60</td>
<td>3 3/8 4 6 8</td>
<td>3/4</td>
<td>520</td>
<td>350</td>
</tr>
<tr>
<td>68</td>
<td>0.0713</td>
<td>0.0677</td>
<td>50</td>
<td>G60</td>
<td>3 3/8 4 6 8</td>
<td>3/4</td>
<td>760</td>
<td>600</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4mm, 1 lbf = 4.448 N, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.5939 N/m

¹See the last two digits in the section designation in Table 2.
²The gap is the maximum distance between end of the stud and the web of the track.
³Loads are allowable strength loads (ASD). For load and resistance factor design (LRFD) multiply by 1.54.
⁴Deflection is the deflection of the edge of the flange away from the web of the CST-300.
### TABLE 7—CST-SLOTTED TRACK ALLOWABLE LOADS (3.25" Flange)

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESIGN THICKNESS (in)</th>
<th>MINIMUM THICKNESS (in)</th>
<th>YIELD (ksi)</th>
<th>COATING</th>
<th>WEB SIZES (in)</th>
<th>GAP (in)</th>
<th>ALLOWABLE LOAD PER STUD (lb)</th>
<th>LOAD AT 1/8 INCH DEFLECTION (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>0.0346</td>
<td>0.0329</td>
<td>33</td>
<td>G40</td>
<td>3/8 4 6 8</td>
<td>3/4</td>
<td>150</td>
<td>105</td>
</tr>
<tr>
<td>43</td>
<td>0.0451</td>
<td>0.0428</td>
<td>33</td>
<td>G60</td>
<td>3/8 4 6 8</td>
<td>3/4</td>
<td>260</td>
<td>195</td>
</tr>
<tr>
<td>54</td>
<td>0.0566</td>
<td>0.0538</td>
<td>50</td>
<td>G60</td>
<td>3/8 4 6 8</td>
<td>3/4</td>
<td>510</td>
<td>335</td>
</tr>
<tr>
<td>68</td>
<td>0.0713</td>
<td>0.0677</td>
<td>50</td>
<td>G60</td>
<td>3/8 4 6 8</td>
<td>3/4</td>
<td>770</td>
<td>540</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4mm, 1 lbf = 4.448 N, 1 ksi = 6.8948 kPa, 1 lb/ft = 14.5939 N/m

1See the last two digits in the section designation in Table 2.
2The gap is the maximum distance between end of the stud and the web of the track.
3Loads are allowable strength loads (ASD). For load and resistance factor design (LRFD) multiply by 1.54.
4Deflection is the deflection of the edge of the flange away from the web of the CST-325.
FIGURE 1—CEMCO SLOTTED TRACK

CST SLOTTED TRACK

CST-W SLOTTED TRACK WITH DRIFT SLOTS

FIGURE 1—CEMCO SLOTTED TRACK
FIGURE 2: CST SLOTTED TRACK WITH 3" FLANGE

FIGURE 3: CST SLOTTED TRACK WITH 3.25" FLANGE
FIGURE 4: CEMCO HOTROD TYPE X
FIGURE 5—FAST 1000 SLOTTED TRACK

FIGURE 6—FAS J-TRACK
FIGURE 7—DEFLECTION DRIFT ANGLE (DDA & DDA-1)

FIGURE 8—MESH ANGLE
FIGURE 9—FASTP

FIGURE 10—HEAD OF WALL PERPENDICULAR TO FLUTED DECK
(See Warnock Hersey Design No. CEM/JS 120-04 for additional details)
FIGURE 11—HEAD OF WALL AT CONCRETE DECK
(See Warnock Hersey Design No. CEM/JS 120-03 for additional details)

FIGURE 12—HEAD OF WALL PERPENDICULAR TO FLUTED DECK
[See UL HW-D-0577 (dated October 20, 2015) for additional details]
FIGURE 13—HEAD OF WALL OFFSET & PARALLEL UNDER FLUTED DECK

[See UL HW-D-0524 (dated June 17, 2019) for additional details in Joint Configurations A and B]

Note: FIGURE 14—HEAD OF WALL PARALLEL & CENTERED DIRECTLY UNDER BEAM

[See UL HW-D-0579 (dated January 31, 2018) for additional details]
FIGURE 15—SHAFT WALL DIRECTLY UNDER BEAM

[See UL HW-D-0622 (dated July 3, 2018) for additional details]

FIGURE 16—HEAD OF WALL AT CONCRETE DECK

[See UL HW-D-0576 (dated December 04, 2012) for additional details]
**FIGURE 17—SHAFT WALL AT CONCRETE DECK**

[See UL HW-D-0585 (dated August 08, 2014) for additional details]

- Maximum 7/8” gap for use with DDA or maximum ½” gap for use with DDA-1

- CEMCO deflection drift angle - DDA

- 5/8” Type ‘X’ drywall

- 1” shaft liner

- 2 hour fire resistive assembly

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**FIGURE 18—HEAD OF WALL AT CONCRETE DECK**

[See UL HW-D-0624 (dated June 18, 2019) for additional details]

- Typical steel fasteners by design

- Hotrod Type X - for use with gaps greater than ½” but less than a maximum of ¾” (both sides)

- Tape and joint compound - for use with Hotrod Type X when gaps are greater than ½” but less than a maximum ¾” (both sides)

- (Not shown) - for gaps less than or equal to 7/8” - continuous open cell polyurethane foam covered with tape and joint compound (both sides) in lieu of Hotrod Type X

- 1 hour fire resistive assembly (available in 2 hour – double layer of gypsum board)
FIGURE 19—SHAFT WALL AT CONCRETE DECK
[See UL HW-D-0625 (dated June 18, 2019) for additional details]
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that CEMCO steel tracks expansion joint system for nonload-bearing wall systems, described in ICC-ES evaluation report ESR-2012, have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code edition:
- 2020 City of Los Angeles Building Code (LABC)

2.0 CONCLUSIONS

The CEMCO steel tracks expansion joint system for nonload-bearing wall systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2012, comply with the LABC Chapters 7 and 22, and are subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The CEMCO steel track expansion joint system for nonload-bearing walls systems described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-2012.
- The design, installation, conditions of use and identification of the Cold-Formed Steel Framing Members are in accordance with the 2018 International Building Code® (2018 IBC) provisions noted in the evaluation report ESR-2012.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 7, 16, 17 and 22, as applicable.

This supplement expires concurrently with the evaluation report, reissued October 2018 and revised March 2020.
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that the CEMCO steel tracks expansion joint system for nonload-bearing wall systems, recognized in ICC-ES evaluation report ESR-2012, has also been evaluated for compliance with the code noted below.

Applicable code edition:
- 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1 and 2.2 below.

2.0 CONCLUSIONS

The CEMCO steel tracks expansion joint system for nonload-bearing wall systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2012, complies with CBC Chapters 7 and 22, provided the design and installation are in accordance with the 2018 International Building Code® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 7, 16 and 17, as applicable.

2.1 OSHPD:
The CEMCO steel tracks expansion joint system for nonload-bearing wall systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2012, comply with CBC Chapter 7, amended Sections in Chapters 16, 17 and 22, and Chapters 16A, 17A and 22A provided the design and installation are in accordance with the 2018 International Building Code® (IBC) provisions noted in the evaluation report and the additional requirements in Sections 2.1.1 and 2.1.2 of this supplement:

2.1.1 Conditions of Use:
1. All loads applied to the cold-formed steel studs shall be determined by the registered design professional and shall comply with applicable loads from CBC amended sections in Chapters 16 and 16A.
2. Prescriptive framing is not permitted in accordance with CBC Section 2211A.1.2 [OSHPD 1 & 4].
3. In accordance with CBC Section 2210.2, cold formed steel structures shall be designed and detailed in accordance with the requirements of AISI S100.
4. In accordance with CBC Section 2211.2 and 2211A.2, for cold-formed steel light-frame construction, the design and installation of nonstructural members and connections shall be in accordance with AISI S220 for noncomposite...
assembly design. Where nonstructural members do not qualify for design under AISI 220, the design and installation of nonstructural members and connectors shall be in accordance with AISI S240 or S100 [OSHPD 1, 1R, 2, 4 and 5].

5. Where primary and secondary structural steel members require fire protection, the attachment of secondary members shall comply with the additional requirements of Section 705.6.1 [OSHPD 1, 1R, 2, 4 & 5].

2.1.2 Special Inspection Requirements:

1. In accordance with CBC Section 1704.2 Exception 3, special inspection is required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of CBC 2211.1.2 [OSHPD 1R, 2, & 5].

2. Periodic special inspections shall be required in accordance with CBC Section 1705A.12.3 and 1705A.12.5 [OSHPD 1 & 4].

2.2 DSA:

The CEMCO steel tracks expansion joint system for nonload-bearing wall systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2012, comply with CBC Chapter 7, and amended Sections in Chapters 16, 17 and 22, and Chapters 16A, 17A and 22A, provided the design and installation are in accordance with the 2018 International Building Code® (IBC) provisions noted in the evaluation report and the additional requirements in Sections 2.2.1 and 2.2.2 of this supplement.

2.2.1 Conditions of Use:

1. All loads applied to the cold-formed steel studs shall be determined by the registered design professional and shall comply with applicable loads from CBC amended sections in Chapters 16 and 16A.

2. Prescriptive framing is not permitted in accordance with CBC Section 2211A.1.2 [DSA-SS].

3. In accordance with CBC Section 2211A.2, for cold-formed steel light-frame construction, the design and installation of nonstructural members and connections shall be in accordance with AISI S220 for noncomposite assembly design. Where nonstructural members do not qualify for design under AISI 220, the design and installation of nonstructural members and connectors shall be in accordance with AISI S240 or S100 [DSA-SS].

4. Where primary and secondary structural steel members require fire protection, the attachment of secondary members shall comply with the additional requirements of Section 705.6.1 [DSA-SS & DSA-SS/CC].

2.2.2 Special Inspection Requirements: Periodic special inspections shall be required in accordance with CBC Section 1705A.12.3 and 1705A.12.5 [DSA-SS/CC].

This supplement expires concurrently with the evaluation report, reissued October 2018 and revised March 2020.