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CEMCO’s
Head of Wall Systems

Overview
Head of Wall Systems

Slotted Track
CEMCO’s CST Brand slotted track and Sliptrack System’s “SLP-TRK®” brand slotted track are evaluated and approved for use by ICC in report ESR-2012.

CEMCO’s CST and Brady’s SLP-TRK® branded slotted track are available to the construction industry so that dealers will be able to satisfy the high demand for products by architects, contractors, and engineers. Both systems are proven solutions for seismic head-of-wall requirements all over the United States and abroad. Each product line will have full sales and technical support through CEMCO’s Technical Services Department.

This co-branding agreement calls for each piece of slotted track you receive to be labeled with both ICC-ESR numbers which simplifies the purchasing, inventorying, sales and distribution for the wholesaler and end user. Full traceability is guaranteed by the ink-jetting of material tracking information commonly required by on-site inspectors, architects, and engineers. CEMCO’s Head of Wall (HOW) products provide for easy installation to meet seismic and fire rated requirements in your commercial, institutional, hospital, and educational project.

FAS® Track 1000 and DDA®
Fire Rated Head of Wall Solutions
The contractors and architects have spoken and CEMCO has responded by introducing the latest iteration of the FAS Track product line “FAS Track® 1000.” FAS Track 1000 is the most efficient way to provide superior fire, smoke and sound protection within a composite deflection track according to UL-2079 without the use of fire caulking. FAS Track requires NO fire sealant or fire spray when used on solid concrete construction or fluted pan decking for 1 and 2 hour fire rated walls.

With FAS Track 1000 you are guaranteed that once installed the intumescent tape will not wear off, tear off, or fall off, making it the most reliable intumescent track on the market. On fluted deck applications mineral wool can be replaced with spray applied fireproofing. This assembly will not require any additional fire spray or caulking.

DDA®
US Patent #8,595,999 B1 (Deflection Drift Angle®) is a composite steel angle with intumescent tape factory applied to the inside leg of the steel angle. The DDA is a fire-rated accessory that when combined with slotted or deep leg track will offer 2” unencumbered movement at the end of the head-of-wall joint in accordance with UL-2079 “Test for Fire Resistance of Building Joint Systems.” The 2-1/2” outside leg marked for proper identification. The section is fabricated from minimum 0.018-inch thick hot-dipped red galvanized steel complying with ASTM A653 having minimum G-40 coating.

Standard HOW Products
- CEMCO Slotted Track “CST” & “SLP-TRK®” Brand Slotted Tracks
- Exterior Slotted Track

FAS Track HOW Products
- FAS Track 1000
- FAS Track 1000 DL
- FAS Track BT 1000
- FAS J-Track Shaft Wall
- Deflection Drift Angle (DDA)
- Deflection Drift Angle-1 (DDA-1)
- FAS Strap

FAS Specialty Products
- TAB and TAB FAS Track
- FAS 093X Fire Rated Control Joint
- FAS 093X-V Fire Rated Control Joint – Vinyl
- FAS RBR (Rated Base Reveal)
- FAS RBR Strap
- FAS Vertical Drift Joint
- HOTROD Type-X (Compressible Firestopping)
ASTM/Standards Declaration

Steel Thickness

<table>
<thead>
<tr>
<th>Mil Thickness</th>
<th>Design Thickness (in.)</th>
<th>Minimum Thickness (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>0.0188 (.48 mm)</td>
<td>0.0179 (.45 mm)</td>
</tr>
<tr>
<td>33</td>
<td>0.0346 (.88 mm)</td>
<td>0.0329 (.84 mm)</td>
</tr>
<tr>
<td>43</td>
<td>0.0451 (1.15 mm)</td>
<td>0.0428 (1.09 mm)</td>
</tr>
<tr>
<td>54</td>
<td>0.0566 (1.44 mm)</td>
<td>0.0538 (1.37 mm)</td>
</tr>
<tr>
<td>68</td>
<td>0.0713 (1.81 mm)</td>
<td>0.0677 (1.72 mm)</td>
</tr>
</tbody>
</table>

1) Uncoated Steel Thickness. Thickness is for carbon sheet steel.
2) Minimum thickness represents 95% of the design thickness and is the minimum acceptable thickness with 2004 AISI supplement.

Color Code (painted on ends)
- 18 mil: None
- 33 mil: White
- 43 mil: Yellow
- 54 mil: Green
- 68 Mil: Orange

ASTM & Code Standards
- ICC-ESR ER-2012 (CEMCO CST, FAS Track 1000, FAS J-Track, SLP-TRK® Brand Slotted Track).
- 2012/2015 IBC
- 2013/2016 CBC
- UL 2079 Tests For Fire Resistance of Building Joints.
- Sound Tested in accordance with ASTM E90-09.
- Air leakage tests conducted for compliance with Section 713.6 of IBC and CBC.

LEED v4 for Building & Design Construction
- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Life-Cycle Impact Reduction, Option 4.

Recycled Content
- Total Recycled Content: 36.9%
- Post-Consumer: 19.8%
- Pre-Consumer: 14.4%

California’s Proposition 65 Warning
California’s Safe Drinking Water and Toxic Enforcement Act of 1986 – commonly referred to as Proposition 65 (“Prop 65”) (27 Cal. Code Reg. § 25600, et seq.) – has recently changed, requiring manufacturers to provide a warning based on its knowledge about the presence of one or more of the almost 900 listed chemicals which are known to the State of California to cause cancer and birth defects, or other reproductive harm. With a few exceptions, manufacturers operating in the state of California as well as those entities who distribute, import, package, and/or supply products into the State of California are now required to provide a “clear and reasonable” warning to consumers that their products may contain one or more of these listed chemicals or compounds. The complete list is available at www.P65Warnings.ca.gov.

In compliance with the new requirements, we are notifying each of our customers that CEMCO products contain Nickel (metallic) and/or other chemicals listed which are known to the State of California to cause cancer and birth defects or other reproductive harm. Safety data sheets from our major suppliers are available from CEMCO on our website at www.cemcosteel.com.
Patents and Intellectual Property Rights

FAS Track, DDA, HOTROD and TAB Track products, or installations incorporating these products, may be covered by one or more of U.S. Patent #’s.

- 7,617,643
- 8,322,094
- 8,595,999
- 8,640,415
- 8,671,632
- 8,793,947
- 9,045,899
- 9,085,895
- 9,551,148
- 9,683,364
- 9,752,318 B2
“CST” and “SLP-TRK®” Brand Slotted Tracks

“CST” and “SLP-TRK®” brand slotted slip tracks are fabricated in following web depths and thicknesses. All CEMCO CST brand and Brady SLP-TRK® brand slotted slip tracks are produced from G40 coated steel for 18 and 33 mil products. All others are manufactured with G60 coating. G90 is available upon request.

CEMCO Slotted Track Configurations

<table>
<thead>
<tr>
<th>“W” Web Size (in)</th>
<th>“F” Flange Size (in)</th>
<th>“S” Slot Length (in)</th>
<th>“T” Steel Thickness (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2½, 3¼, 4, 6, 8</td>
<td>2½</td>
<td>1½</td>
<td>18, 33, 43, 54, 68</td>
</tr>
<tr>
<td>2½, 3¼, 4, 6, 8</td>
<td>3</td>
<td>2</td>
<td>54, 68</td>
</tr>
<tr>
<td>3¾, 4, 6, 8</td>
<td>3¼</td>
<td>2*</td>
<td>54, 68</td>
</tr>
</tbody>
</table>

*Slots are 1” down from top of track
# Overview

## Standard HOW Products

**CEMCO CST and SLP-TRK® Brand Slotted Tracks**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18 mil</td>
<td>0.0188</td>
<td>0.0179</td>
<td>33 G40</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8&quot;</td>
<td>12</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
<td>28' 10&quot;</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 mil</td>
<td>0.0346</td>
<td>0.0329</td>
<td>33 G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8&quot;</td>
<td>12</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
<td>58'</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>43 mil</td>
<td>0.0451</td>
<td>0.0428</td>
<td>33 G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8&quot;</td>
<td>12</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
<td>85' 2&quot;</td>
</tr>
<tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54 mil</td>
<td>0.0566</td>
<td>0.0538</td>
<td>50 G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8&quot;</td>
<td>16</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
<td>105' 3&quot;</td>
</tr>
<tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68 mil</td>
<td>0.0713</td>
<td>0.0677</td>
<td>50 G60</td>
<td>3-5/8, 4, 6, 8</td>
<td>5/8&quot;</td>
<td>12</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
<td>150'</td>
</tr>
</tbody>
</table>

**NOTE:** MAXIMUM LOADS ARE BASED ON AVERAGE TEST RESULTS
“CST” and “SLP-TRK®” Brand Slotted Tracks with Optional Drift Slots

“CST” and “SLP-TRK®” brand slotted slip tracks are fabricated in following web depths and thicknesses. All CEMCO CST brand and Brady SLP-TRK® brand slotted slip tracks are produced from G40 coated steel for 18 and 33 mil products. All others are manufactured with G60 coating. G90 is available upon request.

CEMCO Slotted Track Configurations

<table>
<thead>
<tr>
<th>&quot;W&quot; Web Size (in)</th>
<th>&quot;F&quot; Flange Size (in)</th>
<th>&quot;S&quot; Slot Length (in)</th>
<th>&quot;T&quot; Steel Thickness (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-½, 3-½, 4, 6, 8</td>
<td>2-½</td>
<td>1-½</td>
<td>18, 33, 43, 54, 68</td>
</tr>
</tbody>
</table>
## CEMCO CST SLOTTED TRACK (WITH DRIFT SLOTS) ALLOWABLE LOADS AND HEIGHTS (1-1/2” FLANGE SLOTS & 2-1/2” WEB SLOTS)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>33 mil</td>
<td>0.0346</td>
<td>0.0329</td>
<td>33</td>
<td>G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8”</td>
<td>12</td>
<td>7.5</td>
<td>140</td>
<td>52”</td>
</tr>
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<td></td>
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<td></td>
<td>10</td>
<td>7.5</td>
<td>34’8”</td>
<td>26”</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td>7.5</td>
<td>26’1”</td>
<td>19’7”</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>7.5</td>
<td>26’</td>
<td>17’4”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>7.5</td>
<td>13”</td>
<td></td>
</tr>
<tr>
<td>43 mil</td>
<td>0.0451</td>
<td>0.0428</td>
<td>33</td>
<td>G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8”</td>
<td>12</td>
<td>7.5</td>
<td>210</td>
<td>81’2”</td>
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<td></td>
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<td>10</td>
<td>7.5</td>
<td>54’2”</td>
<td>40’7”</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>16</td>
<td>7.5</td>
<td>40’8”</td>
<td>30’6”</td>
</tr>
<tr>
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<td>24</td>
<td>7.5</td>
<td>27’1”</td>
<td>20’4”</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>7.5</td>
<td>13”</td>
<td></td>
</tr>
<tr>
<td>54 mil</td>
<td>0.0566</td>
<td>0.0538</td>
<td>50</td>
<td>G60</td>
<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
<td>5/8”</td>
<td>12</td>
<td>7.5</td>
<td>280</td>
<td>104’</td>
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<tr>
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<td>10</td>
<td>7.5</td>
<td>69’4”</td>
<td>52’</td>
</tr>
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<td></td>
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<td>16</td>
<td>7.5</td>
<td>78’2”</td>
<td>52’2”</td>
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<td>24</td>
<td>7.5</td>
<td>52’</td>
<td>39’1”</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>7.5</td>
<td>34’8”</td>
<td>26’</td>
</tr>
<tr>
<td>68 mil</td>
<td>0.0713</td>
<td>0.0677</td>
<td>50</td>
<td>G60</td>
<td>3-5/8, 4, 6, 8</td>
<td>5/8”</td>
<td>12</td>
<td>7.5</td>
<td>365</td>
<td>146’10”</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>10</td>
<td>7.5</td>
<td>97’10”</td>
<td>73’5”</td>
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<td></td>
<td>16</td>
<td>7.5</td>
<td>110’5”</td>
<td>73’7”</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>7.5</td>
<td>55’2”</td>
<td>73’5”</td>
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<td></td>
<td></td>
<td></td>
<td>10</td>
<td>7.5</td>
<td>48’11”</td>
<td>36’8”</td>
</tr>
</tbody>
</table>

*NOTE: MAXIMUM LOADS ARE BASED ON AVERAGE TEST RESULTS*
Exterior Slotted Track

Using the Right Product Saves Labor, Time and Money …

At CEMCO we listen to the needs of the contractor and architect. CEMCO’s Exterior Slotted Track addresses the fundamental properties of vertical deflection and drift movement, as well as alignment issues and installation needs that are currently problematic at floor line conditions. Keeping the contractor in mind, our patent pending design will provide a resting point for the exterior sheathing, an attachment guideline for stud fasteners, as well as a five-point attachment pattern in the web.

The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Structural Grade 50 Type H for Grade 33 Type H for with a minimum G60 coating, and complies with ASTM A924/A924M.

<table>
<thead>
<tr>
<th>Track Member Width</th>
<th>Leg Length</th>
<th>Gauge (mils)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 5/8&quot;, 4&quot;, 6&quot;, and 8&quot;</td>
<td>10'0&quot;</td>
<td>20, 18, and 16,14 GA (33, 43, 54, and 68 mil)</td>
</tr>
</tbody>
</table>
**Why I Should Specify and Use FAS Track® 1000?**

**Contractors and Architects Have Spoken** and CEMCO Has Responded

Introducing … the most advanced version of the FAS Track product line “FAS Track 1000.” FAS Track 1000 is the most efficient way to provide superior fire, smoke and sound protection within a composite deflection track according to UL-2079 without the use of fire caulking.

The intumescent on the FAS Track 1000 is installed solely on the web where it can perform more efficiently. There are several benefits to having the intumescent on the web.

1. **FAS Track 1000 provides a sound deadening element** to the head-of-wall joint that has been tested and proven to provide even **greater STC rating** than acoustic sealant.

2. **FAS Track 1000 provides a superior gasket** when sealing against **uneven concrete decks** and with the intumescent compressed between the track and the concrete deck it ensures that the intumescent will not pull away from the track or be damaged by other trades.

3. **Best of all, because of the efficiency of the FAS Track 1000 profile, less intumescent is required so it can be offered at much more competitive pricing** when compared to the current intumescent deflection tracks on the market and still provide 3/4” movement.

**Code Compliance**

FAS Track 1000 with its unique profile design provides industry solutions for meeting deflection requirements where other materials or systems are restricted by design, compressibility, and constructibility.

FAS Track 1000 has no restrictions providing 100% unencumbered movement. FAS Track 1000 has been tested for compliance with Section 713.3 of the 2012/2015 IBC and 2010/2013 CBC and is listed with UL Underwriters Laboratories in accordance with:

- ICC-ES ESR-2012: CEMCO Slotted Track (CST/SLP-TRK® Brand Slotted Track, CST-W, FAS Track 1000® (FAST 1000), FAS J-Track (FASJ).
- Sound tested in accordance to ASTM E90-09.

**Seismic Requirements**

FAS Track 1000 is approved for Class III cycling requirements, 500 cycles at 30 cycles per minute, meeting seismic building codes requirements. The Class III movement provides design advantages over mastic reliant systems which are typically limited to Class II (wind sway) capabilities of 500 cycles at 10 cycles per minute.

**Air Leakage Rating**

Air leakage tests conducted for compliance with Section 713.6 of the 2012/2015 IBC and 2010/2013 CBC are witnessed by UL on conditions using FAS Track as the joint treatment established L-Ratings of less than 1 CFM per lineal foot. Any rating below 1 CFM is also considered the best possible L-Rating. This is achieved with the FAS Track 1000 profile which provides a consistent seal against the drywall.

**Sound Benefits**

Whether the protection you need is Fire, Air (Smoke), or Sound, FAS Track 1000 is all the protection you need in one easy application.

Sound tests were performed at Western Electro-Acoustic Laboratory in Southern California to prove that the FAS Track 1000 profile will maintain maximum STC ratings without secondary acoustic sealant applications. In fact, several sound tests were conducted with a ½” to ¾” open joint at the head-of-wall and with a sealed head-of-wall joint on the same wall assembly. Both open and closed joints rendered the exact same STC rating proving that no sound is lost through the open head of wall joint.

Sound tests were also conducted on a 2-1/2” wide stud double wall (a.k.a. plumbing-wall or chase-wall) with a single layer on both sides rendering an STC rating of 60. Adding one layer to only one side of the double wall increased the STC rating to 63.

Additional FAS Track 1000 sound tests were conducted at Orfield Laboratories in Minneapolis, MN on 3-5/8” 20 EQ stud wall assemblies and produced STC ratings of 50-53. Complete sound test reports can be downloaded at www.cemcosteel.com

**Technical Assistance**

For technical questions and assistance please call 1.800.775.2362 or 1.800.416.2278, email dpilz@cemcosteel.com or visit our website at www.cemcosteel.com.
Overview | FAS Track HOW Products
FAS Track® 1000

INTUMESCENT TAPE

0.50"
1"
1.75"

33, 43, 54 & 68 MIL
2.50", 3.625", 4", 6" & 8"

2-1/2, 3-5/8, 4, 6, and 8
2-3/4"
10'
33, 43, 54 (20, 18, 16)

U.S. Patent #8,640,415
### CEMCO FAS TRACK 1000 ALLOWABLE LOADS AND HEIGHTS (1-1/4" SLOTS)

<table>
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<td>2-1/2, 3-1/2, 3-5/8, 4, 6, 8</td>
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<td>24</td>
<td>24'1&quot;</td>
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<td>16</td>
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<td>12'</td>
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<td></td>
<td>5</td>
<td>7.5</td>
<td>35'2&quot;</td>
<td></td>
<td>26'5&quot;</td>
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<td>19'10&quot;</td>
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<td></td>
<td>17'7&quot;</td>
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<td>33'3&quot;</td>
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<td>29'6&quot;</td>
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<td></td>
<td></td>
<td>16</td>
<td>7.5</td>
<td>22'1&quot;</td>
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<td>24</td>
<td>7.5</td>
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<td></td>
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<td>16</td>
<td>7.5</td>
<td>115'9&quot;</td>
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<td>57'10&quot;</td>
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<td>7.5</td>
<td>51'4&quot;</td>
<td></td>
<td>38'6&quot;</td>
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</tbody>
</table>

NOTE: MAXIMUM LOADS ARE BASED ON AVERAGE TEST RESULTS
Overview | FAS Track HOW Products

FAS Track® 1000 DL | FAS Track® BT 1000

FAS Track 1000 DL

CEMCO FAS Track 1000 DL is a deflection track with ½” Intumescent Tape that offers fire and air (smoke) protection. The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 20 gauge (33 mils) with a minimum G40 coating complying with ASTM A924, and 18 gauge (43 mils) with a minimum G60 coating complying with ASTM A924; and Grade 50 Type H for 50 ksi yield strength steel for 16 gauge (54 mils) with a minimum G60 coating complying with ASTM A924. CEMCO FAS Track 1000 DL has been tested with Underwritten Laboratories in accordance with UL 2079.

FAS Track BT 1000

CEMCO FAS Track BT 1000 is a bottom track that offers fire and air (smoke) protection. The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 for 50 ksi yield strength steel for 20EQ (20/21 mils) with a minimum G40 coating complying with ASTM A924, ASTM A1003 for 33 ksi yield strength steel for 20 gauge (30 mils) with a minimum G40 coating complying with ASTM A924, and 18 gauge (43 mils) with a minimum G60 coating complying with ASTM A924; and Grade 50 Type H for 50 ksi yield strength steel for 54 mil (16 gauge) with a minimum G60 coating complying with ASTM A924.

<table>
<thead>
<tr>
<th>“A”</th>
<th>Track Member Width (in)</th>
<th>Flange Size (in)</th>
<th>Length (ft)</th>
<th>Steel Thickness mils (guage)</th>
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<tr>
<td></td>
<td>2-1/2, 3-5/8, 4, 6, 8</td>
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<td>10</td>
<td>33, 43, and 54 (20, 18, and 16)</td>
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<tr>
<th>“A”</th>
<th>Track Member Width (in)</th>
<th>Flange Size (in)</th>
<th>Length (ft)</th>
<th>Steel Thickness mils (guage)</th>
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</thead>
<tbody>
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<td></td>
<td>2-1/2, 3-5/8, 4, 6</td>
<td>1-1/4</td>
<td>10</td>
<td>20, 21, 30, 43 and 54 (20EQ, 19, 20, 18 and 16)</td>
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</table>
FAS® J-Track Provides the Same Great Benefits of FAS Track 1000 Within a Shaft Wall Assembly

- FAS J-Track has longer legs than standard J-Runner to provide greater deflection at the head-of-wall joint.
- FAS J-Track provides ¾” overall unencumbered movement.
- FAS J-Track provides the best possible L-Rating (smoke) for 1 and 2 hour fire ratings.
- FAS J-Track eliminates the installation of fire caulking or additional drywall rips.

FAS J-Track is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 33 mils (20 gauge) with a minimum G40 coating complying with ASTM A1003. FAS J-Track has been tested with Underwritten Laboratories in accordance with UL 2079 for shaft wall assemblies.

<table>
<thead>
<tr>
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<td>33</td>
<td>G40</td>
<td>2-1/2, 4, 6</td>
<td>3/4&quot;</td>
<td>12</td>
<td>75</td>
<td>22'5&quot;</td>
<td>15'0&quot;</td>
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<td>16</td>
<td>75</td>
<td>22'7&quot;</td>
<td>15'0&quot;</td>
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<td></td>
<td>24</td>
<td>75</td>
<td>19'0&quot;</td>
<td>12'8&quot;</td>
</tr>
</tbody>
</table>

NOTE: BASED ON TEST RESULTS
DDA Fire Block
US Patent #8,595,999

The Most Efficient Method in Firestopping

Contractor Preferred, Architect Specified
The DDA Fire Block is a fire-rated accessory that when combined with slotted leg, deep leg or J-Runner track will offer up to 2" unencumbered movement at the head-of-wall joint in accordance with UL-2079 "Test for Fire Resistance of Building Joint Systems." The 2-1/2" outside leg is red and marked with the proper UL identification. The section is fabricated from both minimum 0.018-inch thick hot-dipped red galvanized steel complying with ASTM A653 having minimum G-40 coating and intumescent tape.

Code Compliance
DDA not only meets all current building code deflection requirements but it can also provide fire, smoke and sound protection for drift and lateral movement. DDA is the first of its kind to provide unencumbered movement in both vertical deflection and lateral drift movement in a joint system that utilizes fire spray over mineral wool on just one side of the wall.

DDA has no restrictions providing 100% unencumbered movement. DDA has been tested for compliance with Section 713.3 of the 2012/2015 IBC and 2010/2013 CBC and is listed with UL Underwriters Laboratories in accordance with:

- ICC-ES ESR-2012
- Sound Tested in Accordance with ASTM E90-09.

For complete list of all UL joint systems visit cemcosteel.com

Seismic Requirements
DDA is approved for Class III cycling requirements, 500 cycles at 30 cycles per minute, meeting seismic building codes requirements. The Class III movement provides design advantages over mastic reliant systems which are typically limited to Class II (wind sway) capabilities of 500 cycles at 10 cycles per minute.

Air Leakage Rating
Air leakage tests conducted for compliance with Section 713.6 of the 2012/2015 IBC and 2010/2013 CBC are witnessed by UL on conditions using DDA as the joint treatment established L-Ratings of less than 1 CFM per lineal foot. Any rating below 1 CFM is also considered the best possible L-Rating.
DDA®
US Patent #8,595,999 B1 (Deflection Drift Angle®) is a composite steel angle with intumescent tape factory applied to the inside leg of the steel angle. The DDA is a fire-rated accessory that when combined with slotted or deep leg track will offer 2” unencumbered movement at the head-of-wall joint in accordance with UL-2079 “Test for Fire Resistance of Building Joint Systems”. The 2-1/2” outside leg marked for proper identification. The section is fabricated from minimum 0.018-inch thick hot-dipped red galvanized steel complying with ASTM A653 having minimum G-40 coating.

Benefits
- The DDA provides a universal fit for any wall width, gauge, height, radius, pitched, shaft wall or standard wall.
- Up to 1” movement with NO Fire Spray required over mineral wool.
- Easy installation; DDA is tapped into place over the leg of the track, the 3/4” leg is friction fit between the overhead structure and the web of the header track.
- There is no need for mechanical fasteners as the DDA’s friction fit provides fire and smoke protection during both vertical and lateral drift movement.
- The DDA comes in 10’ lengths with 10 pieces per box, providing up to 2” unencumbered movement with positive stud attachment. DDA can be butt-joined or overlapped.
- When fire spray is required for 2” movement, RectorSeal brand fire sprays are required on ONLY ONE SIDE of the wall.
- Over 20 separate UL reports in accordance to UL2079 “Test for Fire Resistance of Building Joints.”
- Maintains best possible LRating (smoke rating) and NO loss of STC sound ratings at head-of-wall joint.
- Uses up to 75% less fire spray while the majority of the joint systems requiring no fire spray at all.
- DDA and RectorSeal brand fire spray offer an industry best sustainable-life warranty.
- DDA and RectorSeal brand fire sprays and sealants are 100% made in the USA.
- All Engineering Judgements utilizing fire spray or fire sealant are provided by RectorSeal.

Sound Benefits
Whether the protection you need is Fire, Smoke, or Sound, DDA will help you achieve your requirements. Sound tests were performed at Western Electro-Acoustic Laboratory in Southern California to prove that the DDA will maintain maximum STC ratings without secondary acoustic sealant applications. In fact several sound tests were conducted both with a 1/2” to 3/4” open joint at the head-of-wall and with a sealed head-of-wall joint on the same wall assembly. Both open and closed joints rendered the exact same STC rating proving that no sound transmission occurs through the open head of wall joint.

DDA will provide protection for the most extreme real life conditions and allow your head-of-wall joint to freely move both lateral and vertically without ever compromising the sound (STC) rating.

Technical Assistance
For technical questions and assistance please call 1.800.775.2362 or 1.800.416.2278, email dpilz@cemcosteel.com or visit our website at www.cemcosteel.com.
FAS Strap

FAS Strap Specification
FAS Strap is a flat strap with 2 strips of 1/2" intumescent. This strap is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 20 (33 mils) with a minimum G40 coating complying with ASTM A924; and Grade 50 Type H for 50 ksi yield strength steel for 16 gauge (54 mils) with a minimum G60 coating complying with ASTM A924. The FAS STRAP is listed under Underwriters Laboratories for one and two hour head of wall fire rated wall assemblies.

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<th>Member Width</th>
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<tr>
<td>Length</td>
<td>10'</td>
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<tr>
<td>Gauge (mils)</td>
<td>20 and 16 GA (30 and 54mil)</td>
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</table>

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR
TAB Track
CEMCO TAB TRACK provides a screw-less stud-to-track attachment for metal stud wall framing. A series of 1” long tabs are evenly spaced across the track’s legs providing flexibility for regular and irregular layout. Once the studs are nested within the TAB TRACK the tabs may be pushed inward on either side of the stud to prohibit lateral movement while maintaining vertical deflection. Available in 33 mil thickness, tab track is manufactured from G40 hot-dipped galvanized steel. G60 and G90 are available only upon special request.

TAB FAS® Track
CEMCO TAB FAS TRACK is also available in a fire-rated version to provide fire, air (smoke), and sound abatement by utilizing factory applied intumescent tape to the track profile and is tested and certified according to UL-2079 and sound tested according to ASTM E90.

<table>
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<th>Tab Key</th>
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<td>Minimum Thickness (in.)² (G)</td>
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<td>Yield (KSI)</td>
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<td>Web Sizes (in.) (B)</td>
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<tr>
<td>Leg Size (in.) (A)</td>
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CEMCO’s FAS-093X Fire Rated control joint is a composite control joint with intumescent tape factory applied to the back side of the control joint. The FAS-093X has been tested according to UL-2079 5th Edition “Test For Fire Resistance of Building Joint Systems for 1 and 2 hour wall assemblies” and is used to relieve stresses of expansion and contraction of drywall interior partitions or ceilings running in a horizontal or vertical direction. The opening is protected by an orange plastic tape to indicate the fire rating. This tape is removed after joint compound has been applied and the finish is completed. The section is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel 13 mil thickness.

- **NO** Drywall Rips Required
- **NO** Fire Sealant Required
- **NO** Mineral Wool Required
FAS 093X-V (Vinyl Fire Rated Control Joint)

CEMCO's FAS-093X-V Vinyl Fire Rated Control Joint is a composite control joint with intumescent tape factory applied to the back side of the control joint. The FAS-093X-V has been tested according to UL-2079 5th Edition “Test For Fire Resistance of Building Joint Systems for 1 and 2 hour wall assemblies” and is used to relieve stresses of expansion and contraction of drywall interior partitions or ceilings running in a horizontal or vertical direction. The FAS 093X-V features a co-extruded flexible PVC center that is designed to provide a full 3/8” of protection against the stresses of expansion and contraction.

- **NO** Drywall Rips Required
- **NO** Fire Sealant Required
- **NO** Mineral Wool Required
CEMCO’s FAS-RBR (Rated Base Reveal) is a composite steel/intumescent profile that provides a fire and smoke rating according to UL-2079 5th Edition for a recessed base board. The steel profile provides a pre-bent tape-ready J-bead to receive the drywall and a 4” wide recess for wood or aluminum base board that can be installed flush with the drywall. FAS-RBR is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 25 gage (18 mil) with a minimum G40 coating complying with ASTM A924.
CEMCO’s FAS-RBR Strap (Rated Base Reveal) is a composite steel/intumescent profile that provides a fire and smoke rating for 1 and 2 hour rated walls according to UL-2079 5th Edition for a recessed base board and listed under UL BW-S-0036. The FAS-RBR Strap is a fire rated steel/intumescent strap drywall accessory that provides fire rating for recessed base board assemblies. FAS-RBR is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 20 gauge (30 mil) with a minimum G40 coating complying with ASTM A924.
CEMCO’s FAS Vertical Drift Joint is a composite steel/intumescent corner bead with 2 layers of factory applied intumescent tape applied to the longer leg of the accessory. The intumescent strips work as a compression gasket to prevent the passage of fire, smoke and sound between the metal stud drywall panel and the drywall encased around the aluminum window mullion. The FAS Vertical Drift Joint is tested and certified with UL according to UL-2079 and will provide unencumbered drift and vertical movement between the adjoining wall panels. The profile is fabricated from hot-dipped galvanized steel complying with ASTM A653, and ASTM A1003 Grade 33 Type H for 33 ksi yield strength steel for 25 gage (18 mil).
Compressible Firestopping

CEMCO HOTROD Type-X is a compressible intumescent firestopping that provides 1 and 2 hour fire-ratings for both dynamic and static joints according to UL-2079 5th Edition (for both standard walls and shaft walls) and is sound tested according to ASTM E90.

- HOTROD has a rectangular profile and is easily compressed into the deflection gap between the edge of the drywall and adjoining structure.
- HOTROD is red in color and is easily identified by the inspector.
- HOTROD takes the place of BOTH fire and sound sealant and will not shrink, pull away, or harden over time.
- HOTROD allows the joint compound to be applied evenly, providing a smooth and consistent esthetic finish look for head-of-wall joints.

- HW-D-0624 Standard Wall Concrete
- HW-D-0625 Shaft Wall Concrete
- HW-D-0554 Chase Wall
- HW-D-0550 Gypsum Ceiling
- HW-D-0551 Under Fireproofed I-Beam
- WW-D-0104 Vertical Tie-in
- BW-S-0024 Bottom of Wall
- U.S. Patent No. 9,683,364

STC Ratings
- 51 STC 3-5/8” Unbalanced Wall
- 68 STC 2-1/2” Double Wall Double Layer

Optional joint compound and tape can be applied.
**Typical Details | HOTROD Type-X**

**HW-D-0550 1 HR. STANDARD WALL, GYPSUM WALLBOARD CEILING**

- Typical Steel Fasteners by Design
- 5/8" Type "X" Gypsum Wallboard
- CEMCO Hotrod Type X
- Flat Tape & Joint Compound
- Open Web Truss or Joint
- Furring Channel @ 24" O.C.
- 3/4" Nominal Joint

*NOTE: Double layers of 5/8" Drywall for 2 hour fire rating*

**HW-D-0551 1 HR. STANDARD WALL, CENTERED DIRECTLY UNDER BEAM**

- Gypsum Wallboard Ceiling
- Concrete Slab or Fluted Metal Deck with Concrete Fill
- Spray Fireproofing
- Structural Fireproofing (Thickness by Others)
- 1/2" x 20 ga. Z-Bar or 16 ga. CRC (Spacing by Design)
- CEMCO Hotrod Type X
- Flat Tape & Joint Compound
- 3/4" Nominal Joint

*NOTE: Double layers of 5/8" Drywall for 2 hour fire rating*

**HW-D-0554 1 HR. STANDARD CHASE WALL, CONCRETE SLAB**

- Typical Steel Fasteners by Design
- 5/8" Type "X" Gypsum Wallboard
- CEMCO Hotrod Type X
- Flat Tape & Joint Compound
- CEMCO Slotted Track
- Metal Stud Spacing by Design
- 3/4" Nominal Joint

*NOTE: Double layers of 5/8" Drywall for 2 hour fire rating*

**HW-D-0624 1 HR. STANDARD WALL, CONCRETE SLAB**

- Typical Steel Fasteners by Design
- 5/8" Type "X" Gypsum Wallboard
- CEMCO Hotrod Type X
- Flat Tape & Joint Compound
- CEMCO Slotted Track
- Metal Stud Spacing by Design
- 3/4" Nominal Joint

*NOTE: Double layers of 5/8" Drywall for 2 hour fire rating*

**HW-D-0625 1 HR. SHAFT WALL, CONCRETE SLAB**

- Concrete Slab
- CEMCO Hotrod Type X
- Flat Tape & Joint Compound
- Optional Flat Tape & Joint Compound
- Steel Stud (MIN. 1/2" Flange)
- 3/4" Nominal Joint
- 5/8" Type "X" Drywall

*NOTE: Double layers of 5/8" Drywall for 2 hour fire rating*

** WW-D-0104 VERTICAL TIE IN TO CONCRETE SLAB**

- Concrete
- Steel Stud (MIN. 1/2" Flange)
- Flat Tape & Joint Compound
- Flat Tape & Joint Compound
- Deflection Joints of 1/2" or less do not require any additional Flat Tape & Joint Compound.
Typical Details | FAS Track 1000

3/4" Joint Protection for 1 & 2 Hour Fire Rated Walls

- HW-D-0514 1 & 2 HR. Perpendicular to Flute Spray Applied Fireproofing
- HW-D-0518 1 & 2 HR. Standard Wall, Perpendicular to Fluted Deck
- HW-D-0524 1 & 2 HR. Standard Wall, Parallel & Directly Under Deck Flute, Configurations A & B
- HW-D-0652 1 & 2 HR. Standard Wall, Cantilevered Under Beam
- HW-D-0551 1 & 2 HR. Standard Wall, Centered Directly Under Beam
- HW-D-0553 1 & 2 HR. Standard Chase Wall, Perpendicular to Fluted Deck
- HW-D-0620 1 & 2 HR. Standard Wall, Parallel & Directly Under Fluted Deck (Config. A.)

- HW-D-0518 1 & 2 HR. Standard Wall, Parallel & Offset Under Fluted Deck (Config. B)
- HW-D-0554 1 & 2 HR. Standard Chase Wall, Concrete Slab
- HW-D-0624 1 & 2 HR. Standard Wall, Concrete Slab
- WW-D-0104 1 & 2 HR. Vertical Tie In To Concrete Slab
- BW-S-0024 1 & 2 HR. Bottom of Wall - Static Joint
- HW-D-0514 2 HR. Standard Wall, Perpendicular to Fluted Deck
- HW-D-0550 2 HR. Standard Wall, Gypsum Wallboard Ceiling
- HW-D-0573 2 HR. Standard Wall, @ Fluted Deck Beam Penetration

HW-D-0514 2 HR. PERPENDICULAR TO FLUTED DECK*

- SPRAY FIREPROOFING
- FLUTED METAL DECK WITH CONCRETE
- 3/8" NOMINAL GAP (3/4" JOINT PROTECTION)
- #8 x 1 1/2" FRAMING SCREW
- DRYWALL SCREW 1" LOWER THAN TRACK LEG

HW-D-0524 1 HR. PARALLEL & DIRECTLY UNDER DECK FLUTE

- FLUTED METAL DECK FILLED WITH CONCRETE
- MINERAL WOOL
- TYPICAL STEEL FASTENERS BY DESIGN
- #8 x 1 1/2" FRAMING SCREW
- DRYWALL SCREW 1" LOWER THAN TRACK LEG
- CONFIGURATION "B"

HW-D-0524 2 HR. PARALLEL & DIRECTLY UNDER DECK FLUTE

- FLUTED METAL DECK FILLED WITH CONCRETE
- MIN. #8 FRAMING SCREW BY DESIGN
- 2" STRAP INSTALLED BY DESIGN
- DRYWALL SCREW 1" LOWER THAN TRACK LEG

- TYPICAL STEEL FASTENERS BY DESIGN
- HW-D-0524 2 HR. PARALLEL & DIRECTLY UNDER DECK FLUTE (CONFIG. A.)
- #8 x 1 1/2" FRAMING SCREW
- DRYWALL SCREW 1" LOWER THAN TRACK LEG
- CONFIGURATION "A"

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR
**Typical Details | FAS Track 1000**

### HW-D-0514 Standard Wall, Perpendicular to Fluted Deck

**Configuration “B”**

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*

### HW-D-0551 1 HR. Centered Directly Under Beam

**Configuration “B”**

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*

### HW-D-0554 2 HR. Chase Wall, Concrete Slab

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*

### HW-D-0550 2 HR. Gypsum Wallboard Ceiling*

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*

### HW-D-0553 2 HR. Chase Wall, Perpendicular to Fluted Deck

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*

### HW-D-0573 1 & 2 HR. Fluted Deck Beam Penetration

*NOTE: Single layer of 5/8” Type “X” drywall for 1-hour fire rating, 2 layers for 2-hour fire rating.*
HW-D-0620 1 HR. PARALLEL & DIRECTLY UNDER FLUTED DECK

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR

HW-D-0624 1 HR. CONCRETE SLAB

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR

BW-S-0024 2HR. BOTTOM WALL STATIC JOINT

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR

HW-D-0620 2 HR. PARALLEL & OFFSET UNDER FLUTED DECK

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR

HW-D-0652 1 HR. & 2 HR. CANTILEVERED UNDER BEAM*

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR

WW-D-0104 2HR. VERTICAL TIE-IN TO CONCRETE SLAB

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR
FAS J-Track (Shaft Wall)

3/4" Joint Protection for 1 & 2 Hour Walls

**WW-S-0061 1 HR. SHAFT WALL VERTICAL TIE IN TO CONCRETE SLAB**

- CEMCO FAS J-Track
- Concrete
- Typical Steel Fasteners by Design
- 3/4" Joint Protection
- Drywall Screw
- 1" Shaft Liner
- CH Stud
- Mineral Wool
- Typical Steel Fasteners by Design

**HW-D-0524 2 HR. PERPENDICULAR TO FLUTED DECK**

- CEMCO FAS Strap
- Concrete or Fluted Metal Deck with Concrete Fill
- Mineral Wool
- 5/8" Type "X" Drywall
- CH Stud
- 1" Shaft Liner
- 3/8" Nominal Gap (1/2 Joint Protection)

**HW-D-0525 2 HR. PERPENDICULAR TO FLUTED DECK**

- Fluted Metal Deck with Concrete Fill
- Mineral Wool
- 3/8" Nominal Gap (1/2 Joint Protection)
- CEMCO FAS J-Track
- 5/8" Type "X" Drywall
- CH Stud
- 1" Shaft Liner

**HW-D-0622 2 HR. DIRECTLY UNDER BEAM**

- Concrete Slab or Fluted Metal Deck with Concrete Fill
- Mineral Wool or Spray Fireproofing
- Steel Beam
- Structural Steel Fireproofing (Thickness by Others)
- 1/2" x 21 GA. SHARP OR 16 GA. CIRC. 18 O.D.
- CEMCO FAS J-Track
- 5/8" Type "X" Drywall
- CH Stud
- 1" Shaft Liner

*NOTE: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour

*NOTE 1: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour

*NOTE 2: No fire spray required
**Typical Details | FAS J-Track (Shaft Wall)**

**3/4” Joint Protection for 1 & 2 Hour Walls**

**HW-D-0623 2 HR. FLUTED DECK BEAM PENETRATION**

- DRYWALL CUT AROUND BEAM
- 3/4” NORMAL GAP (3/8” JOINT PROTECTION)
- 2 LAYERS DRYWALL
- CEMCO J-TRACK
- CH STUD
- CEMCO FAS J-TRACK

**HW-D-0653 2 HR. PARALLEL & CANTILEVER UNDER BEAM**

- MINERAL WOOL OR SPRAY FIREPROOFING
- STEEL BEAM
- STRUCUTRAL FIREPROOFING (THICKNESS BY OTHERS)
- 3/8” NORMAL GAP (3/8” JOINT PROTECTION)

**HW-D-0625 1 HR. CONCRETE SLAB**

- CONCRETE SLAB OR FLUTED METAL DECK WITH CONCRETE FILL
- MINERAL WOOL
- 5/8” TYPE “X” DRYWALL
- EXPANDED METAL LATH

**HW-D-0625 1HR. SHAFT WALL, CONCRETE SLAB**

- CONCRETE SLAB
- CEMCO J-TRACK
- MINERAL WOOL
- CH STUD
- 1” SHAFT LINER

*NOTE: SINGLE LAYER OF 5/8” TYPE “X” DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR
The standard Deflection Drift Angle (DDA) is a red ¾” x 2-1/2” steel/intumescent angle that will provide up to 2” unencumbered movement based on the following UL reports:

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<td>Chase Wall at Concrete Deck</td>
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</tbody>
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*Detail not shown in catalog, refer to www.UL.com.

**HW-D-0577 2HR. PERPENDICULAR TO FLUTED DECK**

- Fluted Metal Deck with Concrete
- Rectorsseal Flamesafe/Enstop spray over mineral wool, 1/2" overlap metal on one side only
- 5/8" Type "X" Drywall

**HW-D-0514 STANDARD WALL, PERPENDICULAR TO FLUTED DECK**

- Fluted Metal Deck with Concrete
- Z-Clip
- 5/8" Nominal Gap (1 1/2" Joint Protection)
- #6 x 1/2" Framing Screw
- Metal Stud by Design
- 5/8" Type "X" Drywall

**HW-D-0514 STANDARD WALL, PERPENDICULAR TO FLUTED DECK**

- Fluted Metal Deck with Concrete
- Metal Stud by Design
- 5/8" Type "X" Drywall

**HW-D-0576 2HR. STANDARD WALL, CONCRETE SLAB**

- Concrete Slab
- Typical Steel Fasteners by Design
- 1" Nominal Gap (1 1/2" Joint Protection)
- #6 x 1/2" Framing Screw
- Metal Stud Spacing by Design
- 5/8" Type "X" Drywall

*Note: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour*
Typical Details | Deflection Drift Angle (DDA)
Assemblies with 2" Overall Movement

**HW-D-0580 2HR. STANDARD CHASE WALL PERPENDICULAR TO FLUTED DECK**

- Mineral Wool
- 1" Nominal Gap (2" Joint Protection)
- Cemco Deflection Drift Angle - DDA (Finish Sides of the Wall Only)

**HW-D-0579 2HR. STANDARD WALL, UNDER STAIRWELL SLAB BYPASS @ BEAM**

- Concrete Slab or Fluted Metal Deck with Concrete Fill
- Steel Beam
- Structural Steel Fireproofing (Thickness by Others)
- 1/2" x 20 Ga. Z-BAR or 16 Ga. CRC by Design
- Cemco Slotted Track
- #8 x 1/2" Framing Screw
- Drywall Screw 1" Lower than Track Leg
- 5/8" Type "X" Drywall
- Metal Stud by Design

*Note: Single Layer of 5/8" Type "X" Drywall for 1 Hour Fire Rating, 2 Layers for 2 Hour

**HW-D-0579 2HR. STANDARD WALL, OFFSET & PARALLEL UNDER BEAM**

- Concrete Slab or Fluted Metal Deck with Concrete Fill
- Steel Beam
- Structural Steel Fireproofing (Thickness by Others)
- 1/2" x 20 Ga. Z-BAR or 16 Ga. CRC by Design
- Cemco Slotted Track
- #8 x 1/2" Framing Screw
- Drywall Screw 1" Lower than Track Leg
- 5/8" Type "X" Drywall
- Metal Stud by Design

**HW-D-0562 2HR. SHAFT WALL, CONCRETE SLAB BYPASS**

- Concrete Slab or Fluted Metal Deck with Concrete Fill
- Steel Beam
- Structural Steel Fireproofing (Thickness by Others)
- 1/2" x 20 Ga. Z-BAR or 16 Ga. CRC by Design
- Cemco Slotted Track
- #8 x 1/2" Framing Screw
- Drywall Screw 1" Lower than Track Leg
- 5/8" Type "X" Drywall
- Metal Stud by Design

**HW-D-0576 2HR. STANDARD WALL, CONCRETE SLAB**

- Concrete Slab
- Cemco Deflection Drift Angle - DDA (Both Sides)
- #8 x 1/2" Framing Screw
- Drywall Screw 1" Lower than Track Leg
- Metal Stud by Design
- 5/8" Type "X" Drywall

*Note: Single Layer of 5/8" Type "X" Drywall for 1 Hour Fire Rating, 2 Layers for 2 Hour
DDA-1 is a RED 5/8" x 1-1/4" steel/intumescent angle that will provide 1" unencumbered movement for standard walls and shaft walls as listed on the following UL reports:

- HW-D-0514 Perpendicular to Flutes (Spray Fireproofing Fill)
- HW-D-0515 Concrete Slab*
- HW-D-0518 Perpendicular to Fluted Deck*
- HW-D-0524 Parallel to Flute (FAS Strap)
- HW-D-0550 Gypsum Wallboard Ceiling*
- HW-D-0551 Centered Under Beam*
- HW-D-0553 Chase Wall at Pan Deck*
- HW-D-0554 Chase Wall at Concrete Slab*
- HW-D-0573 Perpendicular I-Beam Penetration*
- HW-D-0620 Parallel to Flute directly Under Flute
- HW-D-0652 Cantilever Fireproofing Under Beam
- HW-D-0525 Perpendicular to Flute Shaft Wall*
- HW-D-0623 Beam Penetration at Shaft Wall
- HW-D-0622 Shaft Wall under I-Beam
- HW-D-0653 Shaft Wall Cantilever Under Beam
- HW-D-0556 Parallel to Beam*
- HW-D-0585 Shaft Wall at Concrete Deck
- HW-D-0600 Cantilever Under Beam
- HW-D-0598 Shaft Wall Cantilever Under Beam

*Not all details are shown in catalog refer to cemcosteel.com for all details
**Typical Details | Deflection Drift Angle-1 (DDA-1)**

Fluted Pan Deck Applications for 1” Overall Movement

**HW-D-0622 SHAFT WALL, OFFSET UNDER BEAM**

- Concrete slab or fluted metal deck with concrete fill
- Steel beam
- Structural fireproofing (thickness by others)
- Deflection drift angle DDA-1 (one side only)
- Joint protection
- Mineral wool
- 5/8” Type “X” drywall
- CH stud
- 5/8” Type “X” drywall
- 1/2” x 20 ga. 2 bar or 16 ga. CRC @ 16” O.C.
- CEMCO slotted track
- 1” shaft liner
- Spray fireproofing

*NOTE: Single layer of 5/8” Type “X” drywall for 1 hour fire rating, 2 layers for 2 hour*

**HW-D-0653 SHAFT WALL, PARALLEL & CANTILEVER UNDER BEAM**

- Concrete slab or fluted metal deck with concrete fill
- Steel beam
- Structural fireproofing (thickness by others)
- Deflection drift angle DDA-1 (one side only)
- Expanded metal lath
- Joint protection
- Mineral wool
- 5/8” Type “X” drywall
- CH stud
- 5/8” Type “X” drywall
- 1/2” x 20 ga. 2 bar or 16 ga. CRC @ 16” O.C.
- CEMCO slotted track

*NOTE: Single layer of 5/8” Type “X” drywall for 1 hour fire rating, 2 layers for 2 hour*

**HW-D-0620 PARALLEL & OFFSET UNDER FLUTED DECK**

- Concrete deck
- Mineral wool
- Joint protection
- #8 x 1/2” framing screw
- Drywall screw 1” lower than track leg
- Configuration “B”

*NOTE: Single layer of 5/8” Type “X” drywall for 1 hour fire rating, 2 layers for 2 hour*

**HW-D-0620 PARALLEL AND DIRECTLY UNDER FLUTED DECK**

- Concrete deck
- Mineral wool
- Joint protection
- #8 x 1/2” framing screw
- Drywall screw 1” lower than track leg
- Configuration “B”

*NOTE: Single layer of 5/8” Type “X” drywall for 1 hour fire rating, 2 layers for 2 hour*
**Typical Details | Deflection Drift Angle-1 (DDA-1)**

Fluted Pan Deck Applications for 1” Overall Movement

**HW-D-0573 STANDARD WALL, @ FLUTED DECK BEAM PENETRATION**

- CEMCO SLOTTED TRACK WITH DDA-1
- MINERAL WOOL STUFFED BETWEEN FRAMING AND FIREPROOFING 50% COMPRESSED
- DDA-1 OVER FRAMING
- (2) LAYERS DRYWALL
- Z-CLIP
- [**NOTIE: SINGLE LAYER OF 5/8” TYPE “X” DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR**](#)

**HW-D-0623 SHAFT WALL, @ FLUTED DECK BEAM PENETRATION**

- CEMCO SLOTTED TRACK OR J-RUNNER
- MINERAL WOOL STUFFED BETWEEN FRAMING AND FIREPROOFING 50% COMPRESSED
- I-BEAM
- CH STUD
- DDA-1 OVER FRAMING
- (2) LAYERS DRYWALL
- Z-CLIP
- [**NOTE: SINGLE LAYER OF 5/8” TYPE “X” DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR**](#)

**HW-D-0525 SHAFT WALL, PERPENDICULAR TO FLUTED DECK**

- TYPICAL STEEL FASTENERS BY DESIGN
- FLUTED METAL DECK WITH CONCRETE FILL
- MINERAL WOOL
- 3/8” NOMINAL GAP 1” JOINT PROTECTION
- DDA-1 OVER FRAMING
- (2) LAYERS DRYWALL
- Z-CLIP
- CEMCO SLOTTED TRACK
- 1” SHAFT LINER
- CH STUD
- 5/8” TYPE “X” DRYWALL

**HW-D-0515 STANDARD WALL, CONCRETE DECK**

- CONCRETE DECK
- TYPICAL STEEL FASTENERS BY DESIGN
- CEMCO SLOTTED TRACK OR J-RUNNER
- DEFORMATION DRIFT ANGLE DDA-1 (BOTH SIDES)
- #8 x 1 1/2” FRAMING SCREW
- DRYWALL CUT AROUND I-BEAM WITH 2” GAP
- I-BEAM
- CH STUD
- DDA-1 OVER FRAMING
- #8 x 1/2” FRAMING SCREW
- CEMCO SLOTTED TRACK
- METAL STUD BY DESIGN
- 5/8” TYPE “X” DRYWALL

*NOTE: SINGLE LAYER OF 5/8” TYPE “X” DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR*
**Typical Details | FAS Strap**

**HW-D-0524 1HR. OFFSET & PARALLEL UNDER FLUTED DECK**

- Fluted Metal Deck filled with Concrete
- 1" Nominal Gap (2" Joint Protection)
- Drywall Screw 1" Lower than Track Leg
- Configuration "A"

*Note: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour

**HW-D-0524 2HR. PARALLEL & DIRECTLY UNDER DECK FLUTE**

- Fluted Metal Deck filled with Concrete
- 3/4" Joint Protection
- Drywall Screw 1" Lower than Track Leg
- Configuration "A"

*Note: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour

**HW-D-0524 1HR. SHAFT WALL, PARALLEL & DIRECTLY UNDER DECK FLUTE**

- Fluted Metal Deck filled with Concrete
- 1" Nominal Gap (2" Joint Protection)
- Cemco Fas Strap
- Cemco Slotted Track
- Mineral Wool
- 5/8" Type "X" Drywall
- Configuration "A"

*Note: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour

**HW-D-0524 2HR. SHAFT WALL, PARALLEL & DIRECTLY UNDER DECK FLUTE**

- Fluted Metal Deck filled with Concrete
- 3/4" Joint Protection
- Cemco Fas Track 1000
- Cemco Fas J-Track
- Mineral Wool
- 5/8" Type "X" Drywall
- Configuration "A"

*Note: Single layer of 5/8" Type "X" Drywall for 1 hour fire rating, 2 layers for 2 hour
**WW-D-0182 WALL TO WALL VERTICAL DRIFT JOINT**

- **5/8" TYPE "X" DRYWALL**
- **3-5/8" x 25GA STUD MIN.**
- **JOINT COMPOUND OVER FLANGE**
- **CEMCO FAS-VERTICAL DRIFT JOINT (FAS-VDJ)**
- **ALUMINUM WINDOW MULLION**
- **INTUMESCENT TAPE**
- **5/8" TYPE "X" DRYWALL**
- **3-5/8" x 25GA STUD MIN.**
- **JOINT COMPOUND OVER FLANGE**
- **CEMCO FAS-VERTICAL DRIFT JOINT**
- **WINDOW WALL SYSTEM**

*NOTE: SINGLE LAYER OF 5/8" TYPE "X" DRYWALL FOR 1 HOUR FIRE RATING, 2 LAYERS FOR 2 HOUR*
Corporate Headquarters
13191 Crossroads Parkway North, Suite 325, City of Industry, CA 91746
P: 800.775.2362 | F: 626.330.7598

Southern California Manufacturing Facility
263 North Covina Lane, City of Industry, CA 91746
P: 800.775.2362 | F: 626.330.7598

Northern California Manufacturing Facility
1001-A Pittsburg Antioch Hwy, Pittsburg, CA 94565
P: 925.473.9340 | F: 925.473.9341

Denver Colorado Manufacturing Facility
490 Osage Street, Denver, CO 80204
P: 303.572.3626 | F: 303.572.3627

Fort Worth Texas Manufacturing Facility
8600 Will Rogers Blvd, Fort Worth, TX 76140
P: 817.568.1525 | F: 817.568.2759

www.cemcosteel.com