Welcome to the EOS Steel Framing System (SFS) Installation Guide

A successful project requires every trade in the design and construction process to deliver with the highest standards and precision. As part of our drive to deliver sustainable light gauge steel materials and energy efficient buildings, we have endeavoured to share best practice and provide a complete set of SFS standard details for use primarily by installers.

Good projects start with good designs, and a good design is one that is matched to the client’s expectations, both in terms of cost and performance. This Guide presents best practice site checks to deliver optimum build quality for SFS non-loadbearing schemes. The Guide is aimed to assist:

- Project Managers
- SFS Installers
- Site Managers
- Site Inspectors
- Trade Trainers
# Standard Details

## CONTENTS

<table>
<thead>
<tr>
<th>REF</th>
<th>SFS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>201 G</td>
<td>Fixing Details for Head / Base Tracks</td>
<td>4</td>
</tr>
<tr>
<td>204 F</td>
<td>Deflection Base / Head Bracket Fixing</td>
<td>5</td>
</tr>
<tr>
<td>205 F</td>
<td>Head Track Fixing Details</td>
<td>6</td>
</tr>
<tr>
<td>206 E</td>
<td>Stud Corner Fixing Details</td>
<td>7</td>
</tr>
<tr>
<td>207 C</td>
<td>Deflection Head Track Fixing Details - Restricted Access</td>
<td>8</td>
</tr>
<tr>
<td>208 F</td>
<td>Head Track Fixing Details - to Steel Edge Beam (SSB)</td>
<td>9</td>
</tr>
<tr>
<td>209 E</td>
<td>Restraint Options for Overhangs</td>
<td>10</td>
</tr>
<tr>
<td>210 D</td>
<td>Oversail Stud Fixing Details (SCB)</td>
<td>11</td>
</tr>
<tr>
<td>211 F</td>
<td>Cloaking Deflection Details</td>
<td>12</td>
</tr>
<tr>
<td>212 F</td>
<td>Deflection Head EFIX100 Fixing Details</td>
<td>13</td>
</tr>
<tr>
<td>213 C</td>
<td>Structural Movement Joint Details</td>
<td>14</td>
</tr>
<tr>
<td>214 D</td>
<td>DHT - Deflection Head / Base Fixing</td>
<td>15</td>
</tr>
<tr>
<td>215 D</td>
<td>DHT - Head into Steel / Head in Concrete</td>
<td>16</td>
</tr>
<tr>
<td>216 D</td>
<td>DHT - Deflection Head Restricted Access</td>
<td>17</td>
</tr>
<tr>
<td>217</td>
<td>Typical Cladding Movement Joint Details</td>
<td>18</td>
</tr>
<tr>
<td>218 A</td>
<td>Indicative Bracing Avoidance Method - Flat Strap</td>
<td>19</td>
</tr>
<tr>
<td>219 C</td>
<td>Indicative Bracing Avoidance Method - Box Section</td>
<td>20</td>
</tr>
<tr>
<td>220 B</td>
<td>EOS Framing Stock Fixings Table</td>
<td>21</td>
</tr>
<tr>
<td>221 B</td>
<td>Zed Bar Head Details</td>
<td>22</td>
</tr>
<tr>
<td>222 A</td>
<td>Shot Fired Fixings Specification</td>
<td>23</td>
</tr>
<tr>
<td>223</td>
<td>Fixings into Blockwork Plinths</td>
<td>24</td>
</tr>
<tr>
<td>241 C</td>
<td>DHT - Installation Quick Guide</td>
<td>25</td>
</tr>
<tr>
<td>242 C</td>
<td>DHB - Installation Quick Guide</td>
<td>26</td>
</tr>
</tbody>
</table>

## OPENINGS IN SFS

<table>
<thead>
<tr>
<th>REF</th>
<th>OPENINGS IN SFS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>261 F</td>
<td>Typical Opening - Single Track Cill / Lintel</td>
<td>27</td>
</tr>
<tr>
<td>262 G</td>
<td>Typical Opening - Single Jamb / Double Track Cill / Lintel</td>
<td>28</td>
</tr>
<tr>
<td>263 F</td>
<td>Typical Opening - Double Jamb / Double Track Cill / Lintel</td>
<td>29</td>
</tr>
<tr>
<td>265 F</td>
<td>Double Stud Connections</td>
<td>30</td>
</tr>
<tr>
<td>269 E</td>
<td>Typical Mid-Height Restraint Details</td>
<td>31</td>
</tr>
<tr>
<td>270 E</td>
<td>Typical Vent Opening Details</td>
<td>32</td>
</tr>
<tr>
<td>271 D</td>
<td>Typical Hard Fixed Lintel Connection</td>
<td>33</td>
</tr>
<tr>
<td>272 F</td>
<td>Typical Parapet Wind Post Details</td>
<td>34</td>
</tr>
<tr>
<td>273 D</td>
<td>DHT - Double Stud Connections</td>
<td>35</td>
</tr>
<tr>
<td>274 C</td>
<td>Typical Opening Wind Post Deflection Details</td>
<td>36</td>
</tr>
<tr>
<td>275 C</td>
<td>DHT - Typical Opening Wind Post Deflection Details</td>
<td>37</td>
</tr>
<tr>
<td>276 A</td>
<td>Typical Opening - Dropped Lintel Details</td>
<td>38</td>
</tr>
<tr>
<td>277 C</td>
<td>Typical Opening Inline Wind Post Deflection Details</td>
<td>39</td>
</tr>
<tr>
<td>278 C</td>
<td>DHT - Typical Opening Inline Wind Post Deflection Details</td>
<td>40</td>
</tr>
<tr>
<td>279</td>
<td>Typical Triple &amp; Quad Jamb Details</td>
<td>41</td>
</tr>
</tbody>
</table>
NOTES

1. Minimum fixing requirements to head and base tracks, U.N.O.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209
3. Each track length to have fixing between 60mm and 100mm from each end.
4. DPC to be included below base tracks if specified by Architect
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Deflection head bracket fixed to vertical stud through slotted holes using 2 No 6.3 x 25mm screws with large washer heads (EOS-1003 or similar approved). Screws fixed central in slot to allow +/- 12.5mm of movement.

Base track fixed to vertical stud each side using 5.5 x 25mm Tek screws (EOS-1005 or similar approved).

TYPICAL STUD BASE FIXING

NOTE
1. Bracket length and slot size to suit required structural deflections
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

**TYPICAL DEFLECTION HEAD**

**STEEL EDGE BEAM CONNECTION**

EOS head track securely fixed to steelwork using HR tek screws (EOS-1020 or similar approved) at each stud centre.

**TYPICAL DEFLECTION HEAD**

**CONCRETE SLAB EDGE CONNECTION**

EOS head track securely fixed to concrete using fixings (EOS-1021 or similar approved) at each stud centre.

**NOTE**

1. Bracket length and slot size to suit required structural deflections
5.5 x 25mm Tek screws (EOS-1002, EOS-1005 or similar approved) fixed into corner stud @ 600 vertical c/c's.
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

In locations where access is restricted, deflection head bracket fixed to head track prior to fixing head track to structure.
TOLERANCES:
Construction tolerances between frames
is -0mm +2mm. Frames are manufactured
and assembled as +0mm -2mm.

Simpson SSB bracket fixed to soffit of
steelwork using min 3 No 5.5 x 25mm
Hot Rolled Tek screws (EOS-1020 or
similar approved) UNO and fixed to
vertical stud through slotted holes using 3
No. fixings supplied in each hole. Screws
fixed central in slot to allow +/- 25mm of
movement.

Indicative steel frame (by others)

Head track

Vertical stud

Simpson SSB Bracket

Indicative steel frame (by others)

Vertical stud

Studs have swaged ends to fit inside the track
so that both studs & tracks are the same width
assisted in providing as flush a finish as is possible

NOTE: Bracket suitability to be determined by EOS
Engineer subject to tech review and cladding loads

TYPICAL DEFLECTION HEAD
STEEL EDGE BEAM CONNECTION

TYPICAL SECTION

Title: TYPICAL HEAD TRACK FIXING DETAIL - TO STEEL EDGE BEAM (S & T)
SCI GUIDANCE

<table>
<thead>
<tr>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
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<tr>
<td>100</td>
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<td>150</td>
<td>100</td>
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<td>147</td>
<td>73</td>
</tr>
<tr>
<td>250</td>
<td>167</td>
<td>83</td>
</tr>
</tbody>
</table>

**OPTION 1**
Support angle sized to suit overhang dimension & loading requirements to be confirmed by EOS Engineer

**OPTION 2**
Support plate sized to suit overhang dimensions & loading requirements to be confirmed by EOS Engineer

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.
TYPICAL OVERSAIL STUD FIXING DETAIL (S & T)

Vertical stud

Simpson SCB bracket fixed to face of concrete slab using min 2 No fixings (EOS-1007 or similar approved) and fixed to vertical stud through slotted holes using 3 No. fixings supplied in each slot, UNO. Screws fixed central in slot to allow +/- 25mm of movement.

Indicative concrete slab edge (by others)

SSL.

TYPICAL SECTION

NOTES

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THIS DRAWING. CONTRACTORS MUST CHECK ALL
DIMENSIONS ON SITE, ONLY FIGURED DIMENSIONS
TO BE WORKED FROM. ALL ERRORS AND
DISCREPANCIES MUST BE IMMEDIATELY REPORTED
TO THE DESIGN OFFICE OF EOS FRAMING LTD

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Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Deflection head bracket fixed to head track each side using 5.5 x 25mm Tek screws (EOS-1005 or similar approved).

Deflection head bracket fixed to cloaking track piece through slotted holes using 2 No 6.3 x 25mm Tek screws with large washer heads (EOS-1003 or similar approved). Screws fixed central in slot to allow for movement.

Cloaking track piece fixed to vertical stud each side using 5.5 x 25mm Tek screws (EOS-1005 or similar approved).

NOTE
1. Bracket length and slot size to suit required structural deflections

TYPICAL DEFLECTION HEAD WITH CLOaked TRACK DETAIL
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

**EFIXS100 DEFLECTION DETAIL**

- 2 No. Titen fixing (EOS-1007 or similar approved) in slot to fix bracket into concrete slab - head track to be pre-drilled prior to fixing in place.
- 1 No. 6.3 x 25mm Tek screw with large washer head (EOS-1003 or similar) to fix bracket into cold formed steel. Fixings located centrally in slot.

**EFIXS100 FIXING DETAIL**
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

**ELEVATION**

**3D VIEW**

**PLAN**

**NOTE:**
- Head & base tracks to be split either side of the movement joint - each track section to be fixed 60-100mm from the end of the track.

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**TOLERANCES:**
Construction tolerances between frames is ±5mm ±2mm. Frames are manufactured and assembled to ±5mm ±2mm.

**NOTES:**
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- This drawing, contractors must check all dimensions on site, only figured dimensions to be worked from. All errors and discrepancies must be immediately reported to the design office of EOS Framing Ltd.
TYPICAL STUD BASE FIXING & DEFLECTION HEAD TRACK (S & T)

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Deflection head track
(Fixing to suit structure see standard detail 215)

Vertical swaged stud fixed to Deflection Head Track through slotted holes using 2 No 5.5 x 25mm tek screws (1 No. each side)
(EOS-1005 or similar approved). Screws fixed central in slot to allow +/- 17mm of movement.

Base track fixed to vertical swaged stud each side using 5.5 x 25mm Tek screws (EOS-1005 or similar approved)

DHT for use with raking pitches up to 5 degrees. If pitch >5deg, use DHB

NOTES

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TYPICAL DEFLECTION HEAD

Base track
Vertical stud
Vertical swaged stud
DEFLECTION HEAD ELEVATION

DEFLECTION HEAD ALLOWANCE

TOLERANCES:
Construction tolerances between frames is -0mm +2mm. Frames are manufactured and assembled to +0mm -2mm.
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

EOS head track securely fixed to steelwork using HR tek screws (EOS-1020 or similar approved). Refer to detail 201. Alternatively, shot fired to steelwork not supplied by EOS. Consult EOS for advice.

**TYPICAL DEFLECTION HEAD STEEL EDGE BEAM CONNECTION**

Vertical stud fixed to Deflection Head Track through slotted holes using 2 No 5.5 x 25mm tek screws (EOS-1005 or similar approved). Screws fixed central in slot to allow +/- 25mm of movement.

EOS deflection head track securely fixed to concrete using anchor (EOS-1021 or similar approved). Refer to detail 201.

**TYPICAL DEFLECTION HEAD CONCRETE SLAB EDGE CONNECTION**

Tolerance: Construction tolerances between frames is ±0mm ±2mm. Frames are manufactured and assembled to ±5mm ±2mm.

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Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

In locations where access is restricted and fixings cannot be installed to BOTH sides, please revert to the use of Deflection Head Brackets (Detail 207), or utilise oversail bracketry as per details details 208 & 210.

Please contact EOS for guidance and advice.

Vertical stud fixed to Deflection Head Track through slotted holes using 2 No 5.5 x 25mm tek screws (EOS-1005 or similar approved). Screws fixed central in slot to allow +/- 25mm of movement.

DHT for use with raking pitches up to 5 degrees. If pitch >5deg, use DHB.

EOS Framing Ltd, Heighington Lane, Aycliffe Industrial Park, Newton Aycliffe, County Durham, DL5 6QC, Tel: 01325 303030

NOTES

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Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

NOTE:
- 2 No. VERTICAL STUDS PROVIDED WITH NOMINAL 10mm GAP FOR BRICK TIE PROVISION AROUND FACADE MOVEMENT JOINTS
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Full height studs notched around bracing and re-dressed with angle profile to re-instate basic stud profile.

10 No. 5.5 x 25mm Tek screws above notch connecting angle to stud.
- 5 No. to flange
- 5 No. to web

10 No. 5.5 x 25mm Tek screws below notch connecting angle to stud.
- 5 No. to flange
- 5 No. to web

IMPORTANT:
Angle to extend at least 150mm above and below notch
Angle must be sized to fully re-dress notched out steel.

10 No. 5.5 x 25mm Tek Screws
(5 No. to web, 5 No. to flange)

Angle to be sized by EOS Design

10 No. 5.5 x 25mm Tek Screws
(5 No. to web, 5 No. to flange)
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.
## EOS FRAMING STOCK FIXINGS TABLE

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Application</th>
<th>Size</th>
<th>Product Type</th>
<th>Supplier Ref</th>
<th>Unit size</th>
<th>Images</th>
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<tbody>
<tr>
<td>EOS - 1001</td>
<td>Framing - SFS to SFS</td>
<td>5.5 x 19mm</td>
<td>Pan Head - #2 Lox Drive</td>
<td>Grabber CFP131875LY2</td>
<td>1000</td>
<td>![Image 1]</td>
</tr>
<tr>
<td>EOS - 1002</td>
<td>Site - LBS Frame to Frame</td>
<td>5.5 x 25mm</td>
<td>Hex Head - Self Drill 5 MD052</td>
<td>HILTI 413417</td>
<td>500</td>
<td>![Image 2]</td>
</tr>
<tr>
<td>EOS - 1003</td>
<td>Site - SFS to Deflection Head Bracket</td>
<td>6.3 x 25mm</td>
<td>Hex Head - Large Washer S-MD232Z</td>
<td>HILTI 413417</td>
<td>500</td>
<td>![Image 3]</td>
</tr>
<tr>
<td>EOS - 1004</td>
<td>Site - LBS Frame Through Floor</td>
<td>5.5 x 50mm</td>
<td>Hex Head - Self Drill 5 MD052</td>
<td>HILTI 414293</td>
<td>500</td>
<td>![Image 4]</td>
</tr>
<tr>
<td>EOS - 1005</td>
<td>Site - SFS to SFS</td>
<td>5.5 x 25mm</td>
<td>Pan Head - Drywall Screw S-MD03ZW</td>
<td>HILTI 408762</td>
<td>1000</td>
<td>![Image 5]</td>
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<tr>
<td>EOS - 1006</td>
<td>Site - WP Base Plate to Concrete</td>
<td>10 x 100mm</td>
<td>Hex Head - Screw anchor HUS3-H 10x100 45/35/15</td>
<td>HILTI 2079915</td>
<td>50</td>
<td>![Image 6]</td>
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<tr>
<td>EOS - 1007</td>
<td>Site - Bracketry Concrete Screw</td>
<td>6.4 x 45mm</td>
<td>Simpson Titen Concrete Screw Simpson TITN25134H</td>
<td></td>
<td>100</td>
<td>![Image 7]</td>
</tr>
<tr>
<td>EOS - 1008</td>
<td>Site - SFS to Blockwork</td>
<td>7.5 x 72mm</td>
<td>Cylinder Head - K-WHO 75072</td>
<td>Rawplug K-WHO 75072</td>
<td>100</td>
<td>![Image 8]</td>
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<tr>
<td>EOS - 1020</td>
<td>Site - SFS to Hot Rolled</td>
<td>5.5 x 40mm</td>
<td>Hex Head - Self Drill 5 MD052</td>
<td>HILTI 2054403</td>
<td>250</td>
<td>![Image 9]</td>
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<tr>
<td>EOS - 1021</td>
<td>Site - SFS to Concrete</td>
<td>6.0 x 56mm</td>
<td>Hex Head - Screw Anchor HUS3-H</td>
<td>HILTI 416735</td>
<td>100</td>
<td>![Image 10]</td>
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<tr>
<td>EOS - 1022</td>
<td>Site - SFS to Concrete Bits</td>
<td>Driver Tip</td>
<td>Driver Tip for EOS1G21</td>
<td>HILTI 2639247</td>
<td>1</td>
<td>![Image 11]</td>
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<tr>
<td>EOS - 1023</td>
<td>Site - SFS to Concrete Bits</td>
<td>Driver Bit</td>
<td>Drill Bit for EOS1G21</td>
<td>HILTI 2022045</td>
<td>10</td>
<td>![Image 12]</td>
</tr>
</tbody>
</table>

**Title:** EOS FRAMING STOCK FIXINGS TABLE

**STAGE:**
- **Preliminary:**
- **Approval:**
- **Construction:**

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TYPICAL ZED BAR HEAD DETAIL

NOTE
1. Detail to be approved by fire consultant on each project
## SINGLE NAILS  COLLATED NAILS (MX)

### FIXINGS INTO HOT ROLLED STEEL SUBSTRATE

<table>
<thead>
<tr>
<th>Supplier Reference:</th>
<th>Fixing</th>
<th>Min. Edge Distance:</th>
<th>Min. Fixing Spacing:</th>
<th>Min. Substrate Thickness:</th>
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<tbody>
<tr>
<td>HILTI X-U 16 P8 #237330</td>
<td>16mm</td>
<td>20mm</td>
<td>40mm</td>
<td>6mm</td>
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<tr>
<td>HILTI X-U 16 MX #237344</td>
<td>16mm</td>
<td>20mm</td>
<td>40mm</td>
<td>6mm</td>
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### FIXINGS INTO REINFORCED CONCRETE SLAB SUBSTRATE

<table>
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<th>Supplier Reference:</th>
<th>Fixing</th>
<th>Min. Edge Distance:</th>
<th>Min. Fixing Spacing:</th>
<th>Min. Substrate Thickness:</th>
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</thead>
<tbody>
<tr>
<td>HILTI X-U 27 P8 #237333</td>
<td>27mm</td>
<td>70mm</td>
<td>80mm</td>
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<tr>
<td>HILTI X-U 27 MX #237347</td>
<td>27mm</td>
<td>70mm</td>
<td>80mm</td>
<td>80mm</td>
</tr>
</tbody>
</table>

### IMPORTANT NOTES

1. Fixing quantities and spacings to be determined by EOS Engineer on a job-by-job basis.
2. For fixing into concrete, each piece of track MUST have a minimum of 5 No. fixings.
3. EOS provide fixing specification only – fixings not supplied by EOS.
RAWL R-WHO-75072 FIXING

MINIMUM EDGE DISTANCE = 50mm
(Fixing not suitable for blocks narrower than 100mm)
MINIMUM EMBEDMENT = 60mm
MINIMUM SPACING BETWEEN FIXINGS = 30mm

FIXING QUANTITIES AND SPACINGS TO BE DETERMINED BY EOS ENGINEERS ON A JOB-BY-JOB BASIS

IMPORTANT:
BLOCKWORK PLINTH MUST BE ADEQUATELY RESTRAINED BACK TO STRUCTURAL SLAB BY OTHERS.

SFS NOT SUITABLE ATOP UNRESTRAINED BLOCKWORK PLINTHS.

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FIXINGS INTO BLOCKWORK PLINTHS

STAGE:

Preliminary:  
Approval:  
Construction:  

Date: AUG 2020

EOS Framing Ltd, Heighington Lane, Aycliffe Industrial Park, Newton Aycliffe, County Durham, DL5 6QG, Tel: 01325 303030

www.eosframing.co.uk
SFS QUICK GUIDE: BASIC INSTALLATION

[For DHT - Deflection Head Track]

Important: to be read in conjunction with project specific drawings and EOS standard details.

**Head Track**
- 5 Fixing 60 to 10mm IN FROM ENDS
- 1 No. FIXING AT EACH JAMB POSITION
- General Fixings to match Stud Centres

**Base Track**
- 5 Fixing 90 to 10mm IN FROM ENDS
- 1 No. FIXING AT EACH JAMB POSITION
- General Fixings to match Stud Centres

Fixings quick reference:
- E02-1006: Standard Tek Screw, EOS to EOS steel
- E02-1007: Double Rollers Screw
- E02-1008: EOS to Concrete Anchor

Typical detail: Fixings to both sides

**DHT - Deflection Head Track**
- 1 No. EOS-1006 PAN HEAD TEK SCREW
- Placed central under LOCUS DUG
- Fixings to both sides

SINGLE LINTEL / CILL SWAGED CRIPPLE TRACK
- 3 No. staggered fixings to web and 1 No. fixing to flanges of Cill / Lintel Track

DOUBLE STUD PLAIN CRIPPLE TRACK WRAP-AROUND
- 3 No. staggered fixings to web and 1 No. fixing to each flange of D0

**Notes**
- This drawing is copyright: do not scale.
- This drawing, contractors must check all dimensions on site. Only figured dimensions to be worked from. All errors and discrepancies must be immediately reported to the design office of EOS Framing Ltd.

Title: INSTALLATION QUICK GUIDE - DEFLECTION HEAD TRACK (S & T)

STAGE:
- Preliminary: [ ]
- Approval: [ ]
- Construction: [ ]

Drawn By: PK
Scale: NTS
Drawing No.: 241
Revision: C
Approved By: AH/KB
Date: AUG 2020

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SFS QUICK GUIDE:
BASIC INSTALLATION
FOR DHB - DEFLECTION HEAD BRACKETS

STANDARD DEFLECTION HEAD
DEFLECTION BRACKET TIGHTENED INTO HEAD TRACK.
LARGE WASHER HEAD SCREWED CENTRALLY.

NON-STD DEFLECTION HEAD
AS PER STANDARD METHOD, BUT CLOTHED WITH SHORT PIECE OF TRACK TO ENABLE BRACKET TO OPEN FACE OF STUD.

FIXINGS QUICK REFERENCE:
EOS-1001: STANDARD THERMOWELDING SCREWS
EOS-1002: EOS-TO-STEEL ROLLER PLATED SCREWS
EOS-1012: EOS-TO-CONCRETE ANCHOR

TYPICAL DETAIL
FIXINGS BOTH SIDES.

NOTES
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TYPICAL OPENING - SINGLE TRACK CILL / LINTEL REF 261F

Date:

STAGE:

Preliminary:

Approval:

Construction:

Drawing No.:

Revision:

Approved By:

Date:

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TOPICS:

Construction tolerances between frames is ±0mm ±2mm. Frames are manufactured and assembled to ±0mm ±2mm.

NOTES

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OPENING SINGLE TRACK LINTEL FIXING

100mm LONG SWAGED CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)

LINTEL/CILL TRACK FIXED INTO CRIPPLE TRACK USING 2 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved) ONE FIXING CENTRALLY INTO EACH FLANGE.

100mm LONG SWAGED CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)

OPENING SINGLE TRACK CILL FIXING

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

OPENING SINGLE JAMB AND DOUBLE STUD LINTEL FIXING

100mm LONG PLAIN CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)

SWAGED DOUBLE STUD LINTEL / CILL FIXED INTO CRIPPLE TRACK USING 2 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved) ONE FIXING CENTRALLY INTO EACH FLANGE.

100mm LONG PLAIN CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)

DOUBLE STUD LINTEL / CILL FIXED TOGETHER USING 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved) 4 FIXINGS PER NOGGIN. DOUBLE STUD LINTEL / CILL TRACK USING 5.5 x 25mm TEK SCREWS (EOS-1001 or similar approved) @ 600mm CENTRES.
TYPICAL OPENING - DOUBLE JAMB / DOUBLE TRACK CILL / LINTEL REF 263F

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

NOTE: - DOUBLE STUDS ARE MANUFACTURED AT 175mm WIDE AS STANDARD TO ENCAPSULATE A BRICK TIE CHANNEL POSITION.

DOUBLE STUDS CAN BE MANUFACTURED BETWEEN 100mm AND 225mm WIDE FOR NON-STANDARD APPLICATIONS. PLEASE ENQUIRY WITH EOS.

OPENING DOUBLE JAMB AND DOUBLE STUD LINTEL FIXING

DOUBLE STUD LINTEL / CILL FORMED FROM 2 No. STUDS CONNECTED BY NOGGINS @ 600mm c/c. WITH TRACK TOP OR BOTTOM

100mm LONG PLAIN CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No. 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)

SWAGED DOUBLE STUD LINTEL / CILL FIXED INTO CRIPPLE TRACK USING 2 No. 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved) ONE FIXING CENTRALLY INTO EACH FLANGE.

DOUBLE STUD JAMBS / DOUBLE STUD LINTELS / CILLS MANUFACTURED OFFSITE IN EOS FACTORY

OPENING DOUBLE JAMB AND DOUBLE STUD CILL FIXING

100mm LONG PLAIN CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No. 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

DOUBLE STUDS CONNECTED USING NOGGINS FIXED WITH 4 No. 5.5 x 25mm TEK SCREWS (EoS-1001 or similar approved).

NOTE:- DOUBLE STUDS ARE MANUFACTURED AT 175mm WIDE AS STANDARD TO ENCAPSULATE A BRICK TIE CHANNEL POSITION.

DOUBLE STUDS CAN BE MANUFACTURED BETWEEN 100mm AND 225mm WIDE FOR NON-STANDARD APPLICATIONS. PLEASE ENQUIRY WITH EOS.
TYPICAL STUD & TRACK MID-HEIGHT RESTRAINT DETAIL (S & T)

Plan on Typical Corner

**Step 1**
Flat plate runs full length of bay.
50mm x 2mm thk,
1 No 5.5 x 25mm Tek screw into each flange of each stud
(EOS-1005 or similar approved)

**Step 2**
Track to be fixed to strap each side with
2 No 5.5 x 25mm Tek screws (EOS-1005 or similar approved)

**Stud Size and Spacing to be Job Specific specified by EOS**

*This detail is to be used in all situations where a mid-height restraint is required.*

*Length of mid-height restraint to be specified by Engineer.*
TYPICAL VENT OPENING DETAIL (S & T)

**NOTES**

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**TOLERANCES**

Construction tolerances between frames is -0mm +2mm. Frames are manufactured and assembled to +0mm -2mm.

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as possible.

**THE HEAD TRACK CAN BE CUT OUT LOCALLY IF IT CLASHES WITH THE VENT HOWEVER PLEASE ENSURE THAT A FIXING IS PLACED A 50-100mm AWAY FROM EACH END OF TRACK.**

**OPENING TRACK FIXED INTO CRIPPLE TRACK USING 2 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved) ONE FIXING CENTRALLY INTO EACH FLANGE.**

**100mm LONG SWAGED CRIPPLE TRACK FIXED TO JAMB STUD USING 3 No 5.5 x 25mm TEK SCREWS (EOS-1005 or similar approved)**

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**Title:** TYPICAL VENT OPENING CONNECTION DETAIL (S & T)

**STAGE:**

- Preliminary: □
- Approval: □
- Construction: □

**Drawn By:** PK

**Scale:** NTS

**Drawing No.:** 270

**Revision:** E

**Approved By:** AH/KB

**Date:** AUG 2020

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TYPICAL HARD FIXED LINTEL CONNECTION

TYPICAL HARD FIXED LINTEL ELEVATION

DEFLECTION BRACKETS OR DEFLECTION HEAD TRACK IS NOT REQUIRED ON THE STUDS ABOVE THE OPENING FOR A HARD FIXED LINTEL - DEFLECTION IS TO BE ALLOWED FOR ABOVE THE WINDOW

WINDOW MANUFACTURER TO ALLOW ADDITIONAL TOLERANCE FOR MOVEMENT / DEFLECTION ABOVE THE HEAD OF THE WINDOW

NOTE: PROJECT SPECIFIC HARD FIXED LINTEL DETAILS WILL BE PROVIDED DURING DESIGN REVIEW WITH AN EOS ENGINEERS AS ADDITIONAL BRACKETRY OR WINDPOSTS MAY BE REQUIRED FOR LARGER OPENINGS

TYPICAL SECTION
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

NOTES

1. Fixing provided as required for windloading restraint.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209 or shown on project specific WPBP detail.
3. Each track length to have fixing 50-100mm from each end.
4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Double stud fixed to Deflection Head Track through slotted holes using 2 No 5.5 x 25mm tek screws (EOS-1005 or similar approved). Screws fixed central in slot to allow +/- 25mm of movement UNO.

DHT for use with raking pitches up to 5 degrees. If pitch >5deg, use DHB.

Double studs can be manufactured between 100mm and 225mm wide for non-standard applications. Please enquire with EOS.
1. Fixing provided as required for windloading restraint.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209 or shown on project specific WPBP detail.
3. Each track length to have fixing 50-100mm from each end.
4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.

**NOTES**

- EOS base track securely fixed to concrete floor using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track
- EOS head track securely fixed to concrete soffit using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track

**BASE FIXING**

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) each side as per project specific detail

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) each side as per project specific detail

Maintain gap for deflection between lintel track and end of Double Stud Wind Post

**HEAD FIXING**

2 No. Deflection Head Brackets provided at lintel level to allowance for deflection. Fixed with 2 No. EOS-1003 located centrally in the slot. Note where deflection is required, do not fix boarding to wind post.

**HEAD TRACK**

Wind Post Double stud

EOS Deflection Head Bracket

**WIND POST BASEPLATE - AS PER PROJECT SPECIFIC DETAIL**

NOTE: BASEPLATE CONNECTS TO STRUCTURE AT SSL & PROTRUDES INTERNALLY PAST THE WALL LINE

WIND POST DOUBLE STUD MANUFACTURED OFFSITE IN EOS FACTORY

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible
NOTES

1. Fixing provided as required for windloading restraint.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209 or shown on project specific WPBP detail.
3. Each track length to have fixing 50-100mm from each end, exceeding the limits highlighted in detail 209 or shown on project specific WPBP detail.
4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.

Base Fixing

Wind Post Baseplate - To be installed as per Project Specific Details

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) each side as per project specific detail

EOS base track securely fixed to concrete floor using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) each side as per project specific detail

2 No. Deflection Head Brackets provided at lintel level to allowance for deflection. Fixed with 2 No. EOS-1003 located centrally in the slot. Note where deflection is required do not fix boarding to wind post.

EOS deflection head track securely fixed to concrete soffit using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 60-100mm from end of track

Head Fixing

Wind Post Double stud

EOS Deflection Head Bracket

Maintain gap for deflection between lintel track and end of Double Stud Wind Post

Baseplate connects to structure at SSL & protrudes internally past the wall line

Wind Post Baseplate - As per Project Specific Detail

Wind Post Double Stud manufactures offsite in EOS factory

Eos deflection head track securely fixed to concrete soffit using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 60-100mm from end of track

Notes

- 1. Fixing provided as required for windloading restraint.
- 2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209 or shown on project specific WPBP detail.
- 3. Each track length to have fixing 50-100mm from each end.
- 4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.

Title: TYPICAL OPENING WIND POST CONNECTION DETAIL [DEFLECTION HEAD TRACK] (S & T)

Stage:

Preliminary: 
Approval: 
Construction: 

Written By: 
Scale: NTS
Drawing No. 275
Revision: C
Approved By: AH/KB
Date: AUG 2020
Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

Main head track stops either side of the opening

Dropped Lintel Framing consists of 'hard-fixed ladder frame' with a deflection gap to the underside of the structural soffit.

1 No. Simpson EFIXS100 Bracket to each vertical stud within the Dropped Lintel to provide lateral restraint and maintain deflection allowance. Bracket fixed to underside of structure using 2 No. EOS-1007 fixings. Bracket fixed to EOS studs using 1 No. EOS-1003 large washer head fixing, fixed centrally in slot.

Dropped Lintel Framing supported on 1 No. Simpson ES/2C50 Bracket each end. Bracket fixed using 2 No. EOS-1005 to each leg.

Notes:
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NOTES

1. Fixing provided as required for windloading restraint.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209.
3. Each track length to have fixing 50-100mm from each end.
4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.

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NOTES

1. Fixing provided as required for wind loading restraint.
2. Installer to confirm line and level of track base prior to fixing and report deviations greater than +/- 15mm, or any overhangs exceeding the limits highlighted in detail 209.
3. Each track length to have fixing 50-100mm from each end.
4. If the double stud windpost is under 300mm long these will be supplied as 2 No. single studs that can be fixed to the windpost base plate in the same manner as the double studs.

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) each side as per project specific detail

Wind Post Double Stud fixed to Wind Post Base Plate using 4 No. 5.5 x 25mm Tek screws (EOS-1020 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track

EOS deflection head track securely fixed to concrete soffit using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track

EOS base track securely fixed to concrete floor using fixings (EOS-1021 or similar approved) @ centres to suit wind loading. Note:- fixing to be 50-100mm from end of track

Studs have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible

INTO STEEL ONLY [DEFLECTION HEAD TRACK] (S & T)

WIND POST BASEPLATE - TYPICAL HR CONNECTION. PLEASE REFER TO PROJECT SPECIFIC DETAIL.
STUDS have swaged ends to fit inside the track so that both studs & tracks are the same width to assist in providing as flush a finish as is possible.

TRIPLE JAMBS consist of single stud fixed to pre-assembled double stud.

QUAD JAMBS consist of 2 no. pre-assembled double studs fixed together with plates as specified by EOS engineers.

NOTE:-
DOUBLE STUDS are manufactured at 175mm wide as standard.

DOUBLE STUDS can be manufactured between 100mm and 225mm wide for non-standard applications. Please enquire with EOS.

FOR HEAD FIXINGS please refer to standard details 273 (DHT deflection head track) or 265 (DHB deflection head brackets).
DISCLAIMER

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