INSTALLATION GUIDE

YOUR FRAMEWORK FOR BUILDING A BETTER FUTURE

www.eos-facades.co.uk
Welcome to the EOS Facades Installation Guide

A successful project requires every trade in the design and construction journey 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 Erectors
• Site Managers
• Site Inspectors
• Trade Trainers
Standard Details

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TYPICAL FIXING DETAIL FOR HEAD & BASE TRACKS (S & T)

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

APPLICABLE TO BOTH HEAD & BASE TRACKS, INTO EITHER CONCRETE OR HOT ROLLED STEEL

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.

TYPICAL SECTION

3D VIEW

60-100mm

1 No. Fixing 60-100mm in from end of each track

1 No. Fixing @ centres to match stud centres

1 No. Fixing at every jamb position

END STUD

STUD

STUD

JAMB

PLAN

HEAD & BASE TRACKS

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.

Title: TYPICAL FIXING DETAIL FOR HEAD & BASE TRACKS (S & T) STAGE:

Preliminary

Approval

Construction

Drawn By: PK Scale: NTS Drawing No.: 201 Revision: F Approved By: AH/KB Date: Aug 2017

EOS Facades Ltd Highighton Lane, Aycliffe Industrial Park, Newton Aycliffe, County Durham, DL5 6BC Tel.: (01325) 300 100 www.eosfacades.org
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 STUD BASE FIXING & DEFLECTION HEAD BRACKET (S & T)

DEFLECTION BASE / HEAD BRACKET FIXING

DEFLECTION HEAD ELEVATION

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.

DEFLECTION HEAD

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

TYPICAL DEFLECTION HEAD

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

TYPICAL STUD BASE FIXING

Title: TYPICAL STUD BASE FIXING & DEFLECTION HEAD BRACKET (S & T)

Stage:

Preliminary: ☐
Approval: ☐
Construction: ☐

Drawn By: TE
Scale: NTS
Drawing No.: 204
Revision: E
Approved By: AH/KB
Date: May 2016
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) at each stud centre.

TYPICAL DEFLECTION HEAD
STEEL EDGE BEAM CONNECTION

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

TYPICAL DEFLECTION HEAD
CONCRETE SLAB EDGE CONNECTION
TOLERANCES:
Construction tolerances between frames is ±0mm ±2mm. Frames are manufactured and assembled to ±0mm ±2mm.

NOTE
Additional stud required on corners to provide vertical fixing face for fixing of internal wall finishes.

5.5 x 25mm Tek screws (EOS-1002, EOS-1005 or similar approved) fixed into corner stud @ 600 vertical c/c's.

Min. 300mm or stud * punched with access holes

PLAN
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.
TYPICAL DEFLECTION HEAD
STEEL EDGE BEAM CONNECTION

Indicative steel frame (by others)

Simpson SSB Bracket

Vertical stud

TYPICAL SECTION

Indicative steel frame (by others)

Simpson SSB Bracket

Vertical stud

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: Bracket suitability to be determined by EOS Engineer subject to tech review and cladding loads.
**SCI GUIDANCE**

<table>
<thead>
<tr>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>120</td>
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<td>220</td>
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<td>73</td>
</tr>
<tr>
<td>250</td>
<td>167</td>
<td>83</td>
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</tbody>
</table>

- **OPTION 1**
  - Support angle sized to suit overhang dimension & loading requirements to be confirmed by EOS Engineer.
  - EOS-1021 or similar approved fixing into base track.

- **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 a flush finish as is possible.
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.

TYPICAL OVERSAIL STUD FIXING

Indicative concrete slab edge (by others)

Vertical stud

Simpson SCB Bracket

TYPICAL SECTION
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.

- Head track (Fixing to suit structure)
- Deflection head bracket fixed to head track each side using 5.5 x 25mm Tek screws (EOS-1005 or similar approved)
- Vertical stud
- 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 +/- 12.5mm of movement.
- Cloaking track piece fixed to vertical stud each side using 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.

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 DEFLECTION DETAIL

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.

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.
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

Title: TYPICAL STUD BASE FIXING & DEFLECTION HEAD TRACK (S & T)

STAGE:

Preliminary: ☐
Approval: ☐
Construction: ☐

Drawn By: PK
Scale: NTS
Drawing No: 214
Revision: C
Approved By: AH/KB
Date: Aug 2017
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. Consult EOS for advice.

Vertical stud fixed to Deflection Head Track through slotted holes using 2 Nos 5.5 x 25mm tek screws (EOS-1005 or similar approved). Screws fixed central in slot to allow +/- 17mm 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
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 +/- 17mm of movement.

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

Title: TYPICAL FACADE MOVEMENT JOINT DETAIL (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.

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

NOTE:- NATURE OF BRACING AVOIDANCE FRAMING SUBJECT TO BUILDING DESIGN. FIXING REQUIREMENTS SUBJECT TO EOS ENGINEER SPECIFICATION.

- 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

Brace notched around

Stud

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.

NOTE:- NATURE OF BRACING AVOIDANCE FRAMING SUBJECT TO BUILDING DESIGN.
# EOS FACADES STOCK FIXINGS TABLE

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<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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<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 CFP10137SLY2</td>
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<td>EOS - 1002</td>
<td>Site - LBS Frame to Frame</td>
<td>5.5 x 25mm</td>
<td>Hex Head - Self Drill S-MD032</td>
<td>HILTI 413417</td>
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<td>EOS - 1003</td>
<td>Site - SFS to Deflection Head Bracket</td>
<td>6.3 x 25mm</td>
<td>Hex Head - Large Washer S-MD323Z</td>
<td>HILTI 413432</td>
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<td>EOS - 1004</td>
<td>Site - LBS Frame Through Floor</td>
<td>5.5 x 50mm</td>
<td>Hex Head - Self Drill S-MD032</td>
<td>HILTI 414293</td>
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<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>
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<td>EOS - 1006</td>
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<td>10 x 100mm</td>
<td>Hex Head - Screw anchor HUS3-H 10x100 45/35/15</td>
<td>HILTI 2679915</td>
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<tr>
<td>EOS - 1007</td>
<td>Bracketry Concrete Screw</td>
<td>6.4 x 45mm</td>
<td>Simpson Titen Concrete Screw</td>
<td>Simpson TTN25134H</td>
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<td>Site - SFS to Blockwork</td>
<td>7.5 x 72mm</td>
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<td>Rawplug K-WHO 75072</td>
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<td>Site - SFS to Hot Rolled</td>
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<td>Site - SFS to Concrete</td>
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<td>EOS - 1022</td>
<td>Site - SFS to Concrete Bits</td>
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<td>Driver Tip for EOS1G21</td>
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<td>EOS - 1023</td>
<td>Site - SFS to Concrete Bits</td>
<td>Driver Bit</td>
<td>Drill Bit for EOS1G21</td>
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<td>EOS 1623 Image Not To Scale</td>
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</tbody>
</table>

This drawing is copyright; do not scale. All dimensions on site, only allow for dimensional tolerance to be worked from. All errors and discrepancies must be immediately reported to the design office of EOS Facades Ltd.
TYPICAL ZED BAR HEAD DETAIL

HEAD TRACK FIXED TO ZED BAR AT EACH STUD CENTRE. ZED BAR SIZE BY EOS.

GAP TO ALLOW INTUMESCENT COATING TO EXPAND.
### 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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<tr>
<td>Hilti X-U 16 P8 #237330</td>
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<tr>
<td>Hilti X-U 16 MX #237344</td>
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<td>20mm</td>
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### Fixings into Reinforced Concrete Slab Substrate

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<th>Supplier Reference:</th>
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<th>Min. Fixing Spacing:</th>
<th>Min. Substrate Thickness:</th>
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<td>Hilti X-U 27 P8 #237333</td>
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<td>70mm</td>
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<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. Applicator gun (Dx) and cartridge type to be specified by EOS Engineer.
2. Gas (Gx) actuated applicator guns are NOT supported.
3. Fixing quantities and spacings to be determined by EOS Engineer on a job-by-job basis.
4. For fixing into concrete, each piece of track MUST have a minimum of 5 No. fixings.
FIXING QUANTITIES AND SPACINGS TO BE DETERMINED BY EOS ENGINEERS ON A JOB-BY-JOB BASIS

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

IMPORTANT:

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

SFS NOT SUITABLE ATOP UNRESTRAINED BLOCKWORK PLINTHS.

FIXINGS INTO BLOCKWORK PLINTHS

Title: FIXINGS INTO BLOCKWORK PLINTHS SPECIFICATION (S & T)
SFS QUICK GUIDE:
BASIC INSTALLATION

[FOR DHB – DEFLECTION HEAD BRACKETS]

IMPORTANT: TO BE READ IN CONJUNCTION WITH PROJECT SPECIFIC DRAWINGS AND EOS STANDARD DETAILS.

STANDARD DEFLECTION HEAD
DEFLECTION BRACKET TIGHT UP INTO HEAD TRACK
LARGE WASHER HEAD SCREWED CENTRALLY

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

SINGLE LINTEL / CLL
CRIPPLE TRACK
3 No. 5" AUGERED FIXINGS TO WEB AND 1 No. FIXING TO FLANGES OF CLL/LINTEL TRACK

BASE TRACK
1 No. FIXING 60 to 100mm IN FROM ENDS
1 No. FIXING AT EACH JAMB POSITION
GENERAL FIXINGS TO MATCH STUD CENTRES

DOUBLE STUD
CRIPPLE TRACK
WRAP-AROUND
3 No. STAGGERED FIXINGS TO WEB AND 1 No. FIXING TO EACH FLANGE OF DS

FIXINGS QUICK REFERENCE:
EOS-100: STANDARD TEK SCREWS
EOS-1020: TEK TO WRF GALV STEEL SCREW
EOS-1021: EOS-TO-CONCRETE ANCHOR

TYPICAL DETAIL
FIXINGS BOTH SIDES

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

 EOS Facades Ltd Heighington Lane, Aycliffe Industrial Park, Newton Aycliffe, County Durham, DL5 6GG Tel : (01325) 303 030 www.eosuk.org
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 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.

**OPENING SINGLE JAMB AND DOUBLE STUD 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)

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 SWAGED 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.**

**OPENING SINGLE JAMB AND DOUBLE STUD CILL FIXING**

**NOTES**

This drawing is copyright. Do not scale. This drawing, contractors must check all dimensions on site. Only intended dimensions to be worked from. All errors and discrepancies must be immediately reported to the design office of EOS Facades Ltd.
TYPICAL OPENING - DOUBLE JAMB / DOUBLE TRACK CILL / LINTEL  REF 263E

DATE: TYPICAL OPENING - DOUBLE STUD JAMB & DOUBLE STUD LINTEL & CILL CONNECTION DETAIL (S & T)

STAGE:
- Preliminary:
- Approval:
- Construction:

DRAWING NO. 263

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 ENQUIRE WITH EOS FACADES.

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

OPENING DOUBLE JAMB AND DOUBLE STUD CILL FIXING

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 ENQUIRE WITH EOS FACADES.

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

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

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 ENQUIRE WITH EOS FACADES.

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

OPENING DOUBLE JAMB AND DOUBLE STUD CILL FIXING

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 ENQUIRE WITH EOS FACADES.

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

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 ENQUIRE WITH EOS FACADES.

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

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 ENQUIRE WITH EOS FACADES.
**TYPICAL DOUBLE STUD CONNECTION DETAIL (S & T)**

**DEFLECTION HEAD FIXING**

- **DOUBLE STUD JAMBS MANUFACTURED OFFSITE IN EOS FACTORY.**
- **DOUBLE STUDS CONNECTED USING NOGGINS FIXED WITH 4 No. 5.5 x 25mm TEK SCREWS (EOS-1001 or similar approved).**

**BASE FIXING**

- **NOTE:- DOUBLE STUDS ARE MANUFACTURED AT 100mm WIDE AS STANDARD (OR 150mm FOR 65 FLANGE SECTIONS).**
- **FOR MASONRY FINISHES A 175mm DOUBLE STUD IS USED TO ACCOMMODATE BRICK TIE CHANNELS SPACED 150mm FROM OPENING REVEAL.**
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.

Stud Size and Spacing to be Job Specific specified by EOS

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)

Track to be fixed to strap each side with 2 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.

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

**Stage:**
- Preliminary:
- Approval:
- Construction:

**Drawing No.:** 270
**Scale:** NTS
**Revision:** D
**Approved By:** AH/KB
**Date:** Aug 2017

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

- **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.**

- **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.**

- **TYPICAL VENT OPENING ELEVATION**

- **NTSPK Aug 2017**

**Notes:**
- This drawing is copyright. Do not scale this drawing. Contractors must check all dimensions on site.
- Errors and discrepancies must be immediately reported to the design office of EOS Facades Ltd.

**Tolerances:**
Construction tolerances between frames is –0mm +2mm. Frames are manufactured and assembled to +0mm –2mm.
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

TYPICAL HARD FIXED LINTEL ELEVATION

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
**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.

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**TYPICAL PARAPET WIND POST DETAILS**

- **Title:** TYPICAL PARAPET WIND POST CONNECTION DETAIL (S & T)
- **Stage:**
  - **Preliminary:** ☐
  - **Approval:** ☐
  - **Construction:** ☐

**Drawn By:** PK  
**Scale:** NTS  
**Drawing No.:** 272  
**Revision:** E  
**Approved By:** AH/KB  
**Date:** Aug 2017
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.

Vertical 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 +/- 17mm of movement UNO.

**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 ENQUIRE WITH EOS FACADES.

**TYPICAL DOUBLE STUD CONNECTION DETAIL (S & T)**

**[DHT - DEFLECTION HEAD TRACK]**
TYPICAL OPENING WIND POST DEFLECTION DETAILS

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.

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

Drawn By: PK
Scale: NTS
Drawing No.: 274
Revision: B
Approved By: AH/KB
Date: Aug 2017

WIND POST BASEPLATE - AS PER PROJECT SPECIFIC DETAIL

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

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 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 BASEPLATE - AS PER PROJECT SPECIFIC DETAIL

BASE FIXING

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

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.

**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**

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.

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

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

**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.

Title: TYPICAL OPENING WIND POST CONNECTION DETAIL [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.

Dropped Lintel Framing consists of ‘hard-fixed ladder frame’ with a 15-25mm 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.
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 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.

**Title:** TYPICAL OPENING INLINE WIND POST CONNECTION DETAIL - Fixing into steel only [Deflection Head Bracket] (S & T)

**Date:** Aug 2017

**Drawn By:** PK

**Scale:** NTS

**Drawing No.:** 277

**Revision:** B

**Approved By:** AH/KB

**Notes**

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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.

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.

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.

Maintain 17mm gap for deflection between lintel track and end of Double Stud Wind Post.
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 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.
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 FACADES.

TRIPLE JAMB

2 No. EOS-1005 @ 600mm vertical centres

Single Stud

Double Stud

Double Studs

Plates to both sides as per EOS specification

QUAD JAMB

FOR HEAD FIXINGS PLEASE REFER TO STANDARD DETAILS 273 (DHT DEFLECTION HEAD TRACK) OR 265 (DHB DEFLECTION HEAD BRACKETS)
DISCLAIMER

Whilst EOS Facades has prepared this document in good faith, it is designed to provide guidance on SFS construction. EOS Facades accepts no liability and offers no warranties in relation to its contents. Users are therefore required to satisfy themselves as to the suitability of the contents of this guidance for their specific intended purpose.

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IF IN DOUBT…
STOP AND CONSULT!

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