



# Professional Steel Framing Services (SFS) to the Construction Industry

*Supplying Components, Frames and Systems*

Frameclad is based in the West Midlands of England, designing, manufacturing and supplying steel frame components throughout the UK.

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# Frameclad Steel Frame Systems

## Overview

### The Services We Provide

#### Stud & Track

Frameclad distribute stud and track in component form to be used as the infill walling to reinforced concrete frame buildings or hot rolled steel frame buildings

We can offer stud and track in various sizes, factory cut to length, generally within 7-14 days from receipt of call off to anywhere on mainland UK.

All studs can have pre-punched service holes at specified locations if requested.

Stud and track is available in various sizes please refer to our website or pricelist for these options.

To supplement this, we can also supply deflection head brackets, hot-rolled steel beams, wind posts, ancillary fixings and brackets.

#### Pre-assembled Panels

As an additional service to stud and track, light gauge steel panels can be assembled offsite prior to delivery. If required items such as CP Board or insulation can also be pre-fixed to the panels under factory conditions and then delivered to site ready for installation.

#### Multi-storey Self-supporting Structures

We have the capability to provide multi storey buildings up to 8 storeys high using the system, incorporating all external walls, load bearing walls, floors and roof structures. All complete with comprehensive design and full structural calculations.

As with all systems, service holes can be pre-punched to give greater ease for the installation of first-fix plumbing and electrics.

#### Single Storey Buildings & Extra Floors

Frameclad can provide systems to suit individual houses, offices or light industrial buildings. Due to the lightweight structure, this system can lend itself to building a new storey or storeys on your existing building (subject to structural engineering approval).

### The Advantages of Steel Frame

Light gauge steel frame is one of the most adaptable, cost effective and environmentally friendly building techniques available. Flexible in design and fast and simple to erect, our systems and materials can be adapted to almost any building project you have in mind.

#### Time

Speed of Erection	Build at least 30% faster than traditional methods
Rapid Dry Envelope	Allows first fix in quickly & reduces the overall build programme.
Predictability	Can be installed in all weather conditions.

#### Quality & Performance

Manufacturing Quality Control.	High degrees of dimensional accuracy
Thinner Wall Option	Potential to increase floor space or the number of plots on a site.
Dry Construction	No cracking or long-term movement from moisture loss.
Stability	Steel does not rot, shrink or creep under load.
Long Span Construction	Creation of open plan space and inventive use of roof space.
Design Flexibility	Balconies, penthouses and stairs can be incorporated in the design.
Durability	Galvanised and zinc coated Steel offers lifetime protection for the structure for in excess of 60 years within a warm frame construction.
Non-combustible	Reduced risk of fire during and after construction.

#### Sustainability

Lightweight	Reduces foundation requirements; perfect for brownfield sites.
100% Recyclable	Exceeds Code for Sustainable Homes standards.
Minimises Wastage	Made to measure components dramatically reduce wastage.
Transport	Materials transported efficiently, in bulk, 'just in time'.
Thermal Requirements	Meets and exceeds all current thermal and acoustic requirements.





**Frameclad provide a tailored service in conjunction with the project team to ensure that all of the necessary detail is provided to the installer, with focus on quality information at a reasonable cost.**

### Technical Review

At tender stage, we perform a technical appraisal of the scheme, this may include an indicative mark up, preliminary façade design and in load bearing options a detailed mark up identifying the load bearing elements we have incorporated within the review. These can then be incorporated as part of an installers tender submission.

### Design Content

A full set of SFS structural calculations, job specific sections and details are provided along with elevations and plans that show the SFS element within the building.

Co-ordinated with the project team (Architects, structural Engineers, Main Contractors and Other Trades) drawings are provided for approval, amended if required and then issued as a construction pack to the installer.

In order to provide the required SFS drawings a full set of architects and engineers sections, plans and elevations along with details will be required in dwg and pdf format.

From this the design process will take between 2-6 weeks to achieve construction status drawings in a phased approach dependant on the project size.

### BIM

Our design service is provided using software that is fully BIM compliant. We can then use the architects and engineers BIM models to ensure full compliance with the design intent. We are also able to provide a model during the comment and approval process.

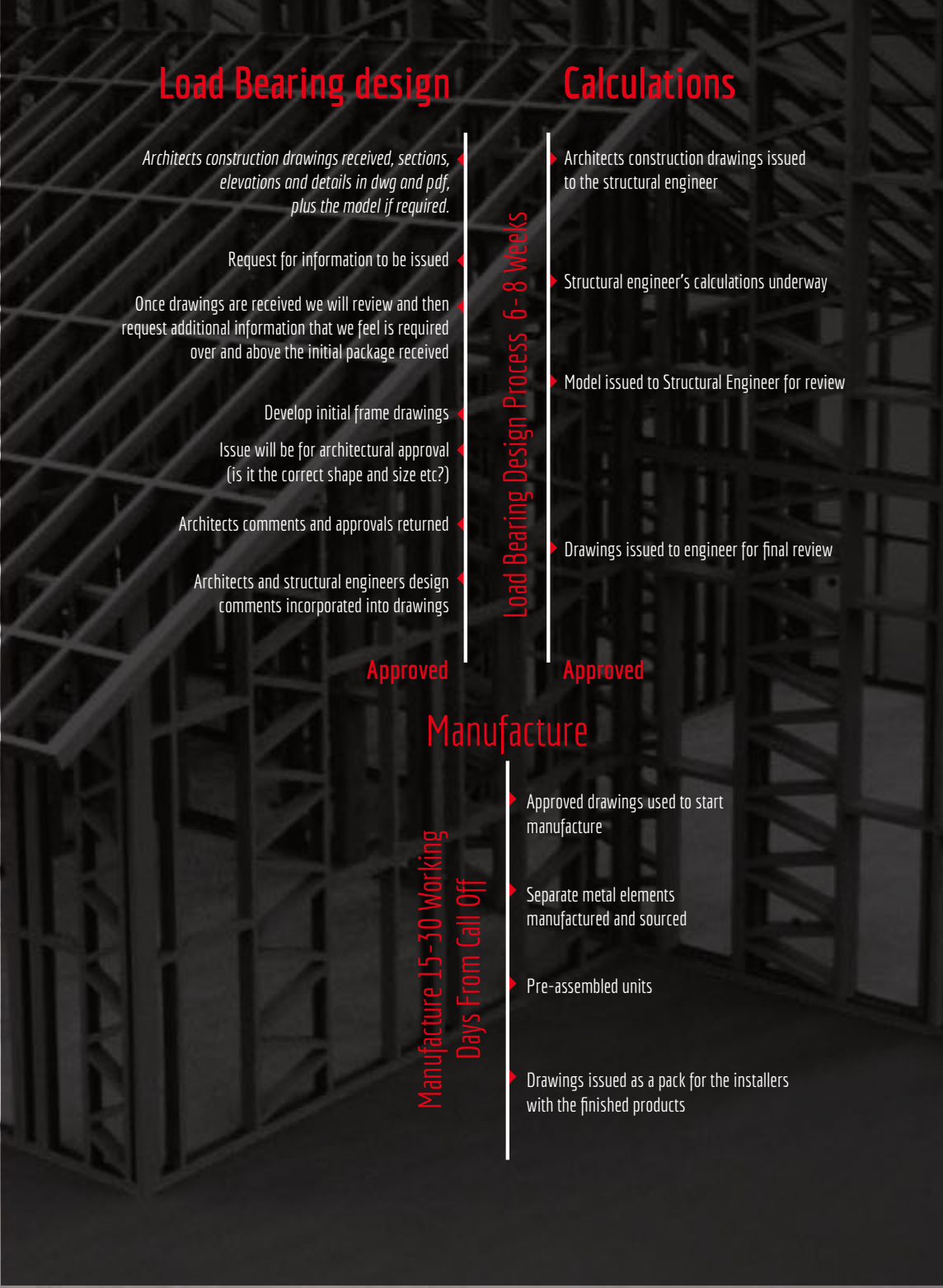
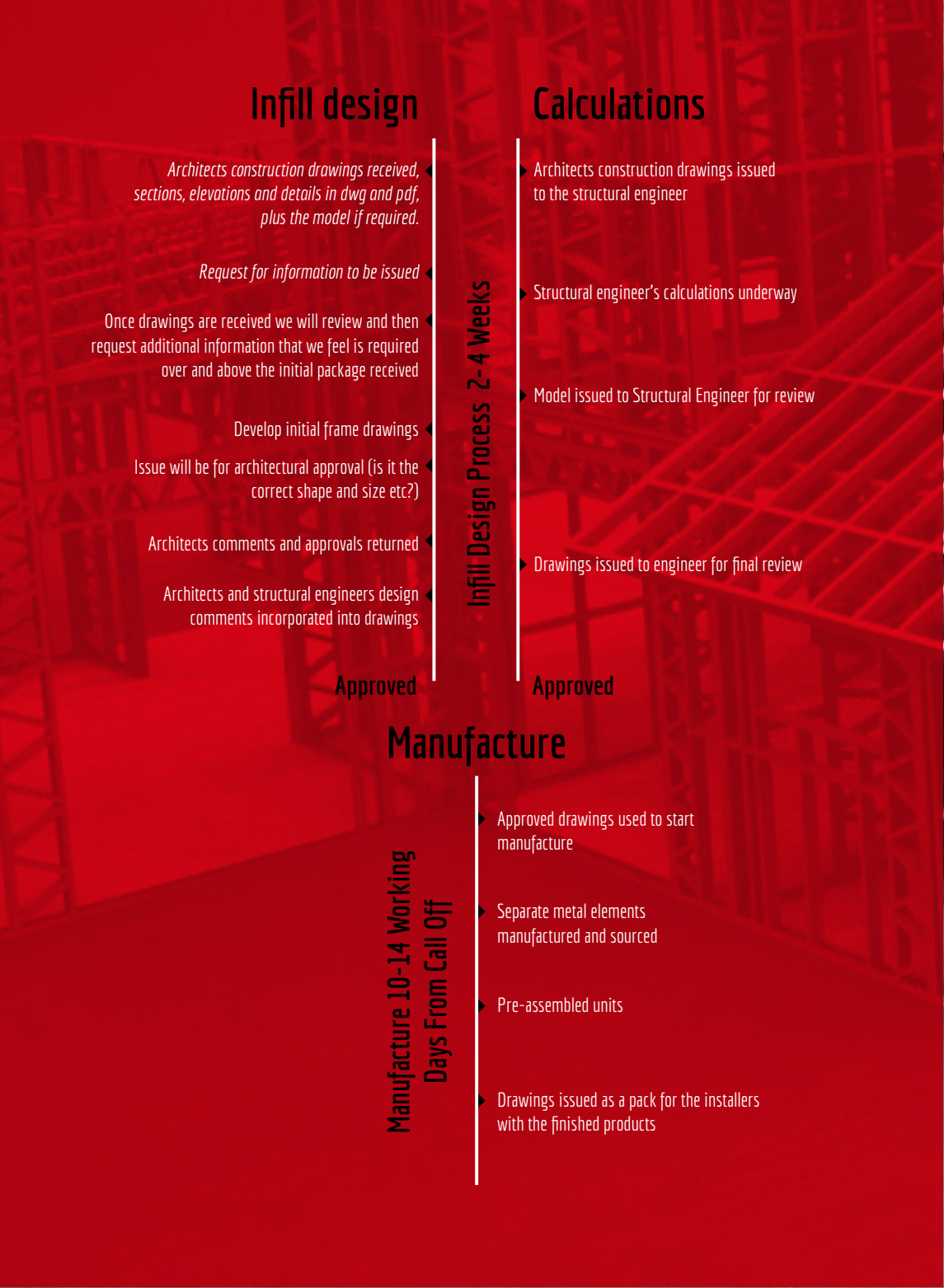
### Pre Start

Assistance is often required in pre-contract design meetings. Frameclad can complement the installers representation to advise on details and service provision.

### Samples

Section samples and small panels can be provided on request.







# Load Bearing Case Study

*Case of ...Steel over Timber*



# Load Bearing Case Study

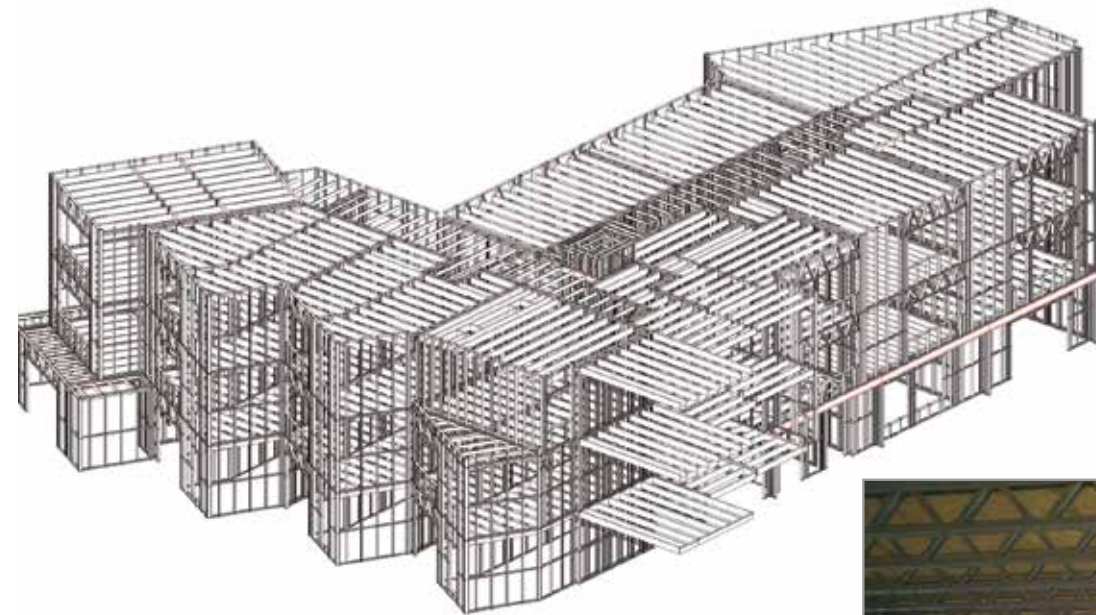
*Case of ...Steel over Timber*

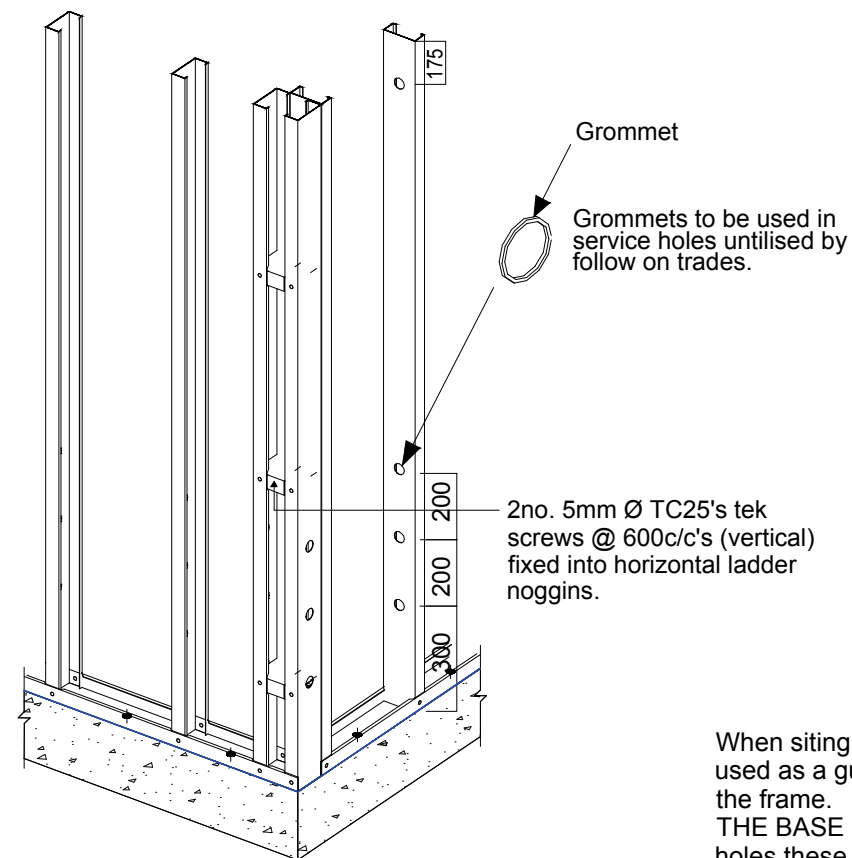
**Materials:** 75mm and 100mm Load Bearing SFS wall frames along with 250mm deep lattice joists to form floors and roof.

**Area:** 9500m<sup>2</sup>

A superior alternative to timber frame. The developer needed an alternative to timber frame to prevent costly delays and increased on site costs, light steel framing was the solution.

Lighter, quicker and more stable LSF delivered these apartments on time and to budget whilst exceeding the clients requirements.



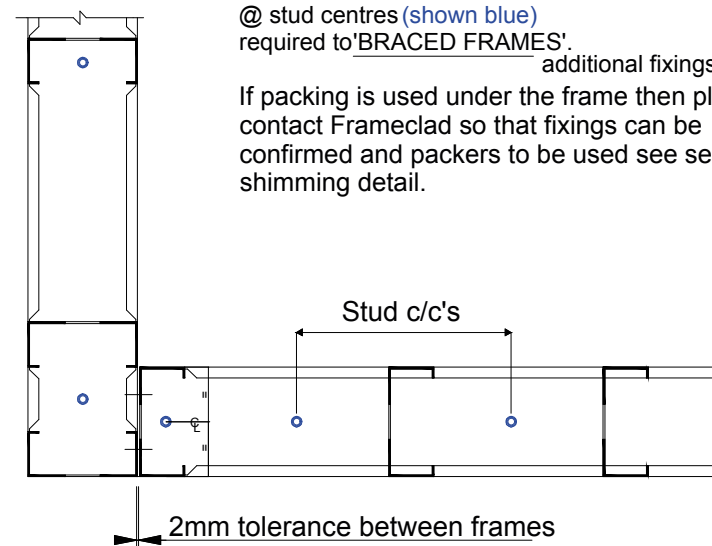


NOTE:  
DPC required under all ground floor LSF walls. Min width 100mm TBC by Architect actual width required.

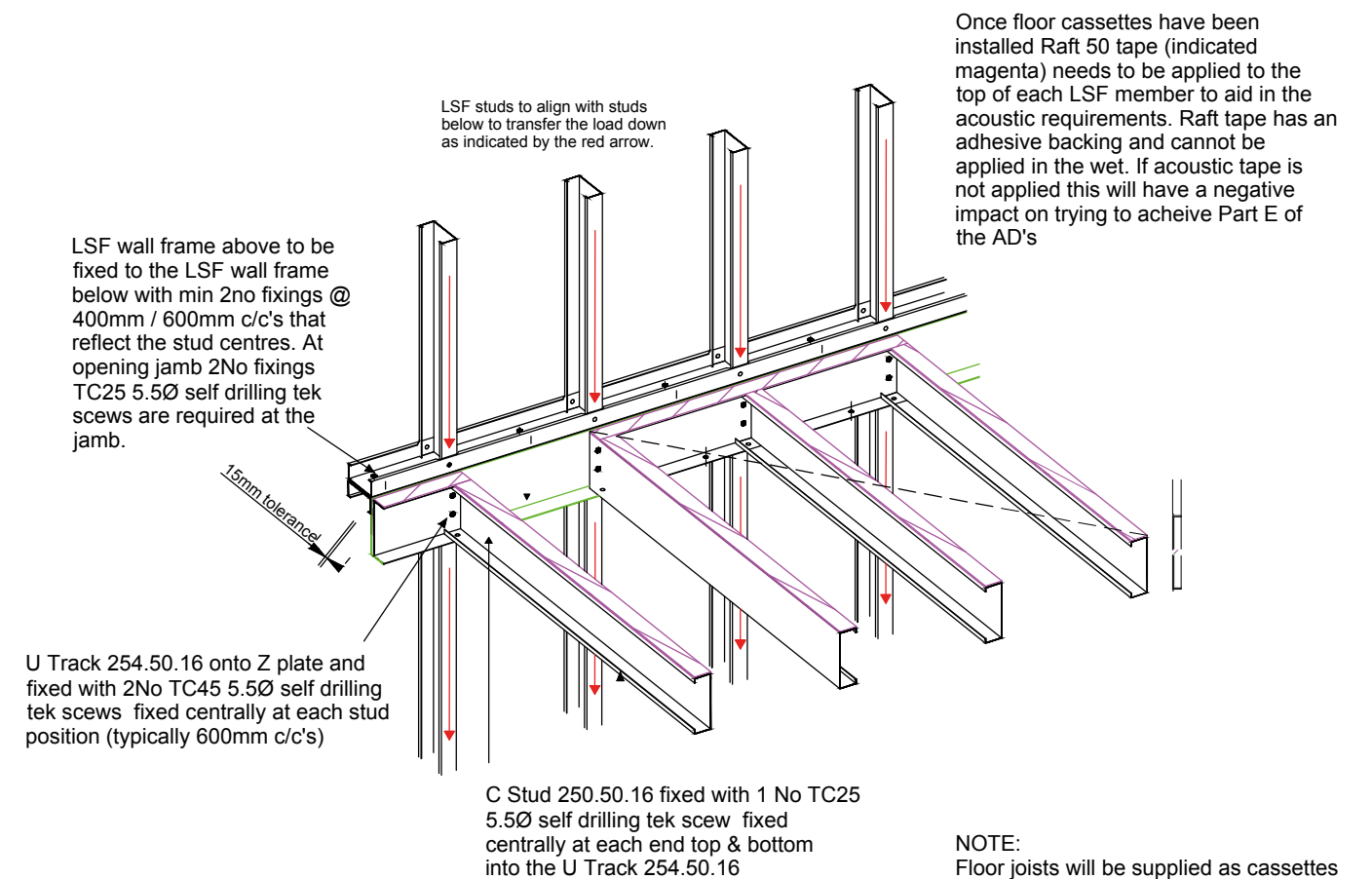
When siting frames the service holes are to be used as a guide to what is the head and base of the frame.  
THE BASE of the LSF panel there are 3No. service holes these are 300mm from the base of frame then 200mm apart.  
THE HEAD of the LSF panel there is 1No service hole that is 175mm from the top of frame one hole per stud.

The base of LSF to be fixed with 6mm Ø x 45 Tapcons @ stud centres (shown blue) required to 'BRACED FRAMES'.

additional fixings are  
If packing is used under the frame then please contact Frameclad so that fixings can be confirmed and packers to be used see separate shimming detail.



PLAN



NOTE:  
Floor joists will be supplied as cassettes and are designed to S.E requirements and are to be installed at 400mm c/c's as stated on following drawings  
LDC 003-00-P-01  
LDC 003-01-P-01  
LDC 003-02-P-01



# Infill Case Study

*Case of ...Infill to Primary Frame*



# Infill Case Study

*Case of ...Infill to Primary Frame*

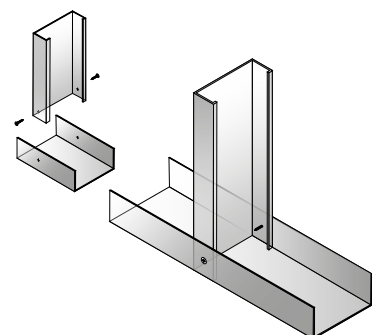
**Materials:** 150mm Infill SFS

**Area:** 5,000m<sup>2</sup>

## Notes:

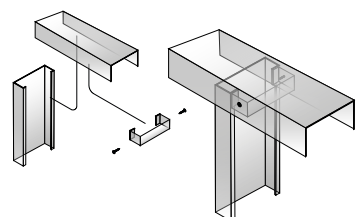
This uniquely shaped building designed by B&R Architects is on the site of the former Bellerby Theatre in Guildford. Main Contractor Bowmer & Kirkland were tasked with building a new Waitrose food store on the ground floor with 30 apartments and 18 affordable homes on the tapering floors above. Several of these enjoyed roof gardens which are sheltered by high parapet walls constructed from Framelad SFS.





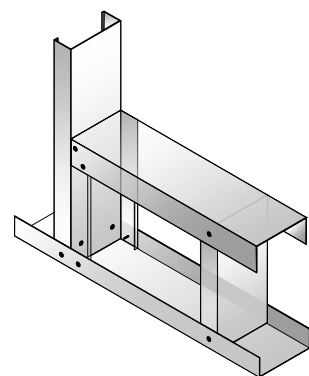
### Vertical Stud to base track connection

Vertical studs should be fixed to the base channel using low profile screws through both flanges fixings should be on center line of intersections.



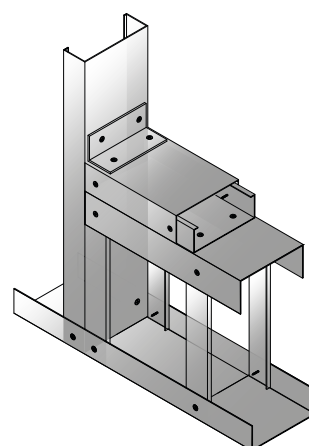
### Deflection Head - Deflection Bracket

The deflection head bracket clips to the flanges of the vertical stud. The clip is fixed in position through the head track using low profile fixings through both flanges. A minimum edge distance of 15mm must always be observed.



### Compound Detail - single Track Cill/Lintel

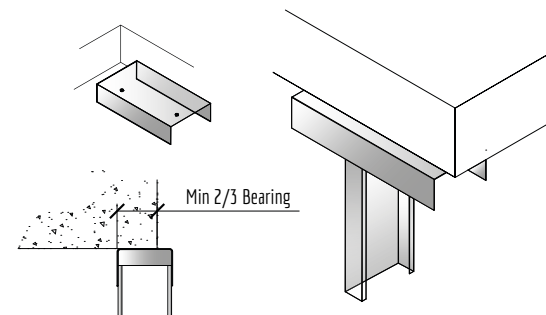
Stud fixed to jamb stud using a minimum 4 fixings through webs. Cill track connection made using fixings into both flanges of the track on the centre line of intersection.



### Compound Detail - 3 Piece Track Cill/Lintel

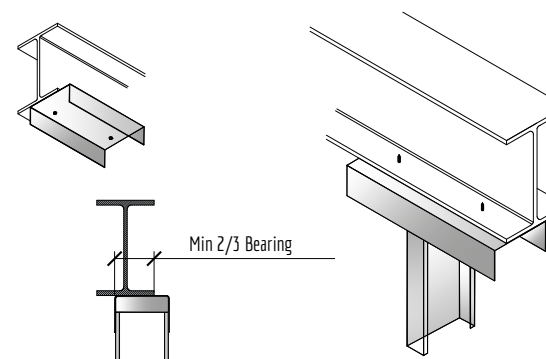
Stud fixed to jamb stud using a minimum 4 fixings through webs. Cill track connection made using fixings into both flanges of the track on the centre line on intersections. Reinforcement cleat by design.

Lintel sections shall be connected together typically by pairs of 5.5mm tek screws at 600mm centres or to the engineers specific site details.



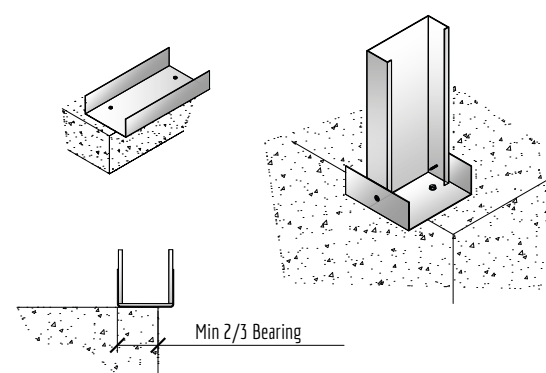
### Head Track to Structural Concrete - Infill

The head channel is positioned on the structure with a minimum of 2/3 bearing in all conditions. This is mechanically fixed at regular intervals as per the engineering specification.



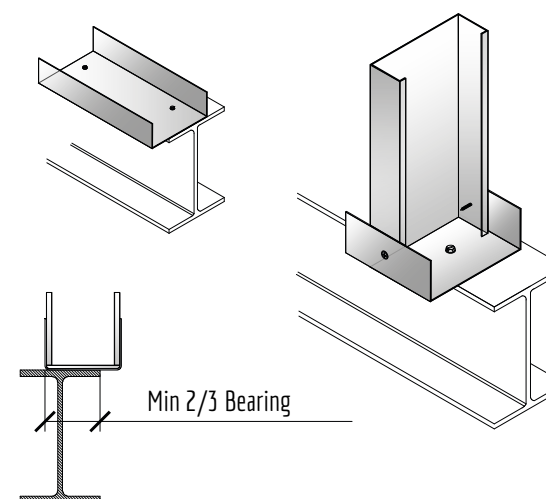
### Head Track to Structural Steelwork - Infill

The head channel is positioned on the structure with a minimum of 2/3 bearing in all conditions. This is mechanically fixed at regular intervals as per the engineering specification.



### Base Track To Structural Concrete - Infill

The head channel is positioned on the structure with a minimum of 2/3 bearing in all conditions. This is mechanically fixed at regular intervals as per the engineering specification.



### Base Track To Structural Steelwork - Infill

The head channel is positioned on the structure with a minimum of 2/3 bearing in all conditions. This is mechanically fixed at regular intervals as per the engineering specification.



# Top Box Case Study

*Case of ...Think on top of the box*



# Top Box Case Study

*Case of ...Think on top of the box*

**Materials:** 70mm, 150mm and 200mm sections

**Area:** 2,000m<sup>2</sup>

Located in a coastal location, this was a conversion of an existing 3 storey concrete frame building into 9 townhouses. Frameclad provided the SFS infill to form new external walls to the existing levels then added a selfsupporting top floor with SFS to give additional floor space to the scheme. Due to the restrictive nature of the site and the need to keep the new loadings of the upper floor to a minimum, SFS was the ideal solution for the developer.





UK Delivery Inc. Northern Ireland & Eire

- Delivered on Frameclad vehicles (flat bed where possible).
- Timed delivery slots can be requested but no exact delivery time can be guaranteed.

Additional costs are charged for:

- Waiting times.
- Self offloading facilities e.g. HIAB/Moffat.
- Deliveries outside of normal working hours.
- Multiple deliveries may incur additional costs.

Delivery Vehicle Load Weights				
Max. Bed length	6m	8m	9m	13.7m
Weight	3,400 kg	9,500 kg	15,000 kg	25,000 kg

