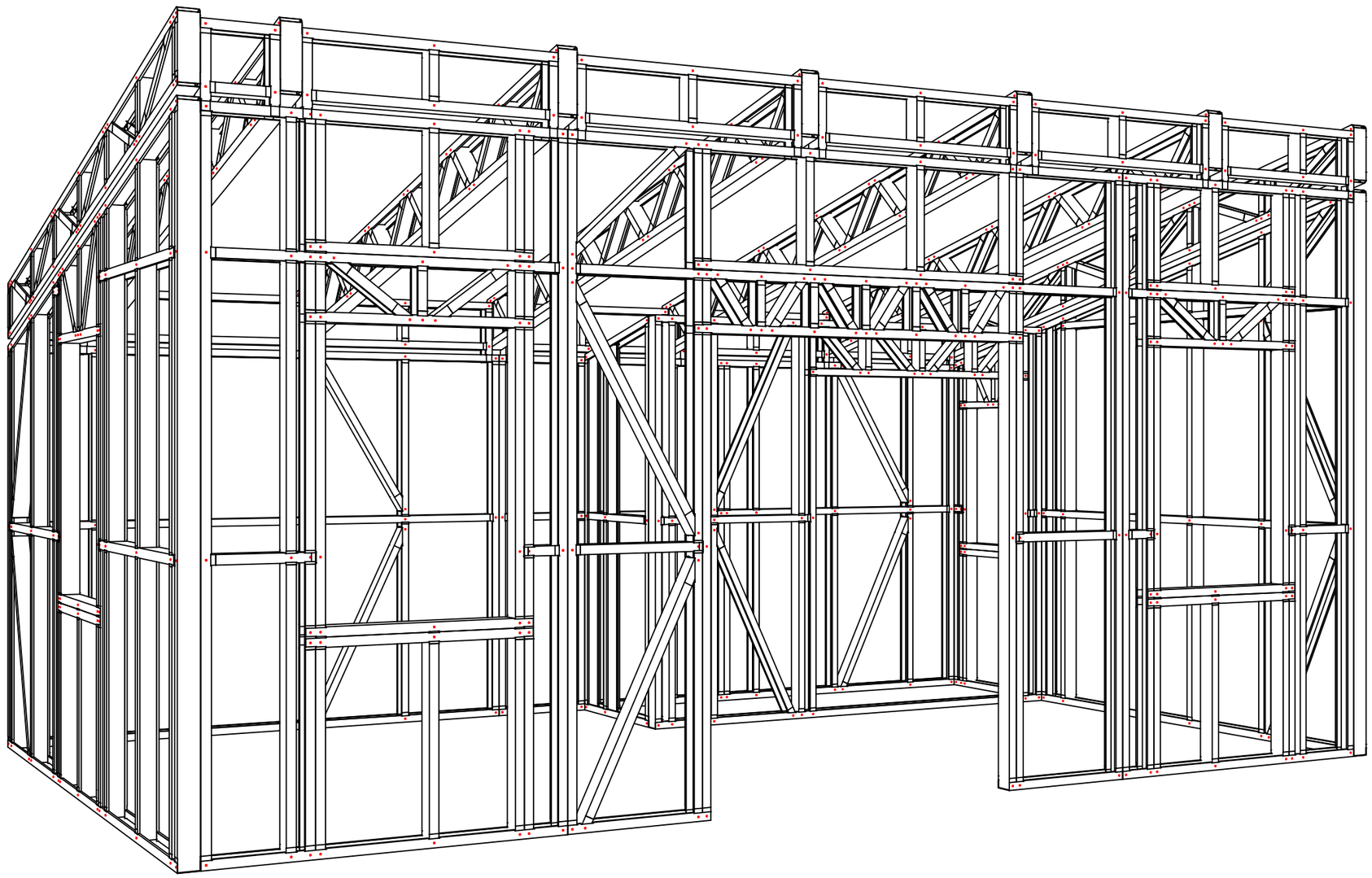


PROPOSED NEW DESIGN FOR
**TBC**

SITE ADDRESS
**TBC**

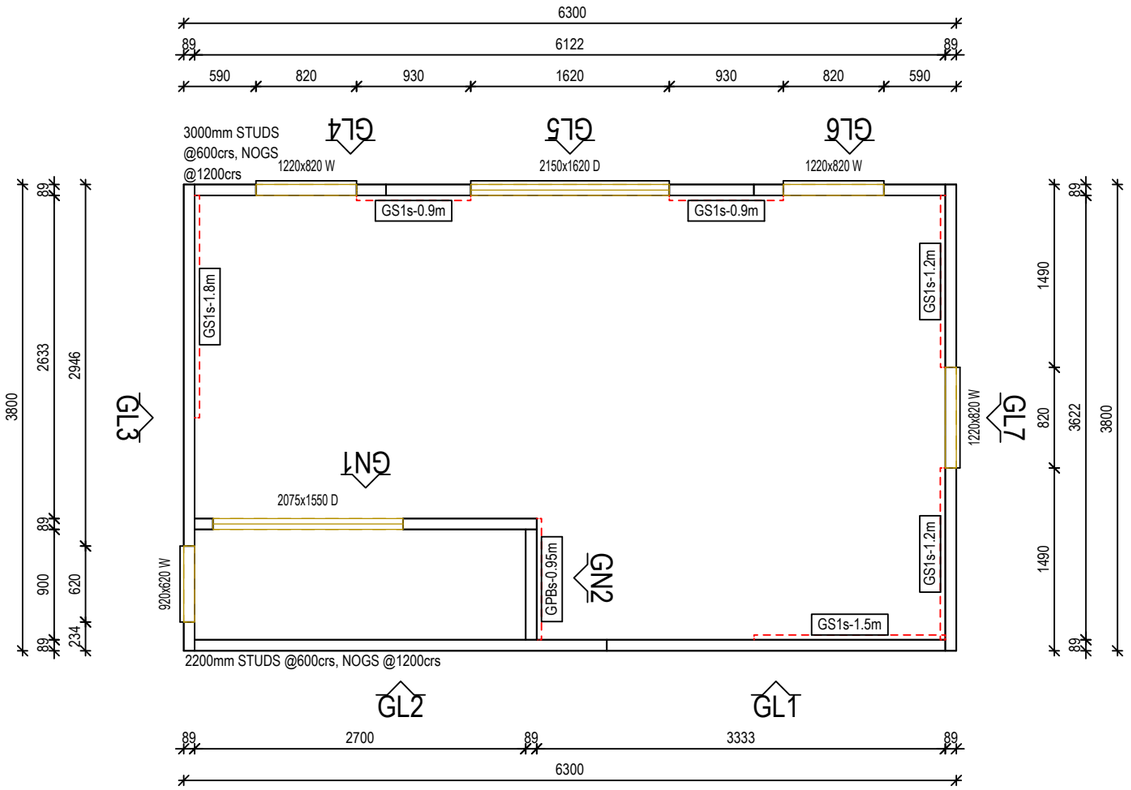
# STEEL FRAME CONSTRUCTION PLANS

| DESIGN PARAMETERS | | COVER SHEET | CONSTRUCTION DRAWING SET | REVISION |
|---|---|---|---|---|
| WIND ZONE | VH | | | |
| SNOW ZONE | <1.5kPa | | | |
| EARTHQUAKE ZONE | 3 | JOB NUMBER | ISSUE DATE | A |
| LOT # -- DP | -- | CO-3.8x6.3-A | 26.03.2024 | |

NOTES ON COLD FORMED STEEL FABRICATION AND ERECTION All cold formed steel structure design is to NZ standards or certified by suitably qualified persons prior to construction. Refer to architectural drawings for dimensions, foundations and any structural steel not shown on framing drawings. FRAMING All framing members to be type SC/PC as classified by 'NASH Standard Part Two: May 2019', Tables E1 & E2, UNO. Framing components are to be pre-assembled into panels prior to erecting and will be square with components attached in a manner to avoid raking. Design, fabrication and erection shall comply with NASH SP2:2019. All screws to be 10g tek screws UNO. Splices in studs of load bearing walls are not permitted. Members shall be held positively in place until properly fastened. ERECTION Erect framing and panels level and square in strict accordance with the approved shop drawings. Handling and lifting of prefabricated panels shall be done in a manner as to not cause distortion in a member. Concrete anchors shall be installed after full concrete compressive strength has been achieved. Do not cut load bearing studs, lintels or trusses to install services in excess of a 35mm diameter hole at the centre of a member, unless studs have been reinforced to maintain structural integrity as per details provided. Ensure continuous DPC between any Concrete, Copper, Brass, CCA treated timber and galvanised steel. Builder to check all trim sizes, braces and cladding fixings on site before enclosing. FIXINGS Screw fixings shall be a minimum of 1.5x the diameter of the screw shank from the closest end and edge of the members being connected except for battens that shall be a minimum of 3x the diameter of the screw shank from the closest end of the batten being connected. Minimum spacing crs between screw fixings shall be 3x the diameter of the screw shank. Screw fixings into timber shall be a minimum of 4x the diameter of the screw shank from any edges and ends of the timber member. Screws shall have a minimum of 3 threads penetration through the connection. Please note Steel Frame Manufacturing Ltd only supplies frame to frame connections unless otherwise agreed.

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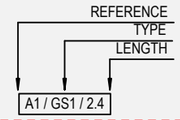

WALL FRAME NOTES

1. LOAD BEARING AND NON-LOAD BEARING WALLS INDICATED BY LABELS L AND N RESPECTIVELY

2. WALL DESIGN IN ACCORDANCE WITH NASH STANDARD PART TWO: MAY 2019 UNLESS NOTED OTHERWISE
   - Jamb studs in accordance with table 7.15
     All external openings to have minimum 2 jambs to each side UNO
   - Lintels in accordance with table 11.9 and 11.11
     All loadbearing lintels to be minimum 180mm Type A2 UNO
   - Stud spacing and stud to plate connections in accordance with tables 7.4 and 7.5

3. TOP PLATE PACKERS NOT REQUIRED OVER NON LOADBEARING WALLS

4. WALL BRACING ELEMENTS READ AS




INSTALL AS PER GIB EZYBRACE FOR LIGHT STEEL FRAME SYSTEMS MARCH 2017
PRODUCT SUPPLY BY OTHERS

READING THE WALL FRAME LAYOUT PLAN

WALL PANEL ORENTATION:
Each wall panel will have the frame code printed on one side of the frame and the Steel Frame Manufacturing Limited website printed on the other. The side with the frame code is the side that the label points to on the plan.
All external walls should have the frame code facing out.

STEELFRAMEMAN.CO.NZ

FRAME CODE

GL1

PROPOSED NEW DESIGN FOR
**TBC**

SITE ADDRESS
**TBC**

| DESIGN PARAMETERS | |
|---|---|
| WIND ZONE | VH |
| SNOW ZONE | <1.5kPa |
| EARTHQUAKE ZONE | 3 |
| LOT # | -- |
| DP | -- |

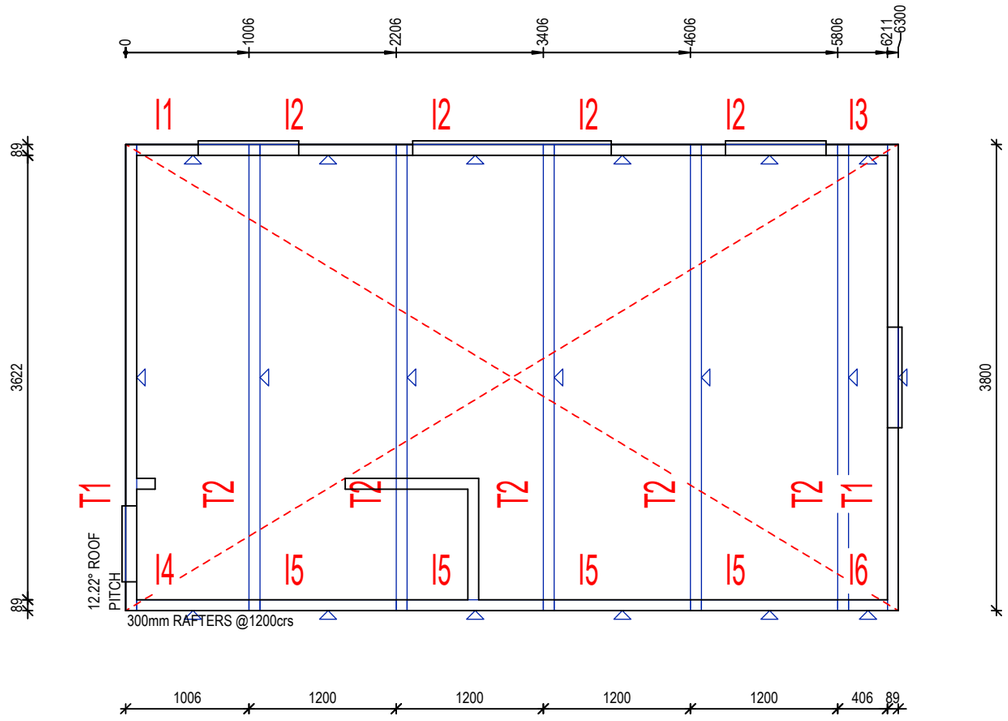
STEEL FRAME CONSTRUCTION PLANS

# WALL FRAME LAYOUT

| CONSTRUCTION | C01 | REVISION |
|---|---|---|
| JOB NUMBER CO-3.8x6.3-A | ISSUE DATE 26.03.2024 | A |
| info@steelframeman.co.nz | DETAILER: CT | |

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NOTES

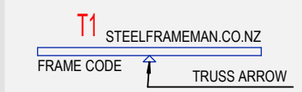
1. RAFTER DESIGN IN ACCORDANCE WITH NASH STANDARD PART TWO: MAY 2019 UNLESS NOTED OTHERWISE
   - Rafters in accordance with table 11.3

2. TOP HAT PURLINS 40mm 0.75 @900crs MAX TO TOP CHORD OF RAFTERS
   TOP HAT BATTENS 30mm 0.55 @600crs MAX TO BOTTOM CHORD OF RAFTERS

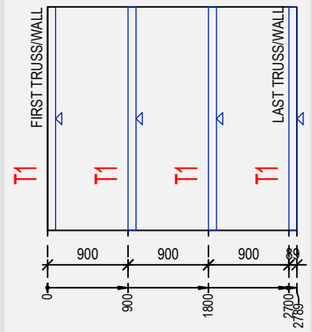
3. RED DASHED LINE INDICATES ROOF STRAP BRACING TO BE INSTALLED AS PER NASH:
   Each roof brace shall consist of the following:
   A diagonally opposing pair of continuous steel straps each having a capacity of 4.0kN in tension, fixed to each top chord or rafter that is intersected and the top plate. The angle shall be between 30 and 60 degrees to the truss top chord or rafter and shall not sag more than 1/500 of the distance between supports. Where tension devices are used to remove excessive sag, care shall be taken not to over-tension the braces. At the bottom end the strap shall be carried over the top plate, down a stud by 100 mm, and fixed with a minimum of 4 x 10g screws.
   SUPPLY BY OTHERS

READING THE JOIST FRAME LAYOUT PLAN

TRUSS / RAFTER ORENTATION:
Each truss/ rafter will have the frame code printed on one side of the frame and the Steel Frame Manufacturing Limited website printed on the other. The side with the truss arrow pointing to it will be the side with the truss code.




TRUSS / RAFTER DIMENSIONS
Each truss / rafter will have a dimension and each dimension will to the same side of the truss. Refer to detail below




PROPOSED NEW DESIGN FOR
**TBC**

SITE ADDRESS
**TBC**

DESIGN PARAMETERS

| | |
|---|---|
| WIND ZONE | VH |
| SNOW ZONE | <1.5kPa |
| EARTHQUAKE ZONE | 3 |
| LOT # | -- |
| DP | -- |

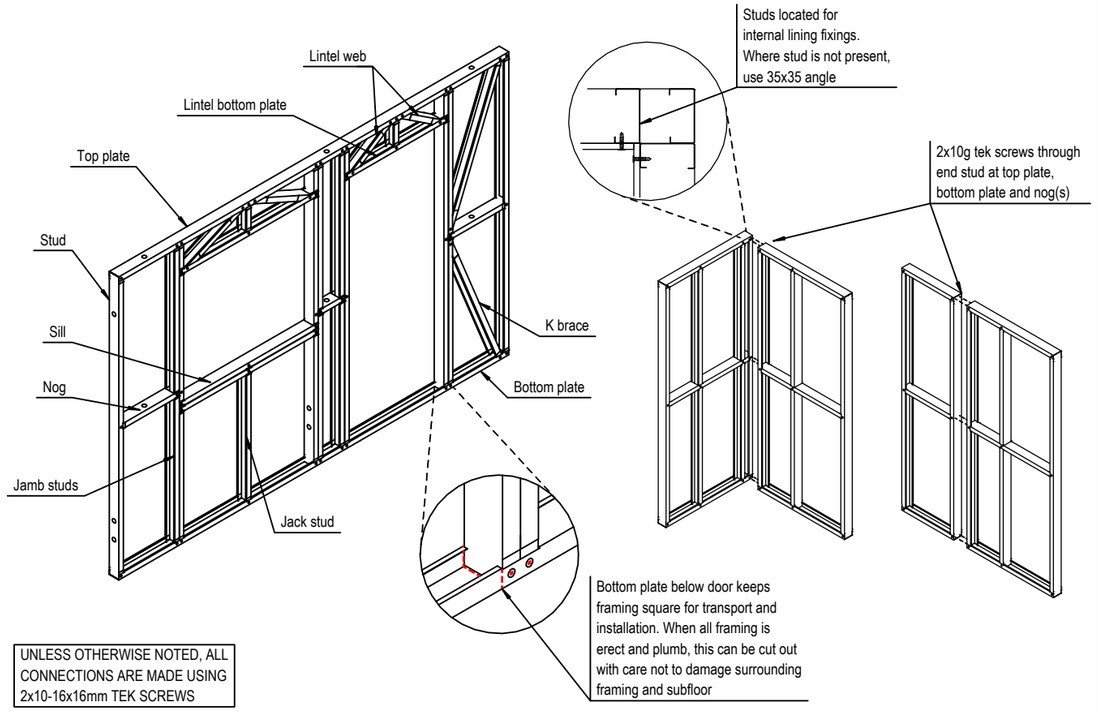
STEEL FRAME CONSTRUCTION PLANS

# ROOF FRAME LAYOUT

| CONSTRUCTION | C02 | REVISION |
|---|---|---|
| JOB NUMBER CO-3.8x6.3-A | ISSUE DATE 26.03.2024 | A |
| info@steelframeman.co.nz | DETAILER: CT | |

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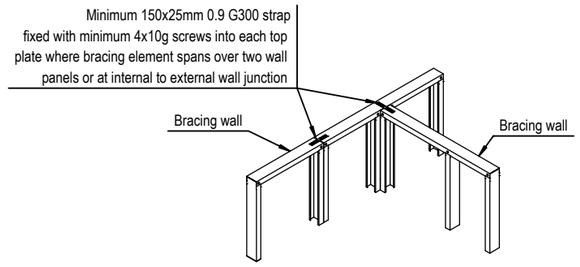

UNLESS OTHERWISE NOTED, ALL CONNECTIONS ARE MADE USING 2x10-16x16mm TEK SCREWS

WALL FRAME TERMINOLOGY

WALL PANEL CONNECTIONS

## BRACING WALL TOP PLATE CONNECTIONS

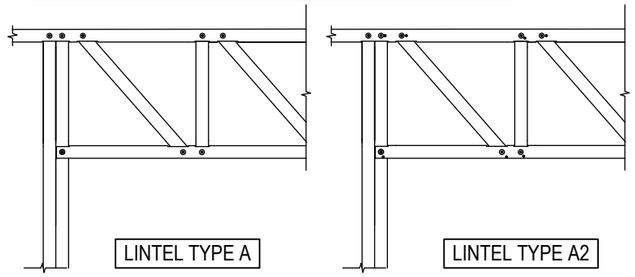
BRACING WALL TOP PLATE STRAP CONNECTION
4x10g tek screws to each top plate to be used where:
-Internal walls with less than 125BUs connect to ONE external wall




TOP PLATE STRAP

## LINTEL TYPES

All lintels as per NASH Standard Part Two: May 2019 - Light steel framed Buildings
TYPE A
- For use in non-loadbearing walls
TYPE A2
- For use in all loadbearing walls unless noted otherwise
- Extra 10g tek screw required to each connection to the first two webs



LINTEL TYPE A

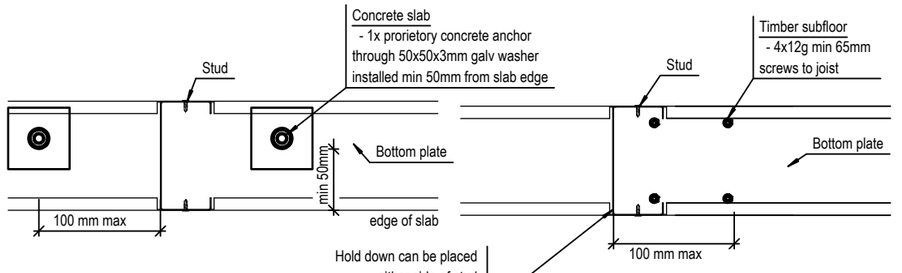
LINTEL TYPE A2

**CONNECTION NOTES NASH Part 2 2019**

All hold downs max 1200 crs (inclusive of bracing hold downs)
Bracing hold downs - refer to bracing specification
DURABILITY
SCREWS
Screws shall conform to AS 3566.2 with a minimum of class 3.
BRACKETS
Brackets shall be either hot-dipped galvanized complying to AS/NZS4680 Table 1 or mechanically galvanized to AS 1397.

GROUND FLOOR (SLAB / TIMBER SUBFLOOR OPTIONS)

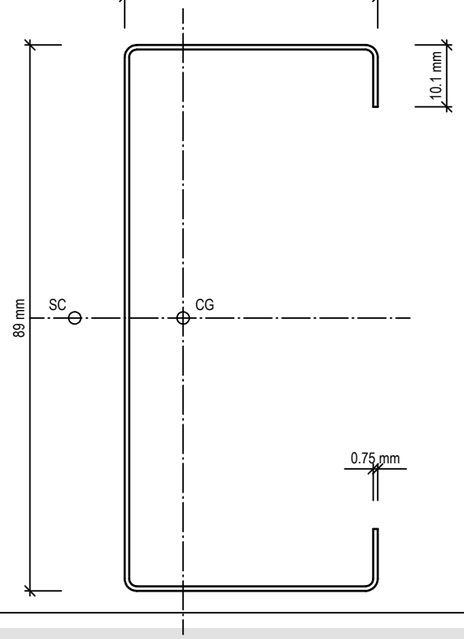
Hold down NASH TYPE D - 6kN external walls 4kN internal walls
- each side of every opening
- at the start and end of wall panels
- elsewhere not exceeding 1200mm crs



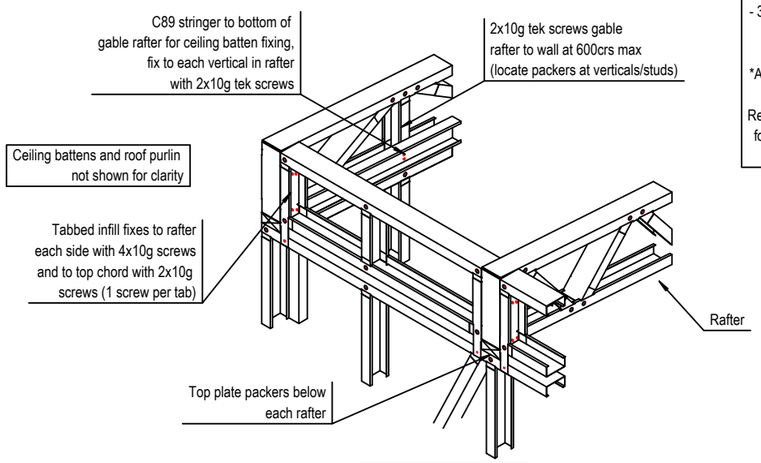

HOLD DOWN TYPE D - slab

HOLD DOWN TYPE D - timber

## C89x41.3mm 0.75BMT LIPPED CEE SECTION PROPERTIES



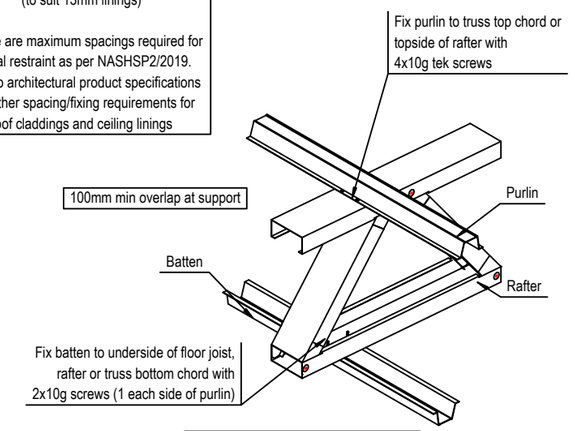

| Name | | | S8975 |
|---|---|---|---|
| Grade | | | G550 |
| Coating | | | Z250 |
| Feed | | mm | 182.0 |
| Area | | mm2 | 136.5 |
| Mass | | kg | 1.072 |
| Yield Stress | fy | Mpa | 550 |
| Tensile Strength | fu | Mpa | 550 |
| Second Moment of Area | Ix | mm4 | 174103 |
| Second Moment of Area | Iy | mm4 | 29996 |
| Radius of Gyration | rx | mm | 35.7 |
| Radius of Gyration | ry | mm | 14.8 |
| Centroid Position | x | mm | 12.6 |
| Centroid Position | y | mm | 44.0 |
| Shear Centre | xo | mm | 33.2 |
| Shear Centre | yo | mm | 0 |
| Polar Radius of Gyration | ro1 | mm | 43.6 |
| Tortion Constant | J | mm4 | 25.6 |
| Warping Constant | Iw | mm6 | 48912422 |
| Sectional Modulus | Zxt | mm3 | 3957 |
| Sectional Modulus | Zxb | mm3 | 3869 |
| Sectional Modulus | Zyt | mm3 | 2381 |
| Sectional Modulus | Zyb | mm3 | 1056 |




RAFTER TO WALL

Tophat Section for use as
- 40mm 0.55 roof purlin @ 900 crs max*
- 35mm 0.55 ceiling batten @ 600 crs max*
(to suit 13mm linings)

*Above are maximum spacings required for lateral restraint as per NASHSP2/2019. Refer to architectural product specifications for further spacing/fixing requirements for roof claddings and ceiling linings




PURLIN & BATTEN FIXING

PROPOSED NEW DESIGN FOR
**TBC**

SITE ADDRESS
**TBC**

DESIGN PARAMETERS

| | |
|---|---|
| WIND ZONE | VH |
| SNOW ZONE | <1.5kPa |
| EARTHQUAKE ZONE | 3 |
| LOT # | -- |
| DP | -- |

STEEL FRAME CONSTRUCTION PLANS

# DETAILS - WALLS

| CONSTRUCTION | C03 | REVISION |
|---|---|---|
| JOB NUMBER CO-3.8x6.3-A | ISSUE DATE 26.03.2024 | A |
| info@steelframeman.co.nz | DETAILER: CT | |

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