

DRAINAGE NOT AFFECTED

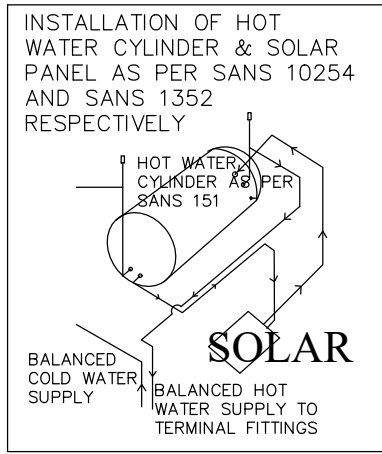


TABLE 5 –HOT WATER DEMAND	
TYPE OF ACCOMMODATION:	= LOW RENTAL 80-115L Capital/day
ASSUMED HOT WATER CONSUMPTION:	= 80L
NUMBER OF PEOPLE:	= 4
ASSUMED DAILY HOT WATER:	= 320L
ASSUMED ANNUAL DAILY HOT WATER:	= 16 800KL
SIZE OF ANNUAL HOT WATER:	= 58 400KL
DAILY WATER CONSUMPTION:	= 160L

HOT WATER SERVICES

A minimum of 50 % by volume of the annual average hot water heating requirement shall be provided by means other than electrical resistance heating, including, but not limited to solar heating, heat pumps, heat recovery from other systems or processes.

Hot water usage shall be minimised and the system maintained in accordance with the requirements as per SANS 10252-1.

–Insulation to be protected against the effects of weather and sunlight.

–Be able to withstand the temperatures within the piping & achieve the min R-Value as specified above.

Hot water vessels and tanks tip be insulated with a material achieving min.R-value of 2. Insulation of vessels, tanks and piping containing cooling water to be protected by a vapour barrier on the outside of the insulation.

Piping insulation requirements do not comply to space heating water piping if

- Located within the space being heated where the piping is to provide heating to that space.
- Encased within the floor slab or masonry.
- These pipes to comply with SANS 10252-1

ROOF-R-VALUE 5.07

Cellulose fibre loose fill 135mm. Thick bulk insulation to be installed Roof assembly to have on R – Value of 3.7m, k/W direction of flow up.

THERMAL INSULATION

Insulation to comply with the min.required R-values & be installed so that: –it abuts or overlaps adjoining insulation or is sealed. –it forms a continuous barrier with ceiling walls,bulkheads or floors that contribute to the thermal barrier.

Roof truss bracing 114 x 38mm diagonal end bracing 45° nailed to underside of rafters @ each end of the roof & in both planes

Roof anchoring: Heavy roofs to be tied down with two strands of 4mm galvanised steel wire embedded 300mm into the wall

Roof anchoring: Light roofs to be tied down with 30mm x 1.6mm galvanised steel strap embedded 600mm into the wall

Gable end walls to be tied back to roof structure with galvanized hoop iron straps 3x30mm @ 320 c/c embedded 300mm in wall bent over and fixed to two rafters

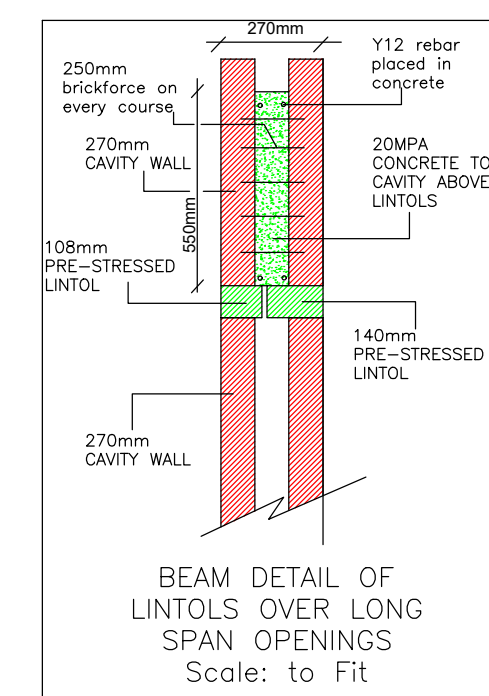
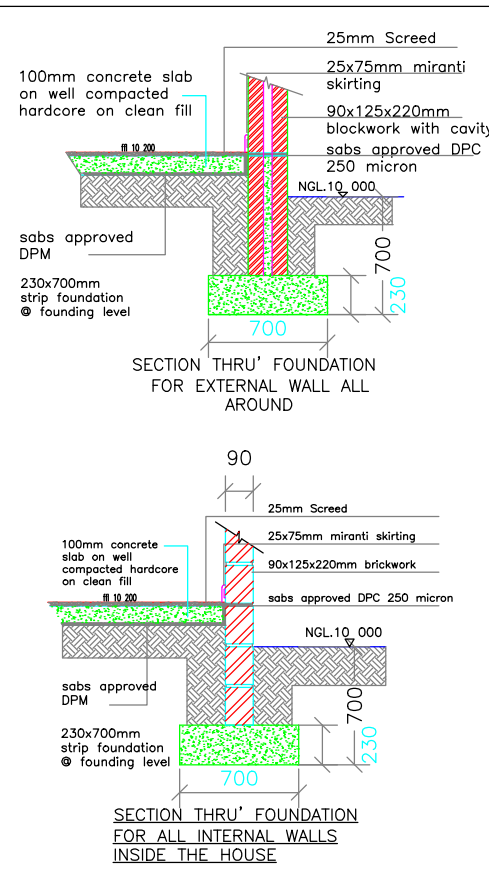
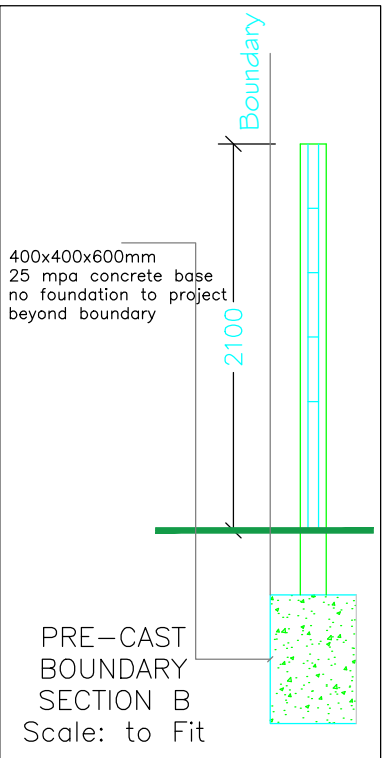
Roof truss bracing: 114x38 diagonal bracing 45° nailed to underside of roof trusses at each end of the roof & in both planes

*NB: R.C. Lintels over all openings (max. 3m opening)with 4 courses of brick work with brickforce above the Lintel. Stresso Lintels with 6 courses brick work. Timbers built into walls to be adequately protected.

*NB: Internal 90mm walls to be built on 700 x 230mm CONCRETE FOOTINGS TIED INTO EXTERNAL WALL FOOTINGS. 250 micron DPM under floor slab. Access doors to be fitted with safety glass. Gable walls to be adequately laterally supported. Parapet wall not to exceed 500mm height

Glazing: All the panels in doors larger than 1 square meter or less than 300mm above FFL to be glazed in safety glass having a nominal thickness of not less 6mm. All other glazing to comply with Part N of the NBR:

Pitch = 22.5°
Rafters: 114x38 grade 5 & 7 timber
Tie-beams: 150x38 grade 5 & 7 timber
Webs: 114x38 grade 5 & 7 timber
Heel & splice joint connections: 3x16mm bolts
All other joint connections: 1x10mm bolt + 4 (90mmx4mm) –clinchd nails.
Prefab: type trusses @ 760/c/c tied down on 114x38 wallplate.
IBR ROOF SHEETS on 38x50 purlins @ 760 c/c with approved plastic underlay.



ENERGY EFFICIENCY

CONDUCTANCE

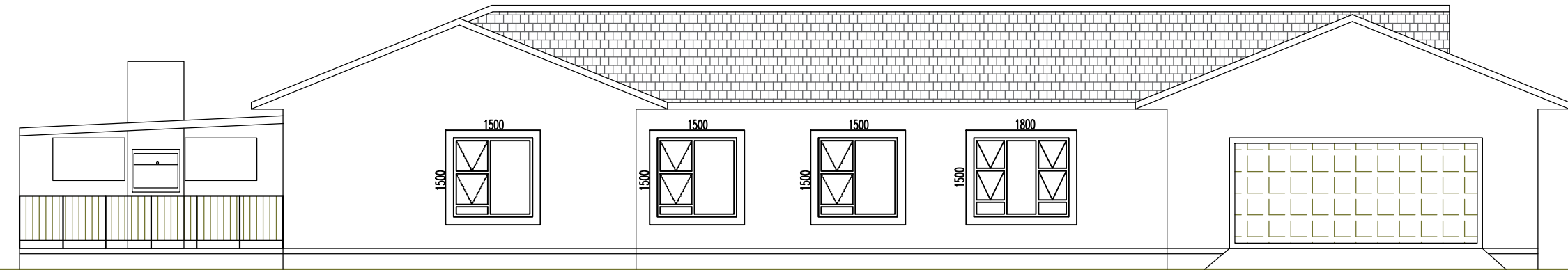
NET FLOOR AREA = 331sqm
AT x CU
331x2 = 1.4 = 463 w/s
46.9 w/s > 32.2sqm

SOLAR HEAT GAIN

AT x CSHGC
41 x 0.13 = 4.68
= 0.2

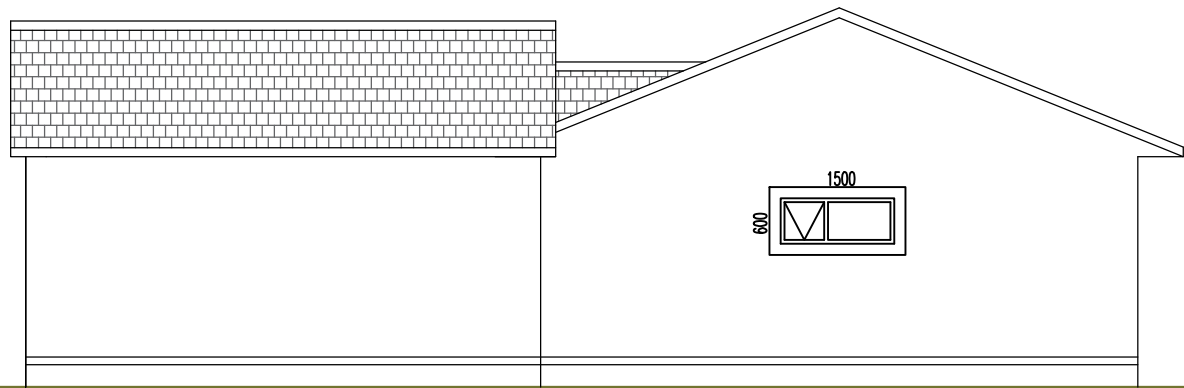
FENESTRATION

WINDOW AREA X 100
NET FLOOR AREA X 100
39.96m2 X 100
= 12.07 %



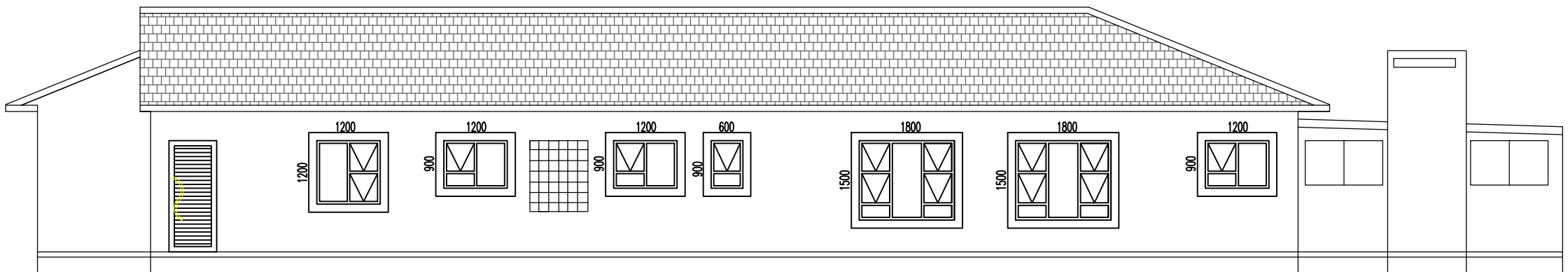
NORTH ELEVATION

scale 1:100



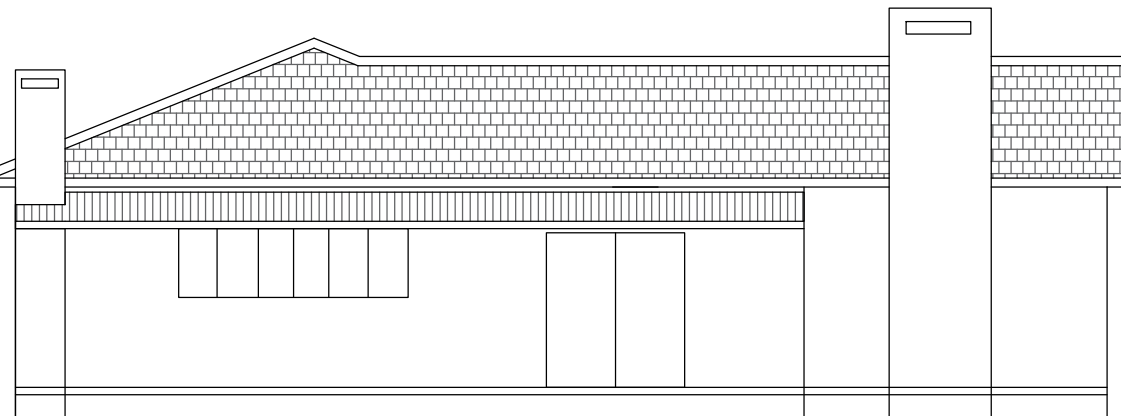
WEST ELEVATION

scale 1:100



SOUTH ELEVATION

scale 1:100



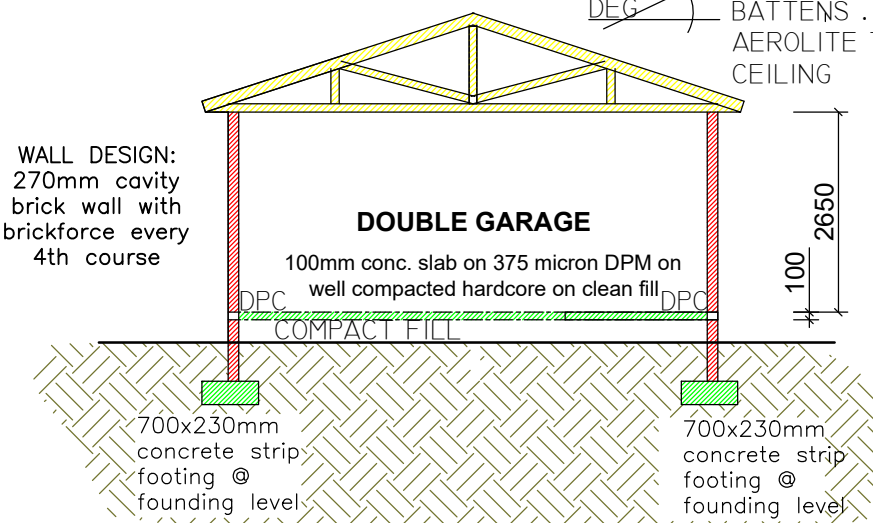
EAST ELEVATION

scale 1:100

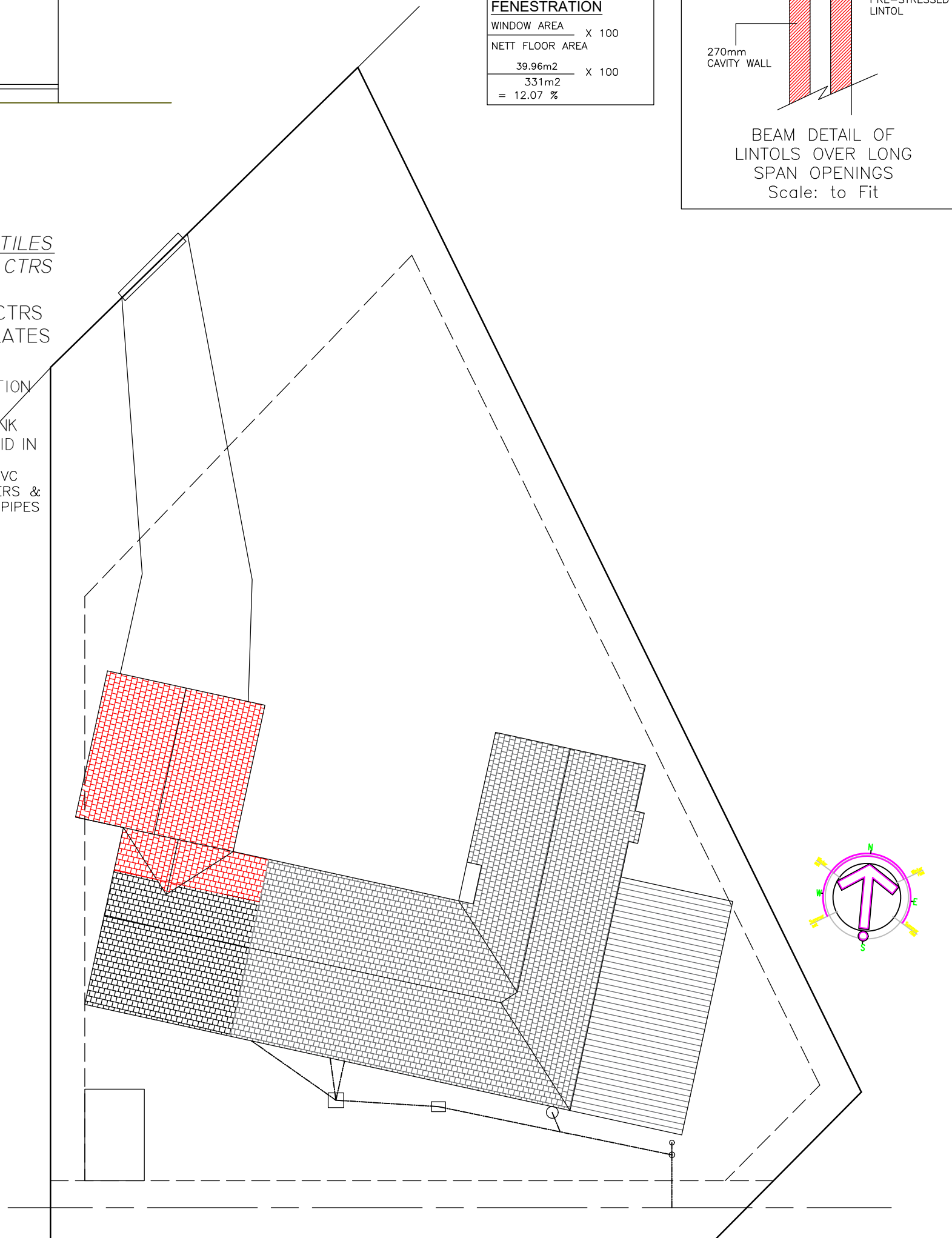
ALL TIMBER USED IN THE ERECTION OF BUILDING BE TREATED AGAINST TERMITE AND WOOD BORER ATTACK & FUNGAL DECAY IN ACCORDANCE WITH SANS 10005

CHARCOAL CONCRETE ROOF TILES ON 38 X38 BATTENS AT 320 CTRS ON SISILATION ON ENGINEER DESIGNED TRUSSES AT 760 CTRS SECURED TO 114X38 WALL PLATES ROOF PITCH 22 DEG

250 LTR GEYSER POSITIONED ABOVE PASSAGE WALLS FOR SUPPORT –NOT AFFECTING TRUSSES



CROSS SECTION A - A SCALE 1:100



SPECIFICATIONS

Foundations:
270 external walls with cavity to be built on strip foundations 700mm wide by 230mm deep. 90mm internal walls plastered & paint.

Floors:

Floors to be min. 100mm surface bed on 250 micron DPM, sealed to the damp proof course, on min. 150mm compacted fill. .

Lintels:

APS prestressed lintels to be built in over all openings in brickwork with min. 4 courses brick over.

Doors:

Externall to be solid timber & Internal to be hallow core

Wall:

Wall Finishes / Paintwork:
Plaster
& Painted internally
External to owners specs

Glazing:

All other glazing to comply with Part N of the NBR.

Roof construction:

As indicated on Section

Rainwater disposal:

. PVA downpipes discharging to s.w. channels as indicated on the Achitctural Drawings

Drainage:

As indicated on plan. discharging into existing connection on site.

TITLE BLOCK

Mr K BUCHNER

ERF 567

39 HAYDEN AVE

FRAMSBY

CEL:0736313891

SIGN: _____

ERF 567

SITE AREA	1245M2
EXISTING AREA	273M2
PROPOSED NEW	58M2

TOTAL AREA 331M2

COVERAGE

EXISTING	21%
PROPOSED	4%
TOTAL NEW	25%

DRAWN BY: _____

N TROLLIP D3127

Design-a-PLAN

revision 1 date 11/06/2019 drawn by N.T.

This scheme is subject to town planning and all other necessary consents. Dimensions, areas and levels where given are only approximate and subject to site survey. All dimensions are to be checked on site. Any discrepancies are to be reported to the architect before the work commences. Figured dimensions only are to be taken from this drawing.