

Name of Owner. ED & E.I. Deane

Name of Builder Partic Homes

Address 5 Welling St

Address. Box 20203

Glenn Eden

Auckland

Plumber & Drainlayer.

BUILDING DESCRIPTION

New Residence

		Date	permit No.	Completion or issue date.
Building permit application	Received	<u>26-7-80</u>	<u>1016130</u>	<u>2-12-80</u>
Fees paid	yes-no-n/a.	<u>No fees paid until 27-11-80</u>		
Plumbing and Drainage Applic.	Received			
Fees paid	yes-no-n/a			
Site inspection	yes/no	Approved	any comments below	
Town Planning	yes/no	Approved		
Health	yes/no	Approved		
Council	yes/no fees	Approved		
Engineers check	yes/no	Approved		

Note any conditions on permit.

Inspections	Initials	Date	Comments.
Foundations	<u>DER</u>	<u>19-1-81</u>	<u>Plat drawn to 3-9m as per letter 4-2-80</u>
or Bond			
oor			
ning	<u>DER</u>	<u>19-2</u>	
ulation	<u>DER</u>	<u>16-4</u>	<u>underfloor ventilation not 150mm gap - some gaps 20mm. Letter to owner to close again 2/8/81. Letter to be called. Building Inspector also good.</u>
Plumbing			<u>Letter to be called. Building Inspector also good.</u>
Drains	<u>W</u>	<u>18-5</u>	<u>Letter to be called. Building Inspector also good.</u>
Finished Job	<u>DER</u>	<u>20-7</u>	<u>On 20-7-81. Owner's request. Letter to be called. Building Inspector also good.</u>
Filed	<u>DER</u>	<u>31-7</u>	<u>13pm - last of the inspection of above letter mentioned. 4:00pm - work completed on above. Letter to be called</u>

FORM 1

Regulation 10 (b) Drainage and Plumbing Act 1908

TE AROHA BOROUGH COUNCIL

Application For Drainage Plumbing Permit

Fee £20.00
Ref. No. 301
Planning Permit No.
Drainage Permit No.
Date Issued

To The TE AROHA BOROUGH COUNCIL

I, the undersigned, hereby make application for permit to have the work described herein and set out in the plan on the back hereof, carried out in or on the premises owned by

MR. & MRS. E. DEER, of TE AROHA (PROPRIETORS)

Situated at STIRLING STREET TE AROHA

Local District No. LOT 3 DP 5 7023

TE AROHA BOROUGH COUNCIL

Class of Work with Description-Site/Requirements NEW DWELLING

SCHEDULE OF FEES - Separate Sheet Attached

N.B. FEES ON PLUMBING AND DRAINAGE WORK ARE TO BE CHARGED SEPARATELY

I authorize J. T. CARTER (PLUMBERS) LTD.
J. T. CARTER (PLUMBERS) LTD.

Craftsman Plumber
Registered Drainlayer

To carry out the work

Estimated Labour Cost of Plumbing

\$400.00

Estimated Labour Cost of Drainage

\$100.00

Signature John E. Carter

J. T. CARTER (PLUMBERS) LTD.
TE AROHA

Date 26.11.80

WORK INSPECTED AND APPROVED

Plumber

Drainlayer

NOTE:-For drainage work a scale plan is not showing road line, section boundaries, buildings or other structures or location of fittings, lines of drains, inspection points, etc., MUST be supplied.

PLAN TO BE DRAWN ON BALKY VERSION

2012

35

APR 1968

TE AROHA BOROUGH COUNCIL

APPLICATION FOR DRAINAGE AND PLUMBING PERMIT

I/We, the undersigned, hereby make application for permission to have the work described herein, and set out in the plans on the back hereof, and in strict accordance with the "Drainage and Plumbing Regulations", under the Health Act, 1956, carried out in or on the premises —

Owned by E. Dean of TE AROHA
 Premises Situated at No. STIRLING ST. Street/Avenue
 Lot No. Section No. D.P. No. Valuation No. Block No.

CONDITIONS OF PERMIT:

1. No roof water or any stormwater is allowed to discharge into a sewer. Where possible stormwater from building is to be discharged into the street stormwater channel.
2. All gully trap basins to be built not less than 6 inches in height above the surrounding ground level.

DESCRIPTION OF WORK:

Disposal of sewerage to

Signature of _____ Plumber Address _____

Signature of _____ Drainlayer Address _____

Estimated Value of Sanitary Plumbing \$ _____ Fee \$ _____ Rec. No. _____

Estimated Value of Drainage \$ _____ Fee \$ _____ Rec. No. _____

Sewer connection _____ Fee \$ _____ Rec. No. _____

Dated this 10th day of June 19 81

Signature

Address

John T. Carter
J. T. CARTER (PLUMBERS) LTD.
LIPSEY STREET
TE AROHA

NOTE:—Schedule of fees and instructions for drawing the drainage plan are on the back of the form.

FOR OFFICE USE ONLY

Plans and specifications approved and issue of permit authorised

Conditions

Permit No.

Date

Inspector

Te Aroha Borough Council

T. M. WILLIAMS

TOWN CLERK

R. M. RANKINE

BOROUGH ENGINEER

TELEPHONES 48-183
P.O. BOX 4

ADMINISTRATIVE BUILDING AND
COUNCIL CHAMBERS

35 KENRICK STREET
TE AROHA

YOUR REF

OUR REF

A/7/4/2

22nd. July, 1981

Rustic Homes Ltd.,
P.O. Box 20-203,
GLEN EDEN

Copy to Mr. & Mrs. E. Dean,
Stirling Street,
TE AROHA

Dear Sirs,

Re: House under construction at Stirling St., Te Aroha
for Mr. & Mrs. E. Dean

As the result of a complaint by the owner to the local plumber regarding water leaks, an investigation has taken place into the source of the leaks. We have located most of the problem areas and I wish to make it quite clear that most, if not all of them, are due to very poor workmanship. Listed below are some of the faults that were found.

1. Leaks around dormer windows - side flashing incorrectly fitted, should be over the top of the bottom flashing - not under it. Lack of noggings to nail down flashing. ✓
2. Valleys adjacent to dormer windows do not have sufficient cover in relation to the overall width of the valley gutter. ✓
3. Ends of ridging are not finished satisfactorily. ✓
4. Flashings over windows are not fitting correctly, they lift up above the top of the window in a high wind and also rattle. ✓
5. Dormer windows not nailed properly (bottom only) which allows the window frame to move in and out and consequently leaks. ✓
6. Intersection of the two roof pitches on the northern side leaks badly due to nails being driven through the flashing and into the bottom of the corrugations on the lower roof level. ✓
7. Sheets of iron are lapped incorrectly and not giving sufficient cover. ✓

Several other items of concern were noticed at this time, as follows:-

1. Floor joist hanger brackets adjacent to stairwell are not nailed properly. ✓
2. Ceiling sheets between the rafters upstairs are not nailed properly to the purlins. ✓
3. Joins in the upstairs floor joists over the kitchen are not supported. They should have large nail plates covering the joints.

Please notify this office when you intend to rectify these faults as we wish to be present when this is undertaken.

Yours faithfully,

D. E. Reid
D. E. Reid
BUILDING INSPECTOR

Revised at the workshop
1 Floor to be higher against the
stairwell. (2 added by 2/clock
2 Windows. Windows not in place

3 Flashing - a corner that is not being
properly waterproofed - poor workmanship

4 Ceiling starts up from bottom. Little
not fastened to inner side of partition

5 Joist in beams and backing of
beams

6 Window backing loose, not fitting.

7 Interior at the two roof pitches
leaking badly due to water being
driven through the Dabing and into
the bottom of a container on the
lower level.

2/1/6/2

22nd. July, 1981

Rustic Homes Ltd.,
P.O. Box 20-203,
GLEN EAGLE

Copy to Mr. & Mrs. E. Dean,
Stirling Street,
TE ARONA

Dear Sirs,

Re: House under construction at Stirling St., Te Arona
for Mr. & Mrs. E. Dean

As the result of a complaint by the owner to the local plumber regarding water leaks, an investigation has taken place into the cause of the leaks. We have located most of the problem areas and I wish to make it quite clear that most, if not all of them, are due to very poor workmanship. Listed below are some of the faults that were found.

1. Leaks around dormer windows - side flashing incorrectly fitted, should be over the top of the bottom flashing - not under it.
Lack of noggings to nail down flashing.
2. Valleys adjacent to dormer windows do not have sufficient cover in relation to the overall width of the valley gutter.
3. Ends of ridging are not finished satisfactorily.
4. Flashings over windows are not fitting correctly, they lift up above the top of the window in a high wind and also rattle.
5. Dormer windows not nailed properly (bottom only) which allows the window frame to move in and out and consequently leaks.
6. Intersection of the two roof pitches on the northern side leaks badly due to nails being driven through the flashing and into the bottom of the corrugations on the lower roof level.
7. Sheets of iron are lapped incorrectly and not giving sufficient cover.

Several other items of concern were noticed at this time, as follows:-

1. Floor joist hanger brackets adjacent to stairwell are not nailed properly.
2. Ceiling sheets between the rafters upstairs are not nailed properly to the purlins.
3. Joins in the upstairs floor joists over the kitchen are not supported. They should have large nail plates covering the joints.

Please notify this office when you intend to rectify these faults as we wish to be present when this is undertaken.

Yours faithfully,

D. E. Reid
BUILDING INSPECTOR

1/7/4/2

20th, March, 1961

Rustic Homes,
P.O. Box 20203,
GLEN ECHO

Dear Sirs,

Re: New dwelling for Mr. & Mrs. F. Deane, 51/51, St. Is. Road

I have undertaken an inspection of the above residence today and note that there are some alterations required to bring this building to conform with our high wind requirements. They are as follows:

1. 100 x 50 rafters are to be fastened to the verandah lintel with two 2 nails each.
2. Terraced joists are to be bolted to the lintel and to the sub-floor framing with two 5/8 bolts each.

It should be noted that in some spans between the floor joists the perforated insulation does not sag the required minimum of 100 mm.

Please phone or write to the above address when the two requirements listed have been completed.

Yours faithfully,

G. F. Reid
BUILDING INSPECTOR

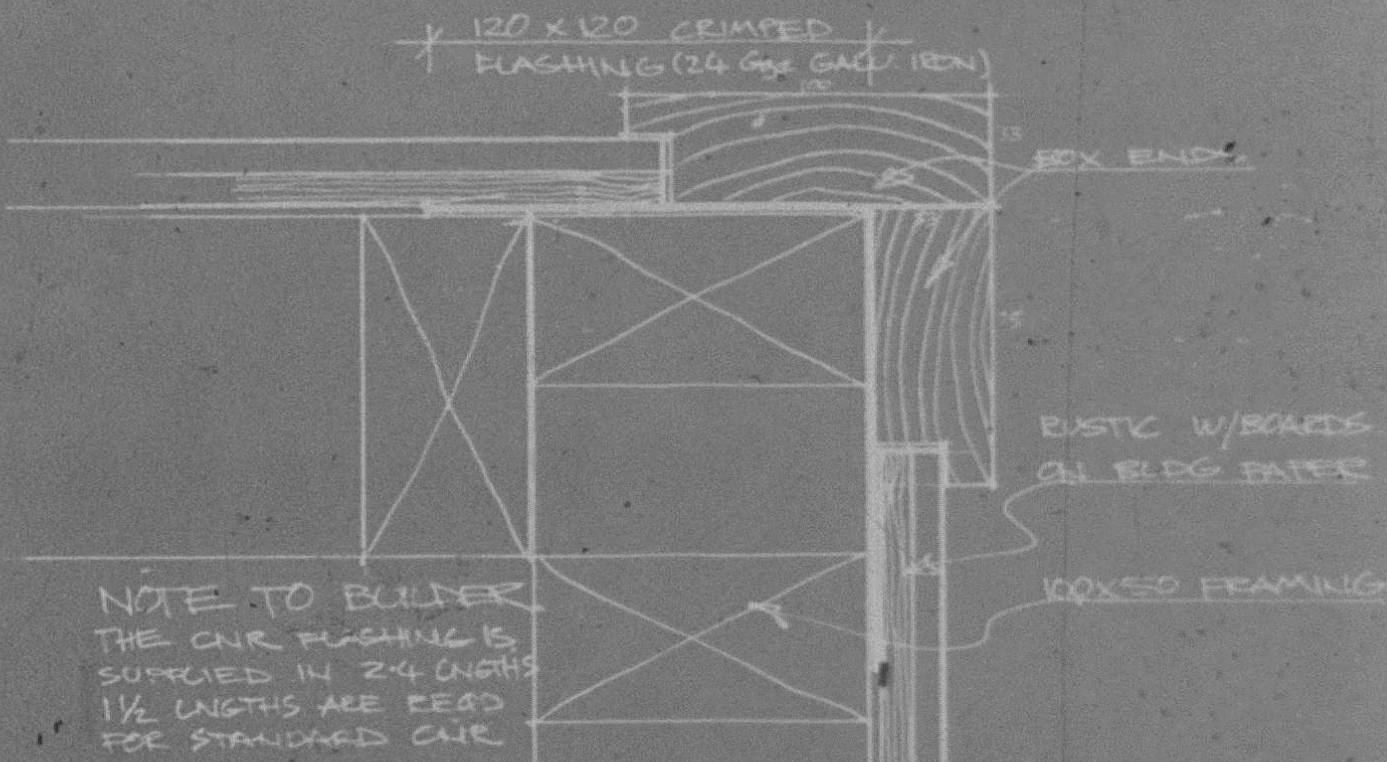
RUSTIC

HOMES

General

details

DEAN



DETAIL G1

TYPICAL CORNER

scale 1:2

DETAIL

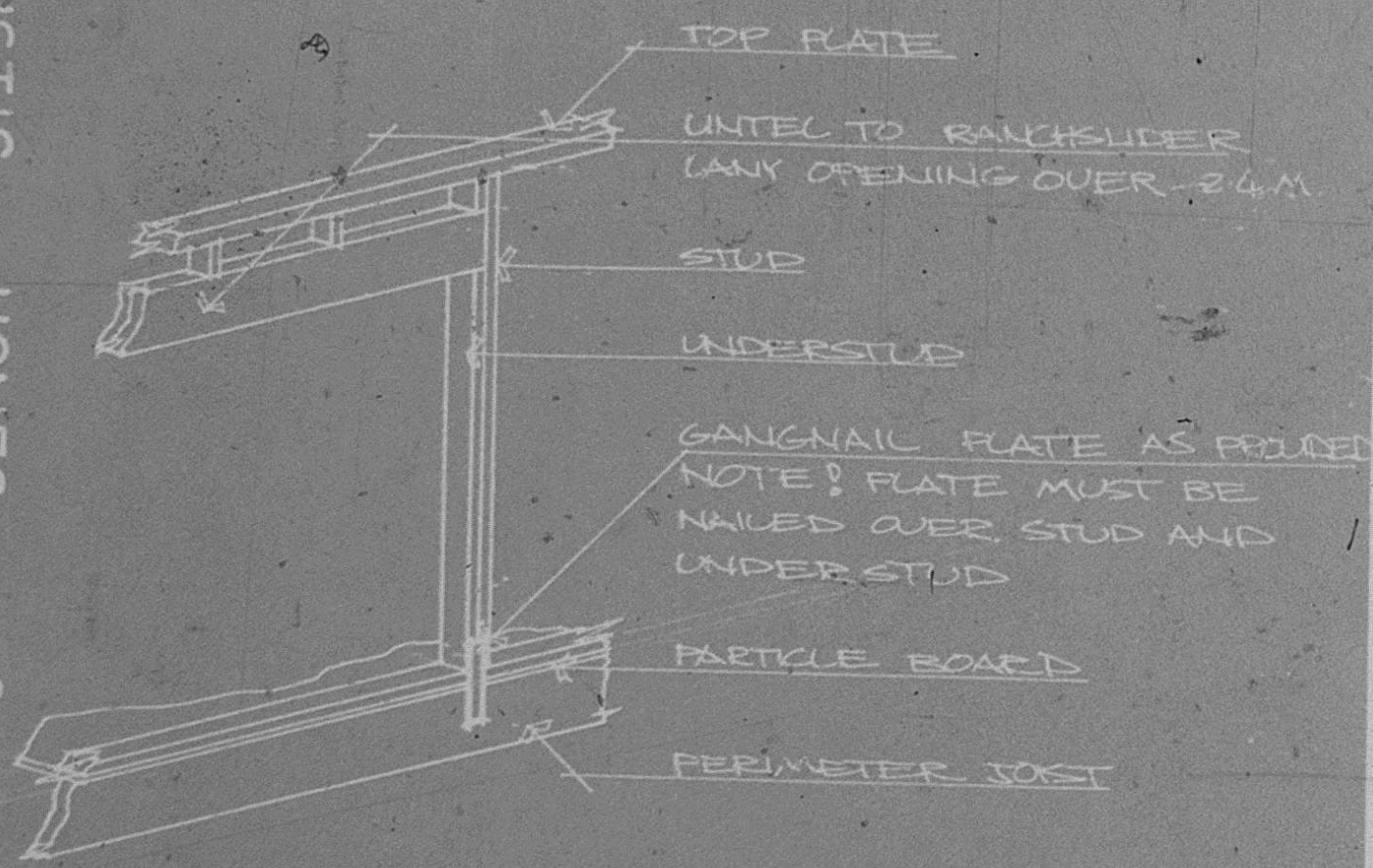
DETAIL G2

TYPICAL JAMB DETAIL

scale 1:1



IMPORTANT NOTE! BUILDER TO PLACE WINDOW IN POSITION
BOTH SIDES OF WINDOW LESS THAN 1/2\"/>



DETAIL G3
TRIMMING STUD AT RANCHSLIDER

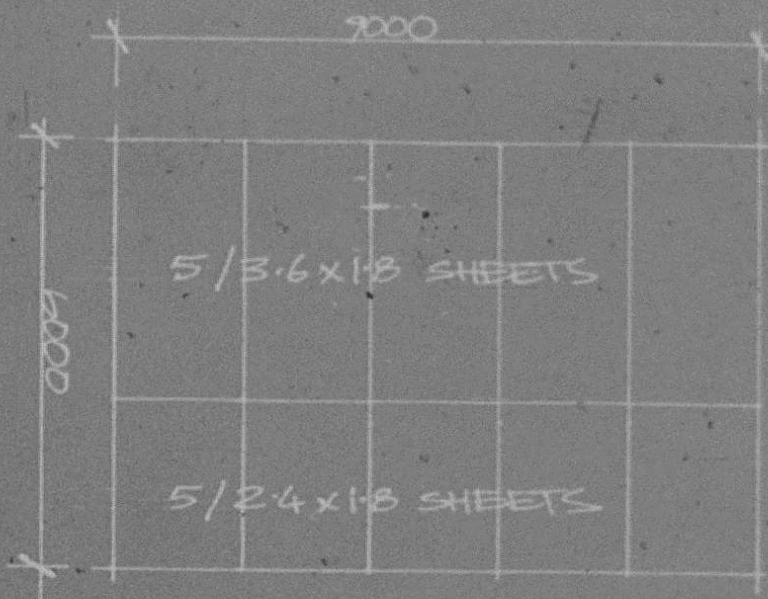
DEAN

RUSTIC

HOMES

General

details



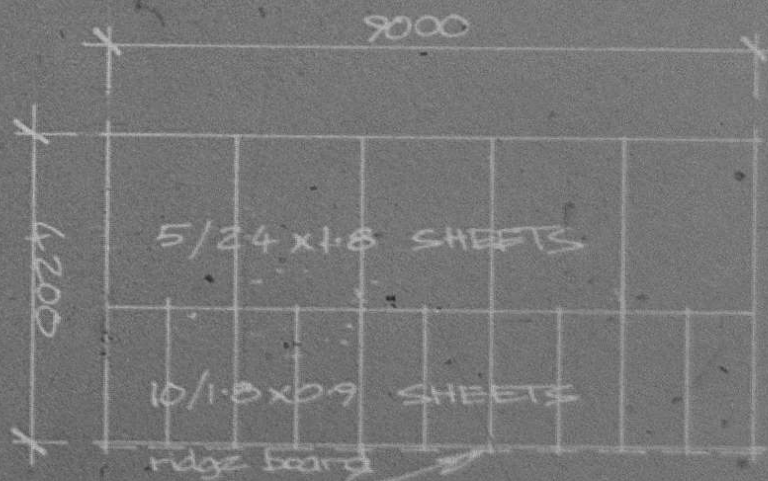
DETAIL G4

LAYOUT OF PART. BD. FLOOR

scale 1:100

NOTE?

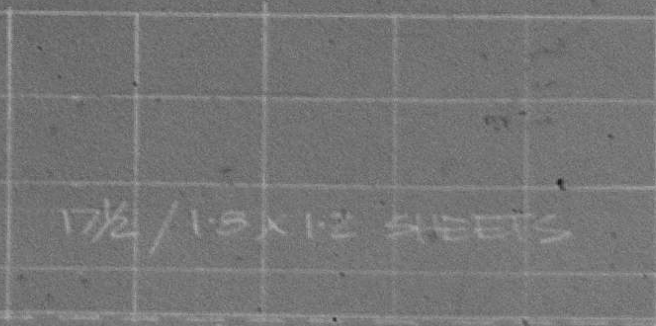
LAYOUTS REQUIRING CUTTING OF SHEETS
IN HALF. - CUT ONE SHEET AT A
TIME AND USE BOTH HALVES AS REQD.



DETAIL G5

LAYOUT OF SARKED CEILING

scale 1:100



ALTERNATIVE LAYOUT

DEAN

NOTES

IMPORTANT CONSTRUCTION NOTES

GENERAL: ALL BUILDING CONSTRUCTION MUST BE IN ACCORDANCE WITH

① N.Z.S. 3604 AND AMENDS.
(OR EQUIVALENT N.Z.S. SPECIFICATION THAT THE LOCAL BODY CURRENTLY IS USING.)

② AND ALL DRAWINGS AND DETAILS THAT FORM THE CONTRACT DOCUMENTS FOR THIS BUILDING. (SOME SPECIFIC DETAILS MAY OVER-RIDE GENERAL BUILDING PRACTICE.)

THE ERECTION OF RUSTIC HOMES COTTAGES IN HIGH WIND COASTAL AREAS AND THE UKE MAKES ADHERANCE TO THE ABOVE NOTES OF THE UTMOST IMPORTANCE

FIXING REQUIREMENTS:

AS PER N.Z.S. 3604 BUT ESP. THE FOLLOWING:

JOINING OF BEARERS - WELT OR NAIL PLATES
SEE N.Z.S. 3604 P 43

BRACING CONNECTIONS - USE: NAIL PLATES, NAILS,
SEE N.Z.S. 3604 P 47

NAILING SCHEDULE: (based on pp 99-103 N.Z.S. 3604)

SOLE PLATE TO JACK STUDS 100x3.75 galv. 3 skew

JACK STUD TO BEAFER 100x3.75 galv. 2 skew
4 skew at Ends.

JOIST TO BEAFER 100x3.75 galv. 2 skew

BOUNDARY JOIST & BLOCKING TO JOIST 90x3.75 3

STEEL ANGLE BRACE TO STUDS 60x3.15 2
" " " " PURLINS

STEEL ANGLE BRACE TO PLATES 60x3.15 2
" " " " PURLINS AT ENDS

RAPTER TO RIDGE BOARD 100x3.75 2
90x3.75 3 skew

NOTE: GENERALLY 90mm NAILS MAY BE USED IN PLACE OF 100mm NAILS PROVIDING A GREATER NUMBER ARE USED

DEAN

RUSTIC

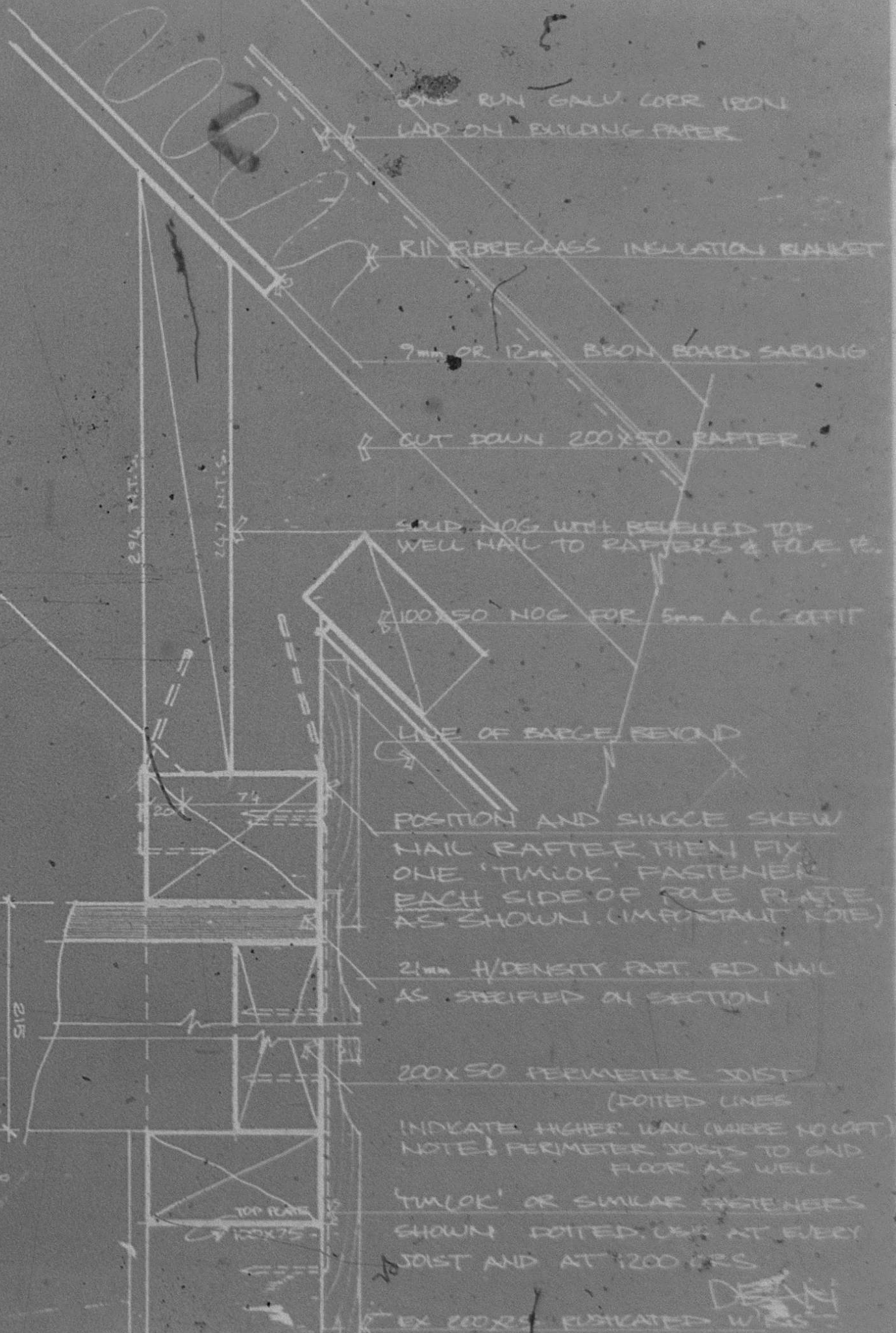
HOMES

Framing

detail

DETAIL E1

7

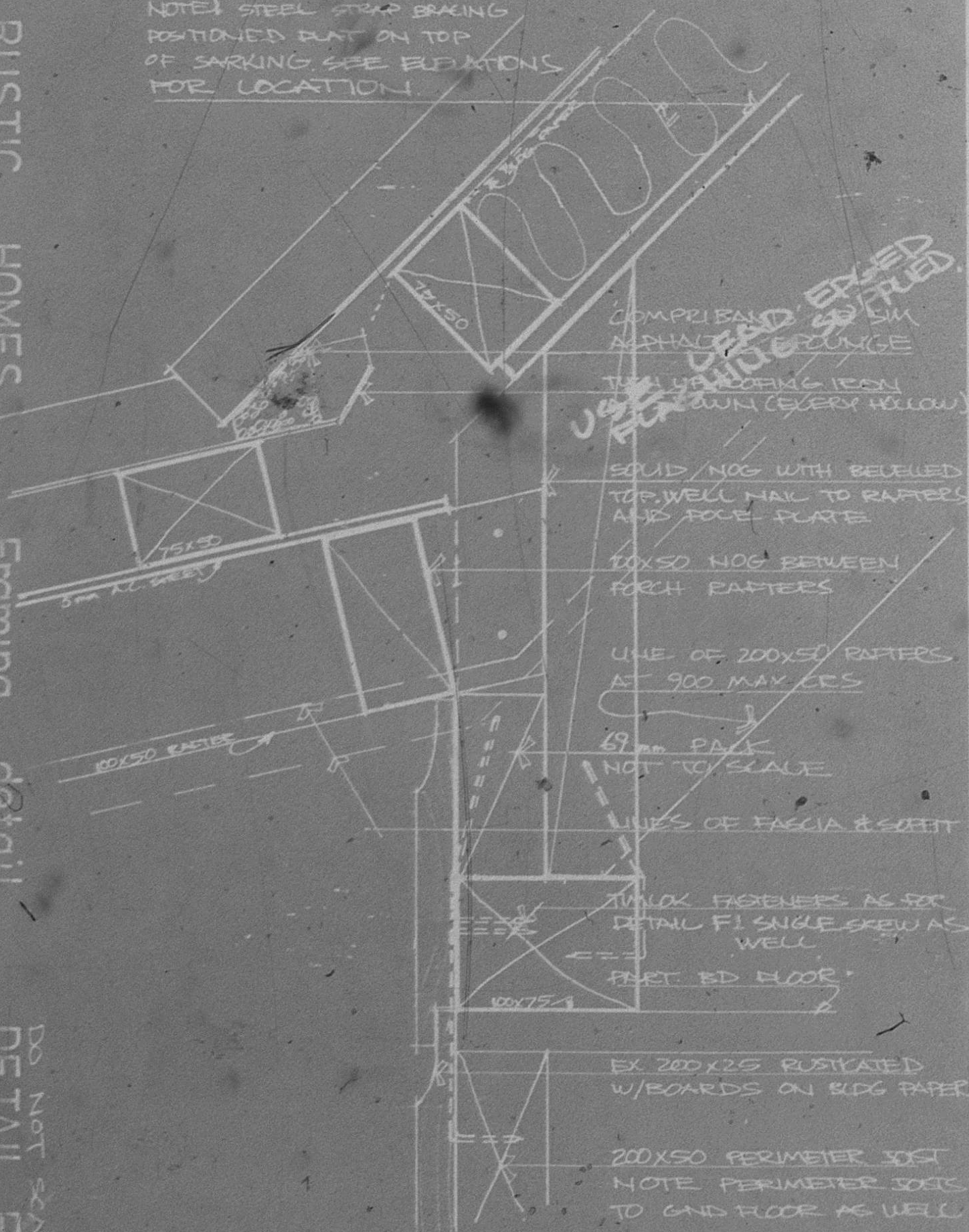


RUSTIC HOMES

Framing detail

DO NOT SCALE!
DETAIL F2

NOTE! STEEL STRAP BRACING
POSITIONED FLAT ON TOP
OF SARKING. SEE ELEVATIONS
FOR LOCATION.



COMPRESSED ASPHALT SPONGE

ROOFING IRON
DOWN (EVERY HOLLOW)

SOLID NOG WITH BEVELED
TOP. WELL NAIL TO RAFTERS
AND POSE PLATE

12x50 NOG BETWEEN
PORCH RAFTERS

LINE OF 200x50 RAFTERS
AT 900 MAX C/S

69mm PAK
NOT TO SCALE

LINE OF FASCIA & SOFFIT

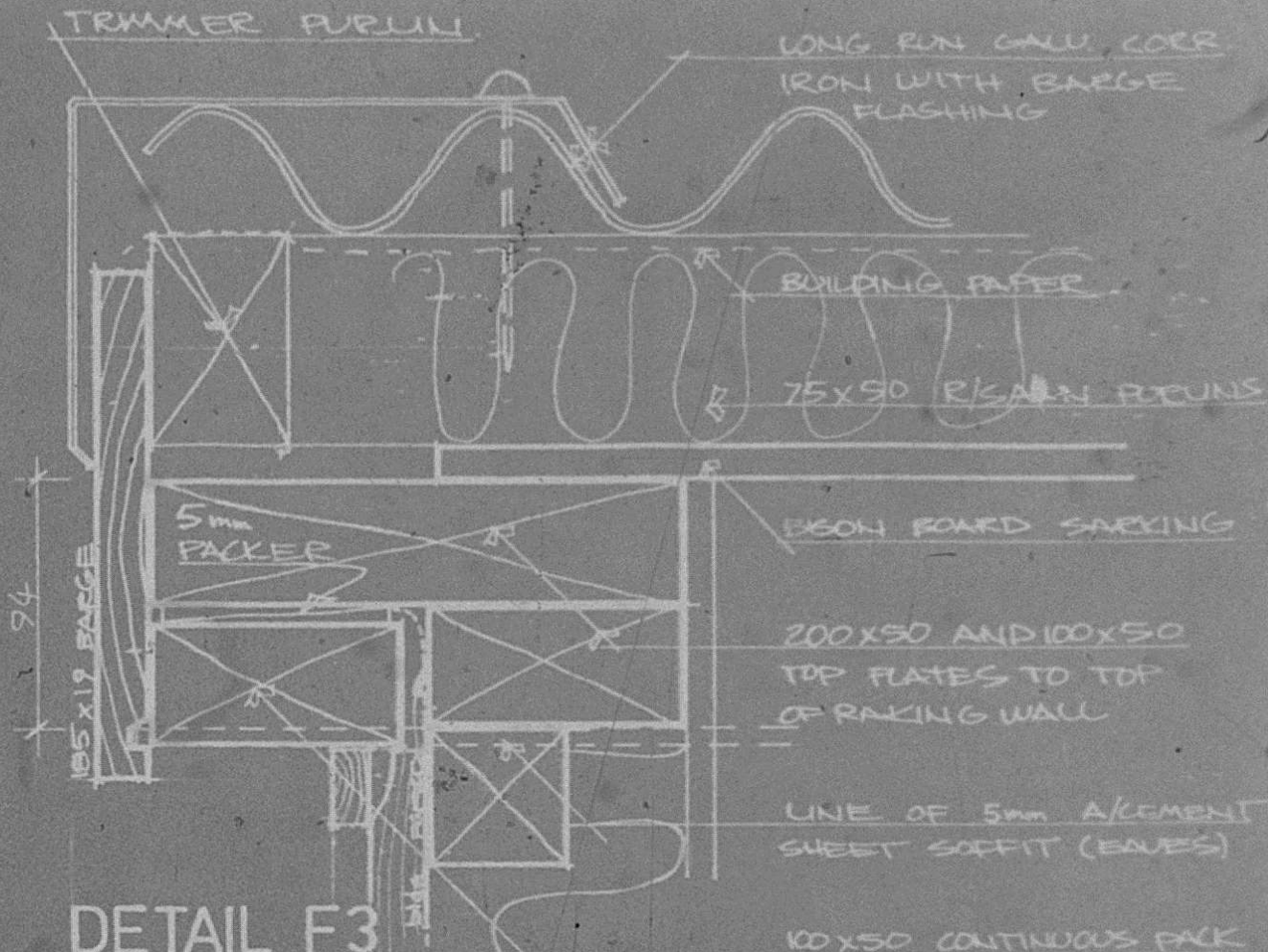
12x50 FASTENERS AS PER
DETAIL F1 SINGLE SKEW AS
WELL

PART. ED FLOOR

EX 200x25 RUSTICATED
W/BOARDS ON SLDG PAPER

200x50 PERIMETER JOIST
NOTE PERIMETER JOIST
TO GND FLOOR AS WELL

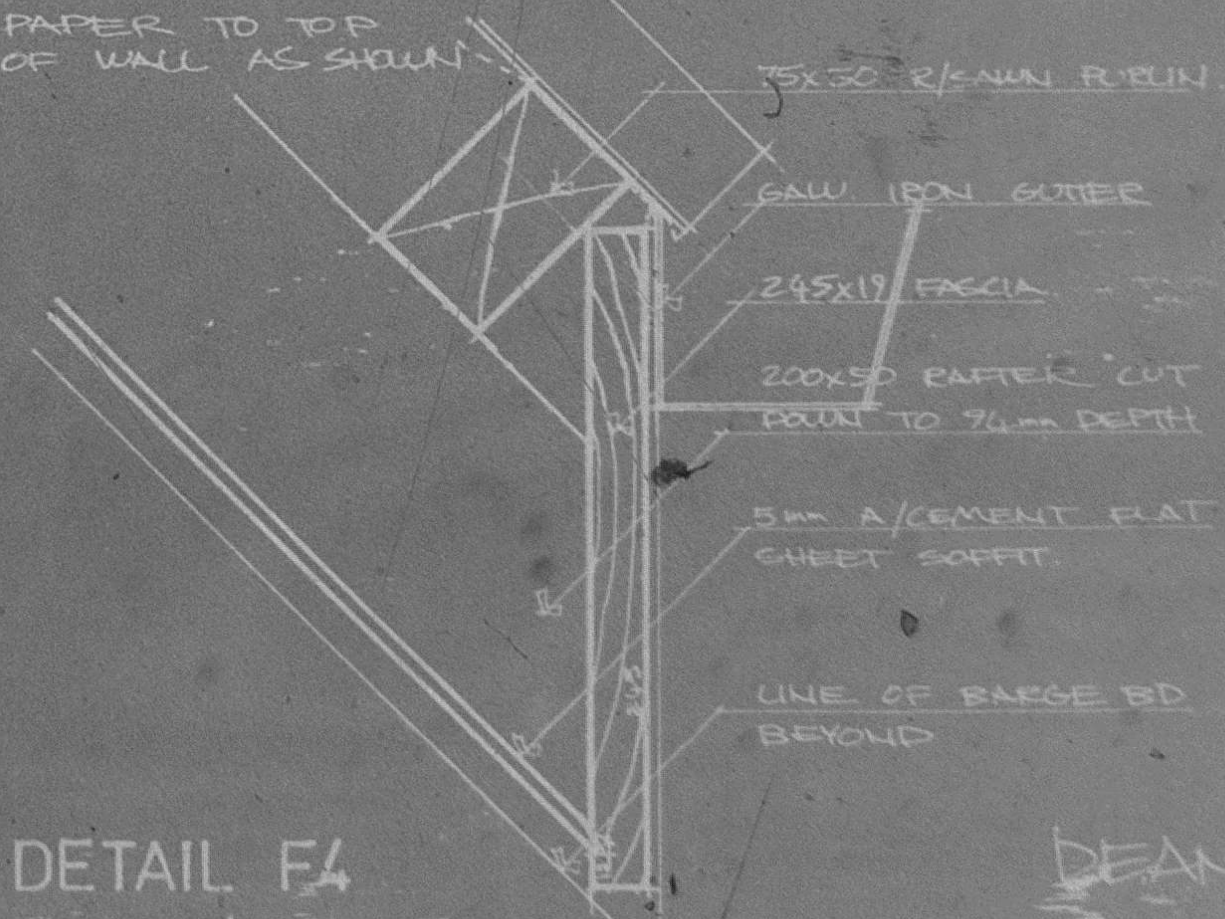
IMPORTANT NOTE: DEAN
FIXING OF PORCH RAFTER TO COTTAGE:
DOUBLE NAIL TO MAIN RAFTER
THE PLATE MUST BE WELL NAILED
TO MAIN RAFTER



DETAIL F3

scale = 1:2.5

NOTE: CARRY BLDG PAPER TO TOP OF WALL AS SHOWN

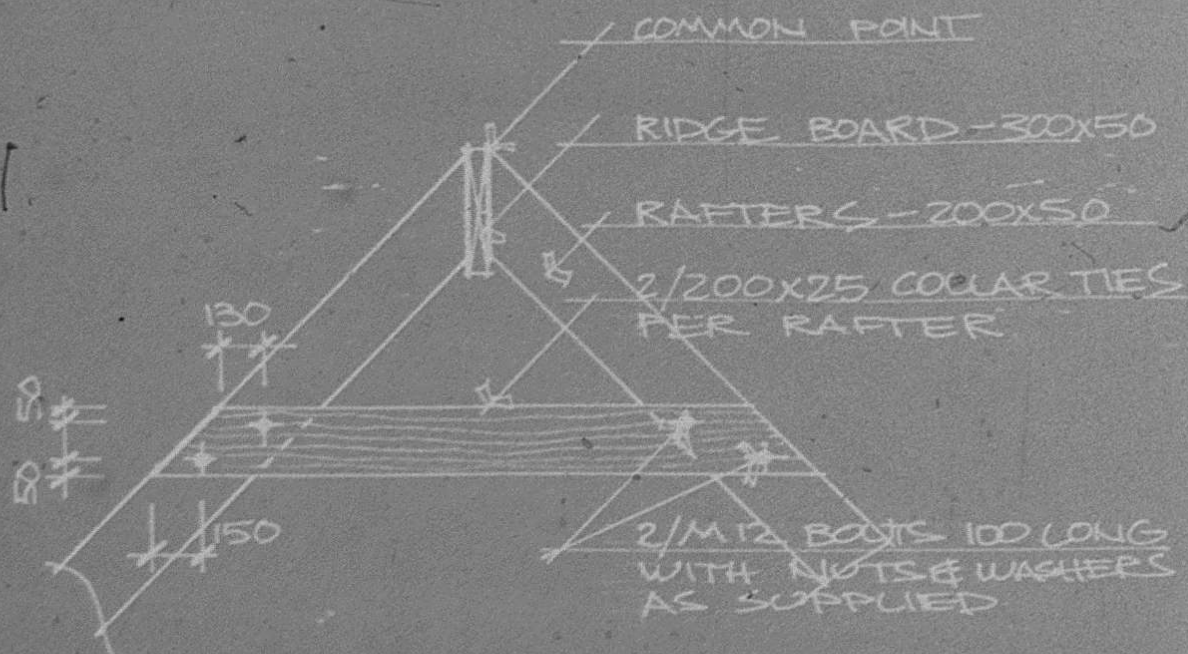


DEAN

RUSTIC

HOMES

FRAMING details



DETAIL F5

NOTE: NAIL COLLAR TIES IN POSITION, DRILL HOLES TO CRS AS SHOWN. BOLT WITH M12 BOLTS.

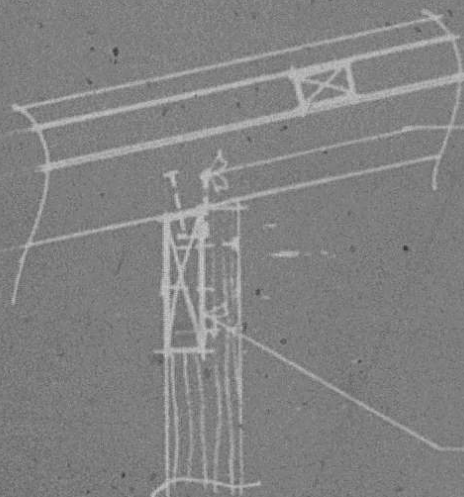
DEAN

RUSTIC

HOMES

Deck

details



100X50 VERANDAH RAFTERS
FIX TO BEVELLED BEAM
WITH 1/ 'TIMLOK' FASTENER
AND 1/100mm GALV. NAIL OR
3/100mm GALV. NAILS

100X100 R/SAWN POST FIX
TO BEVELLED BEAM
WITH 3/100mm NAILS OR
4/90mm NAILS

DETAIL D2

scale 1:10



100X100 R/SAWN POST FIX
TO PERIMETER DECK JOIST
WITH 3/100mm NAILS

DECK JOIST & WELL NAIL
TO BEARER AND PERIMETER
JOIST

PERIMETER DECK JOIST
NAIL TO BEARER AT 200mm
CENTRES WITHIN 600mm OF POST
600mm CENTRES ELSEWHERE

NOTE!

PLACE A JOIST BOTH SIDES
OF VERANDAH POST FOR
POLE PLATFORMS AND ONE
SIDE FOR STANDARD SUBROOF

DETAIL D3

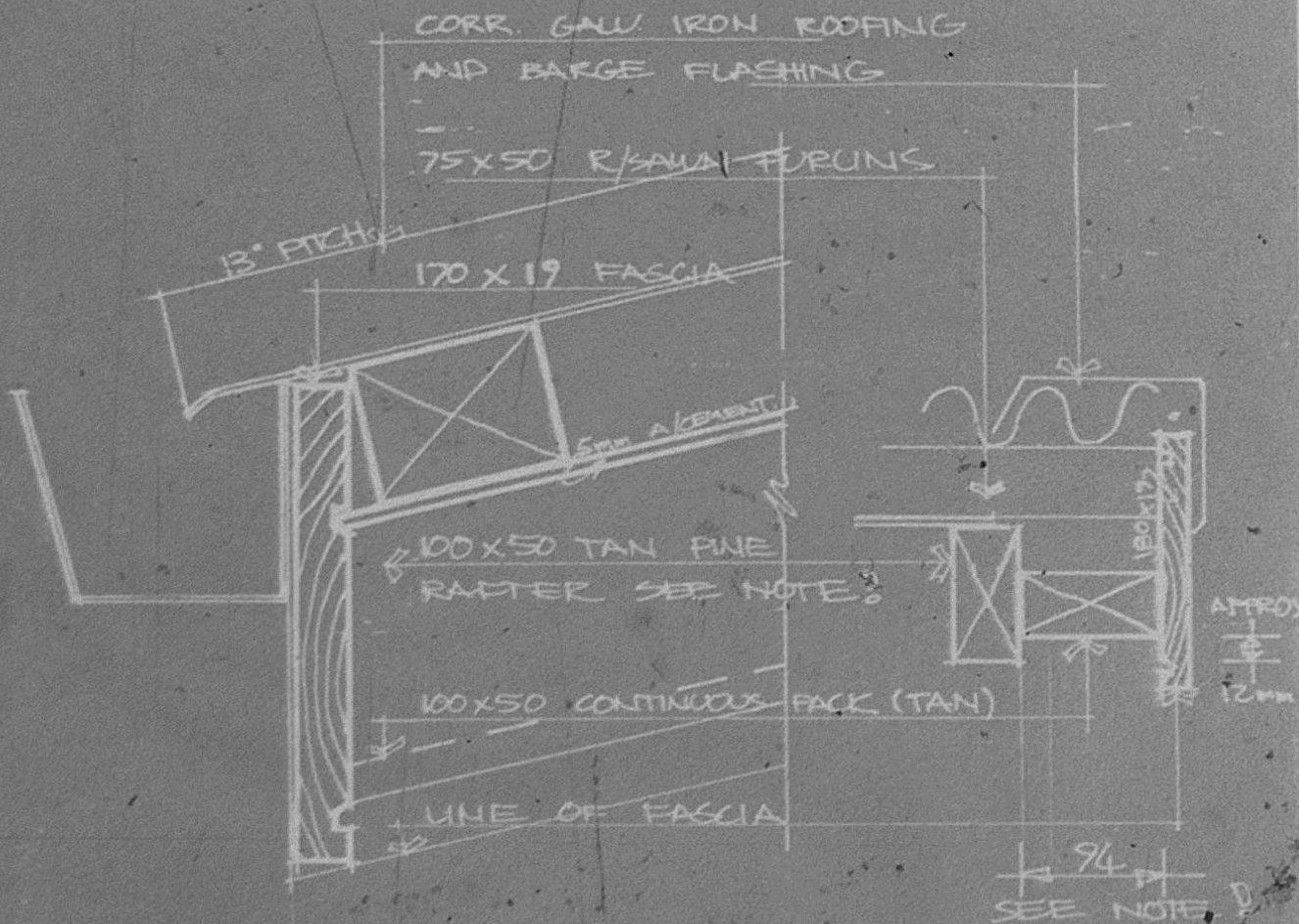
scale 1:10

DEAN

RUSTIC

HOMES

Deck details



DETAIL D1

scale = 1/2" = 1'-0"

NOTE 2 POSITION OUTSIDE RAPTER
94mm FROM FASCIA AS SHOWN.

DEAN

DETAIL S1

scale 1:10

APPROX
100 OR 75

10mm Max

FIXING OF BTM PLATE
TO FLOOR SHALL BE
2/100 x 4mm NAILS / 600 CES

PERIMETER FLOOR JOIST
200 x 50 IN LONG LENGTHS
AS SUPPLIED

FIX STRIP TO BEARER
WITH 1/100 x 4mm NAIL / 200 CES

SOLE PLATE (ON P.P.C.)
WIRED TO CONC. PILE
WITH 4mm GALV WIRE
AND SIX STAPLES TOTAL
SEE N 2 S 360 P 35

NOTE TO BUILDER!
IN ABOVE DETAIL TAKE W/BOARDS
DOWN TO TOP OF BEARER AS SHOWN.

APPROX
100 OR 75

10mm Max

FIXING OF BTM PLATE
TO FLOOR SHALL BE
2/100 x 4mm NAILS / 600 CES

PERIMETER JOIST: 100 x 50
TANALISED 2/100mm NAILS
TO EACH JOIST

DECK JOIST: 100 x 50 TAN.
LAYOUT HANDMADE LINES BE-
TWEEN POSTS TO LOCATE
POSITION OVER BEARERS

DEAN

FIX BEARERS TO
POLES WITH 2/M19
HOT DIP GALV STUDS
AND 60mm SQ WASHERS
BOLTS TO BE WELL
SMEARED WITH GREASE

DETAIL S2

scale 1:10

112 25 43

2800 (BETWEEN S'S)

RUSTIC HOMES

timber schedule

CLIENT: DEAN

DATE: 20/7/80 JOB No:

ITEM	SIZE	DESCRIPTION	REMARKS
<u>FLOOR</u>			
FLOOR JOISTS	200x50	RAD. TAN Ggd.	600 MAX CRS (325 MAX SPAN)
SOUD BLOCKING	200x50	RAD. B.T. Ggd.	
FLOORING	21 mm	H/DENSITY PARTICLE BOARD (36x18m SHEETS)	
BEAM	200x100	RAD. B.T. Ggd.	450 MAX SPAN
POST	100x100	RAD. B.T. Ggd.	
NOTE! FLOORING IS 'FINAL FLOOR 600' WHICH IS DESIGNED TO SPAN FLOOR JOISTS AT 600 CRS			
<u>WALLS</u>			
PLATES	100x75	RAD. B.T. Ggd.	
STUDS	100x50	RAD. B.T. Ggd.	600 MAX CRS
NOGS	100x50	RAD. B.T. Ggd.	2 ROWS
TRIMMERS	200x100	RAD. B.T. Ggd.	UP TO 2.4M SPAN
	150x100	RAD. B.T. Ggd.	UP TO 1.8M SPAN
	100x100	RAD. B.T. Ggd.	UP TO 1.2M SPAN
EXT. SHEATH.	200x25	RAD. TAN.	RUSTICATED PROFILE
INT. SHEATH.			
POLE PLATE	100x75	RAD. B.T. Ggd.	NOTE! SOME NON-BEARING PARTITIONS ARE 75x50. STUD & NOG SPACINGS AS FOR 100x50 WALLS.
<u>PORCH</u>			
BEARER	100x75	RAD. TAN. Ggd.	300x50 FOR POLE SUB-FLOOR
STRUT	100x50	RAD. TAN. Ggd.	
JOISTS	100x50	RAD. TAN. Ggd.	AT 600 MAX CRS
DECKING	100x40	RAD. TAN. Ggd.	BEVELLED AND SHOT EDGED
RAPTERS	100x50	RAD. TAN. Ggd.	AT 900 MAX CRS
POSTS	100x100	RAD. TAN. R/S	
BEAM	200x50	RAD. TAN. R/S	BEVELLED TOP EDGE
HANDRAIL ETC.	EX 50	RAD. TAN. R/S	

RUSTIC HOMES

timber schedule

CLIENT: DEAN.

DATE: 20/7/80. JOB No:

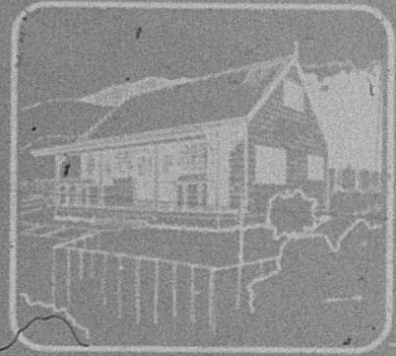
ITEM	SIZE	DESCRIPTION	REMARKS
<u>SUB-FLOOR</u>			
(TIMES)	200x200	x600 CONC. BUKS ON 300x300x1000 CONC. PAD	
SOLE PLATE	100x50	RAD.TAN. Ggd	
JACK STUDS	100x75	RAD.TAN. Ggd	
BRACES	100x75	RAD.TAN. Ggd	
BEARERS	150x75	RAD.TAN. Ggd	
(D.P.C.)	100mm	MACTHOLD	
<u>POLE SUB-FLOOR</u>			
POLES	175 DIA.	RAD.TAN (CZ)	
BEARERS	300x50	RAD.TAN R/Sawn	DOUBLE, EXCEPT AT DECK
BRACES	200x50	RAD.TAN R/Sawn	REQD ONLY WHERE SHOWN ON DWGS.
<u>ROOF</u>			
FURUHS	75x50	RAD.BT. R/S.	0.75 METRES MAX CBS
FASCIA	EX 25	RAD.TAN. Dross	GROOVED
RAFTERS	200x50	RAD.BT. Ggd.	900 MAX CBS
COLLAR TIES	200x25	RAD.BT.	DOUBLE BOLTED BOTH ENDS
RIDGE BD	300x50	RAD.BT. Ggd	JOINED AT RAFTERS
SARKING	9 or 12mm	BEON BOARD	

Display Centre
3350 Great North Rd.
New Lynn

P.O. Box 20203
Glen Eden

Bus. Phone 874-021
After Hours 876-394

RUSTIG HOMES



5th August 1980

The Building Inspector,
Piako County Council,
35 Kenrick Street,
TE AROHA.

Attention: Mr Reed

Dear Sir,

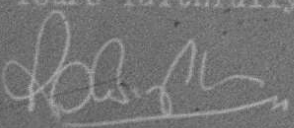
Re dwelling at Stirling Road for our client Mr & Mrs Dean.

Please find enclosed ammended BRANZ sheet and two sets of ammended plans showing:-

- (i) Bracing and ammended bracing to comply with the High Wind Zone.
- (ii) Ammended pole lengths to comply with the engineers calculations as already explained in our letter of 4th August '80.

If you have any queries regarding the above do not hesitate to contact the writer at the above address or phone GLE 6983 collect.

Yours faithfully,


Laurence McKechnie
DRAFTSMAN

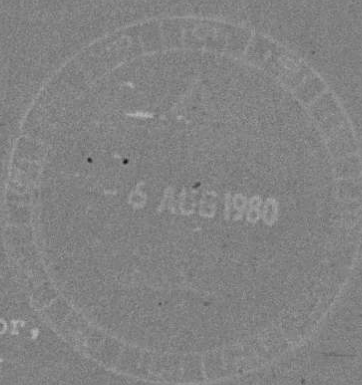
The Home with the Natural Look

Display Centre
3350 Great North Rd.
New Lynn

RUSTIG HOMES

P.O. Box 20203
Glen Eden

Bus. Phone 874-021
After Hours 876-394



4th August 1980

The Building Inspector,
Piako County Council,
35 Kenrick Street,
TE AROHA.

Dear Sir,

Re application for building permit for Mr and Mrs Dean, please find enclosed one set of engineers calculations covering the pole platform for the above dwelling.

You will notice that on the last page of the calculations the engineer has required pole depths in excess of 1.8 metres. Verbal consultation with the engineer has revealed that in the absence of more bore holes he advises us to add another 2.1 metres onto the 1.8 metres already required. This covers the worst case. Therefore we will be supplying and driving all our poles to a minimum depth of 3.9 metres.

We would appreciate it if you would mark our drawings accordingly. If you have any queries regarding the above do not hesitate to contact the writer at the above address or phone GLE 6983 collect.

Yours faithfully,

Laurence McKechnie
DRAFTSMAN

Love

Katie Holmes telephoned 10/1/81

Are driving from LA to Ocean

Point in driving to a room

Will be in the room 11/20

DEAN 1013

M^cKECHIE

GLEN EDEEN 6983

pl. him if any more was

up to him to say so

to D. for

H.T.

Dean - Contact Home

N. Carlton St

48-570

very interesting

48-570

TE AROHA BOROUGH COUNCILBUILDING PERMIT APPLICATION PURSUANT TO CHAPTER 2 NZS 1900

	FEES	RECEIPT No.
PERMIT NO. J016130	\$ 95-00	2720
WATER CONNECTION	\$ 100-00	
SEWER CONNECTION	\$ 225-00	2721
FT/PATH DAMAGE DEP.	\$ 100-00	
VEHICLE CROSSING	\$ 180-00	2719
BUILDING RESEARCH	\$ 18-00	2722
STORMWATER	\$	
TOTAL	\$ 518-00	
	518-00	

INFORMATION TO BE SUPPLIED BY APPLICANT

All information required by Sections A. and B. must be supplied before any building permit can be issued.

Section C. may be used if separate specifications are not supplied and site plan may be on Section F.

(A)

Owners Name: E. D. AND E. I. DEAN
 Postal Address: 1 ROYAL VIEW ROAD
 TE ATATU, AUCKLAND.
 Name of Builder: Rustic Homes
 Postal Address: P.O. Box 20203
 Glen Eden, Auckland.
 Road Address of Proposed Work: STIRLING ST
 Nature of Work: NEW DWELLING
 Estimated Value of Work \$ 18,000
 Area of Building: 108 m²
 Legal Description of Property: Lot 3 D.P.S. 7023
 Use of proposed building: PRIVATE RESIDENCE.

(B) PLAN AND SPECIFICATIONS

All applications must be accompanied by the prescribed building permit fees, plans and specifications of the building and a locality (site) plan for all buildings. The locality (site) plan must show the proposed position of the work on the section in relation to boundaries and existing buildings. The nearest street frontage or frontages must be shown and named on the plan. This plan should be drawn to scale with existing buildings in blue or black and proposed work in red.

Planned Income - \$ of fees. 272

(C) THIS SECTION MUST BE COMPLETED WHERE SEPARATE SPECIFICATIONS DO NOT ACCOMPANY PLANS

Plans are required in all cases, sufficient to show to the satisfaction of the Inspector, the nature of the structure and compliance with the Bylaws.
Building Inspector must be given 24 hours notice prior to pouring any concrete footings, floor or bond beams.

SIZE OF TIMBER — TYPE OF TIMBER
SPACING — SPAN

Foundations *See attached plans + specifications*
Site Soil Type i.e. sand, clay, peat, fill etc.
Piles
Particulars of Concrete Work
Steel Work
Bearers
Floor Joists
Bottom Plates
Flooring
Studs
Nogs/Dwangs
Lintel Schedule
Bracing
Top Plates
Ceiling Joists
Rafters
OR
Roof Trusses, make and Design No
Perkins
Roofing
Outside Sheathing
Internal Lining
Chimney
Insulation — Floors, Walls, Ceilings
Height of Rooms
Plumbing and Drainage (Separate application required).

I HEREBY APPLY as builder or his authorised agent for permission to carry out the work described hereon and on the locality (site) plan attached AND CERTIFY THAT THE PARTICULARS SUPPLIED ARE TRUE AND CORRECT

KUSTIC HOMES
P.O. Box 20-203
Glen Eden

KOB-16
24.7.80

Signature
Date

BUILDING PERMIT FEE (as per schedule) herewith \$

To Archa Borough Council

All communications to be
addressed to the Borough
Health/Building Inspector

Borough Health/Building Inspector's Office

Phone 46-153
P.O. Box - 4

To Archa
New Zealand

.....1980

Kevin Jones
Robert Jones
Chas. Ann. Anderson

Dear Sir,

Re: BUILDING PERMIT APPLICATION

FOR: E.D. & E.I. Davis

ADDRESS OF WORK: 80-82 St. Archa.

Your application for the above has been received. So that it can be further considered the following information is requested as indicated by a * below.

- (a) Site Plan: A plan showing the proposed position of the work on the section in relation to all boundaries and existing buildings. The nearest street frontage or frontages must be shown and named on the plan. This plan should be drawn to scale with existing buildings in blue or black and proposed work in red.
- (b) Work Plan: As required on the application form this plan must show at least one plan, one elevation and a typical cross section of the work and must also show any special details of construction which are out of the ordinary.
- (c) Specifications: This list must comprise of a complete list of the building material, their sizes, spacings and spans for the proposed work, the name of the timbers and type of roofing etc. as on the back of the application. This may, if possible, be included on the cross section as in (b).
- (d) Building Programmers Approval: For work valued over \$20,000.
- (e) Design Certificate.
- (f) Insulation details — walls, floor, ceiling. *Bracing Schedule*
- (g) More specific details concerning the following *Adopted after the July 79 storm.*
- (h) Other requirements:

—(i) Building Permit fee	\$..94.....00....	Footpath damage deposit	\$..00.....00....
Plumbing & Drainage fee	\$.....00.....00....	Building Research Levy	\$..08.....00....
Water connection fee	\$..30.....00....	Vehicle Crossing fee	\$..30.....00....
Sewer connection fee	\$..215.....00....	Total	\$..613.....00....

** I have not including plumbing & drainage fees as we had the quotes given as too high. The fee is based on these figures.*

If you wish to discuss any of the above mentioned items further please contact the undersigned.

Please note that a permit must be obtained before work is commenced.

Your co-operation in these matters would be appreciated and will speed the issue of your permit.

Yours faithfully,

D.E. Reid

D. E. Reid
BUILDING INSPECTOR

*on please contact
copy of this page.*

SHEET A

(CIRCLE whichever is applicable)

NAME: MR & MRS DEAN

ADDRESS: STIRLING ROAD
TE AROHA

STOREY: Single or Uppermost
Lower of two or middle of three
Lower of three

ROOF TYPE: Light Heavy

ROOF PITCH: 0° - 25° / 26° - 45°

WIND AREA: High / Medium / Low

W = 90 B.U.'s/m

EARTHQUAKE ZONE: A B C

E = 6 B.U.'s/m²

ROOF OR BUILDING LENGTH

BL = 9.1 m

ROOF OR BUILDING WIDTH

BW = 6 m

GROSS ROOF OR BUILDING PLAN AREA

GPA = 54.6 m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS

E x GPA = 6 x 54 = 324 B.U.'s

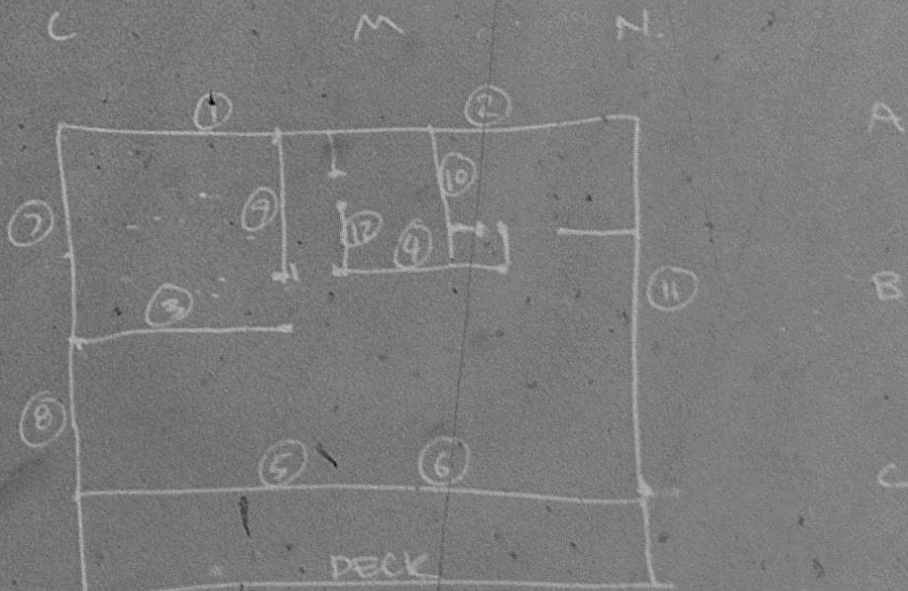
WIND: B.U.'s ALONG

W x BW = 90 x 6 = 540 B.U.'s

WIND: B.U.'s ACROSS

W x BL = 90 x 9 = 810 B.U.'s

SKETCH PLAN (external and internal walls) :



SHEET B

1 Total B.U.'s Required	2 Wall Line	3 Minimum B.U.'s Required	4 Label No.	5 Type	6 Rating B.U.'s/m	7 Length (m)	8 B.U.'s Provided	
ALONG	A	90	①	1	50	1.7	85	
			②	1	50	3.5	175	
			Sub-total					260
	B	70	③	4	74	3.0	222	
			④	4	74	3.0	222	
			Sub-total					444
	C	90	⑤	1	50	2.2	110	
			⑥	1	50	2.2	110	
			Sub-total					220
	D							
540.	TOTAL		TOTAL					924 ✓
ACROSS	L	60	⑦	1	50	3.0	150	
			⑧	1	50	3.0	150	
			Sub-total					300
	M	70	⑨	2	74	2.4	178	
			⑩	2	74	2.2	163	
			⑪	10	83	0.9	75	
			Sub-total					416
	N	60	⑫	3	50	2.4	120	
			Sub-total					120
810	O							
	P							
TOTAL		TOTAL					836 ✓	

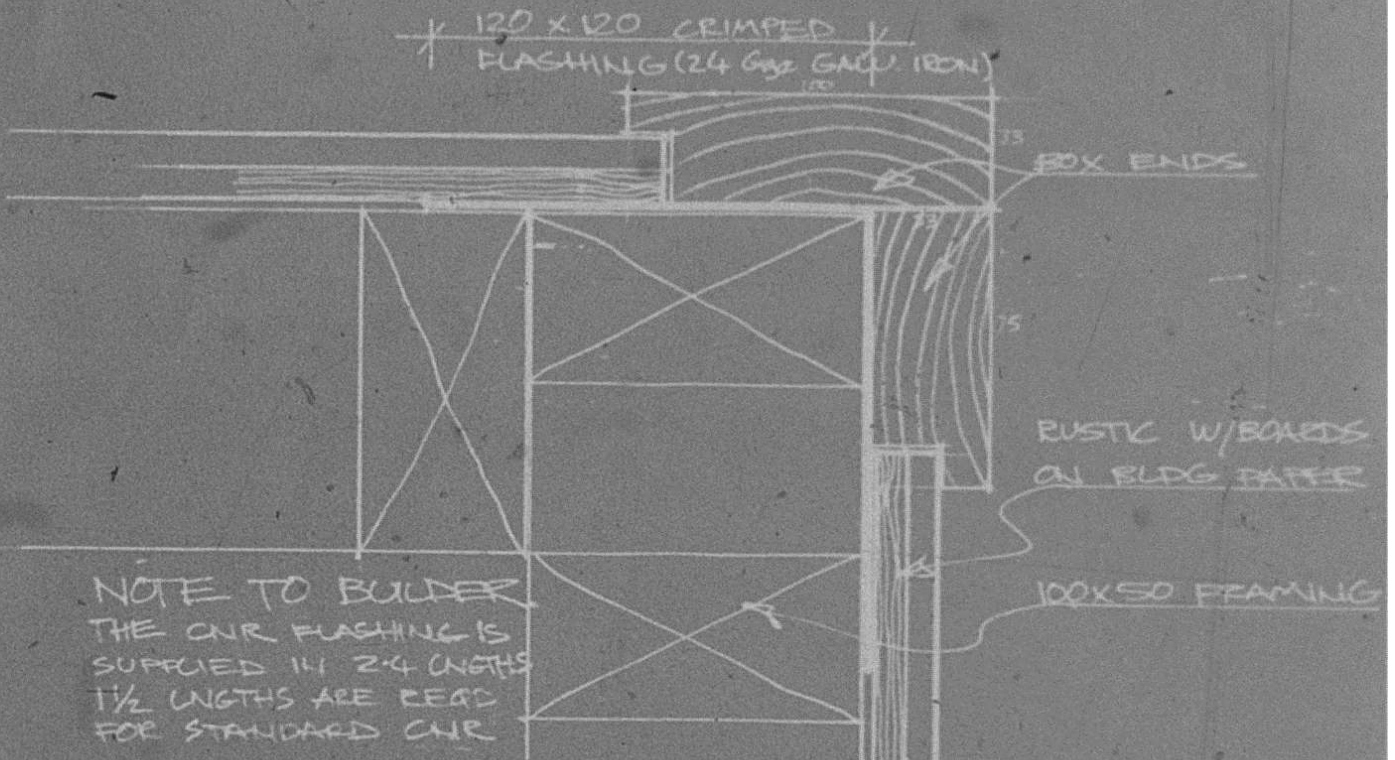
RUSTIC

HOMES

General

details

DEAN



DETAIL G1

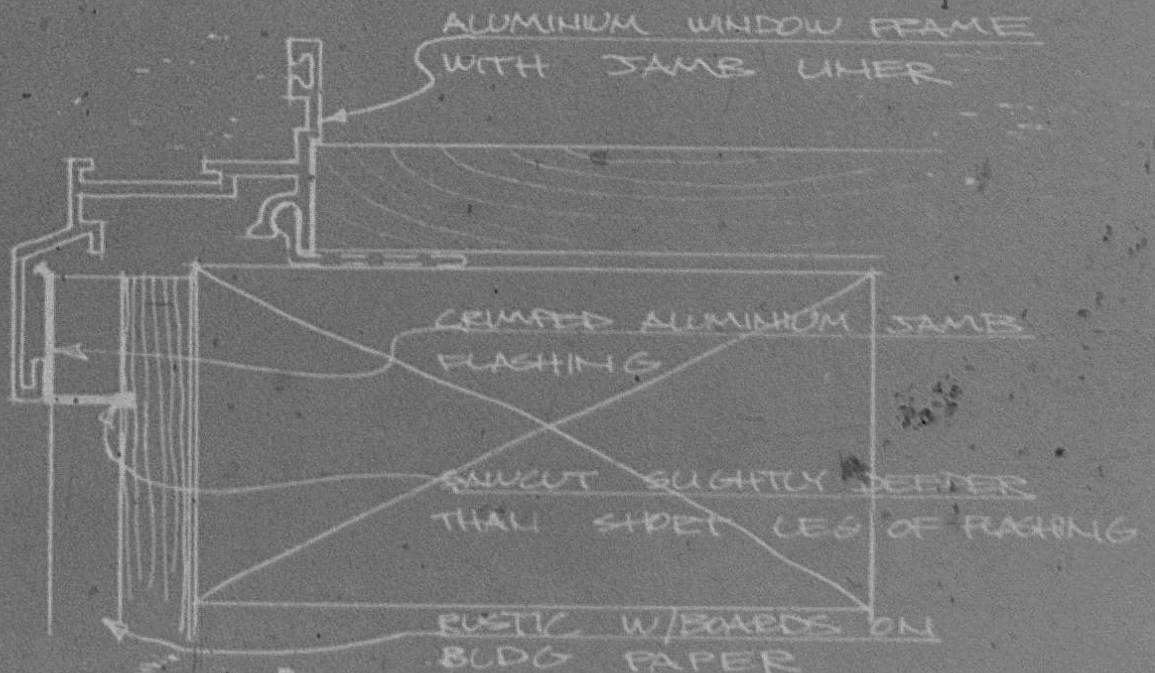
scale 1:2

TYPICAL CORNER DETAIL

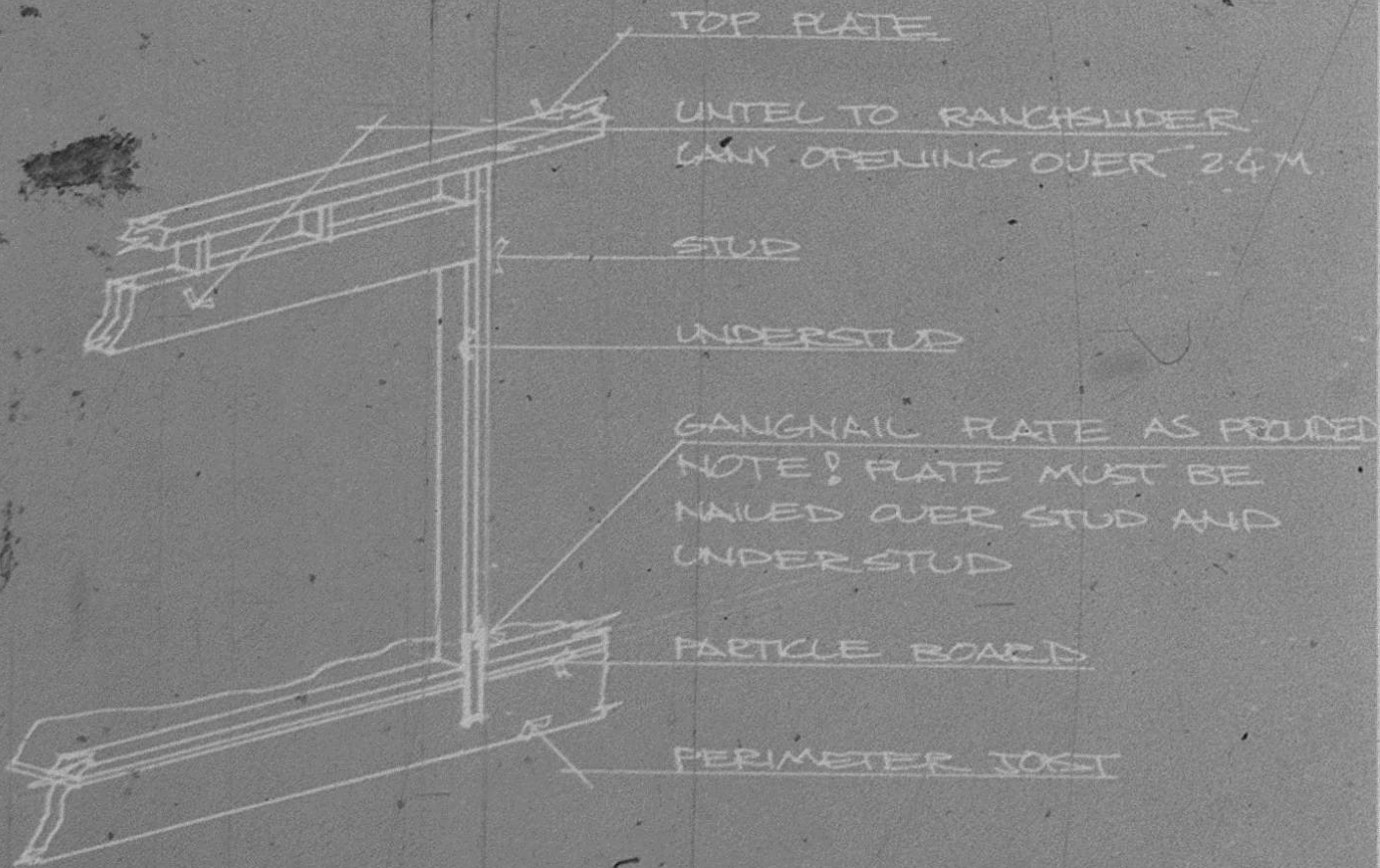
DETAIL G2

scale 1:1

TYPICAL JAMB DETAIL



IMPORTANT NOTE! BUILDER TO PLACE WINDOW IN POSITION
EXPIRE BOTH SIDES OF WINDOW FOR CORNER FLASHING



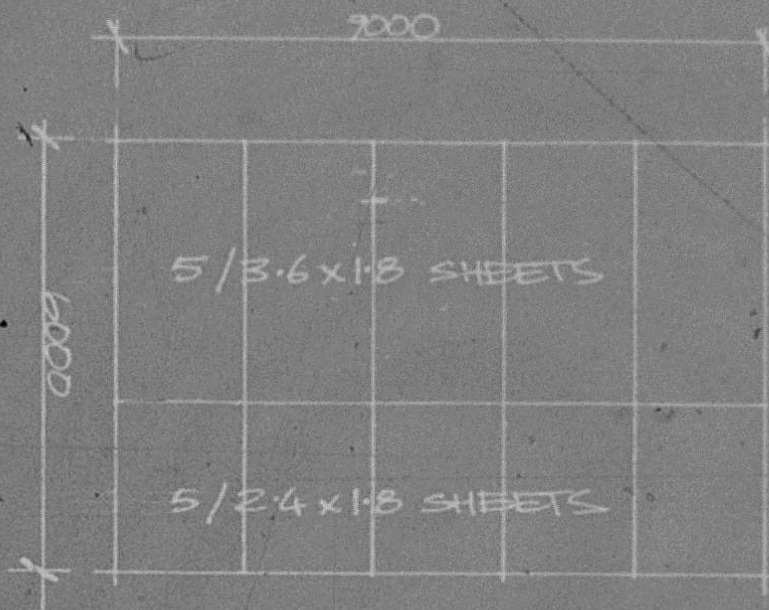
DETAIL G3
TRIMMING STUD AT RANCHSLIDER

RUSTIC

HOMES

General

details

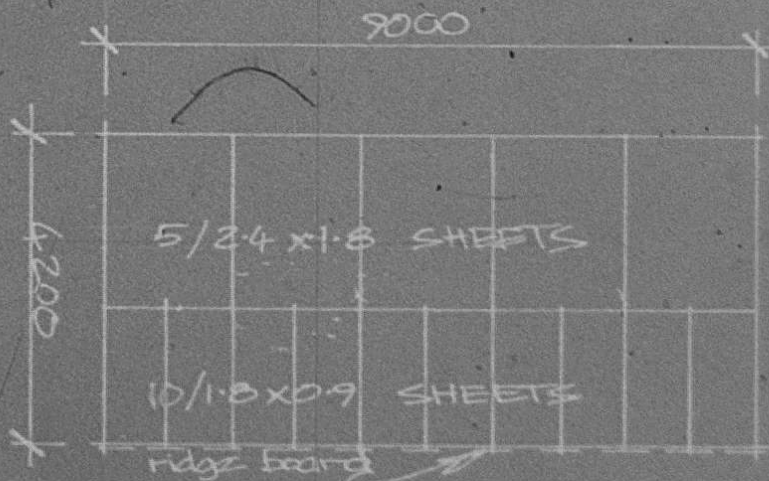


DETAIL G4

LAYOUT OF PART. BD. FLOOR scale 1:100

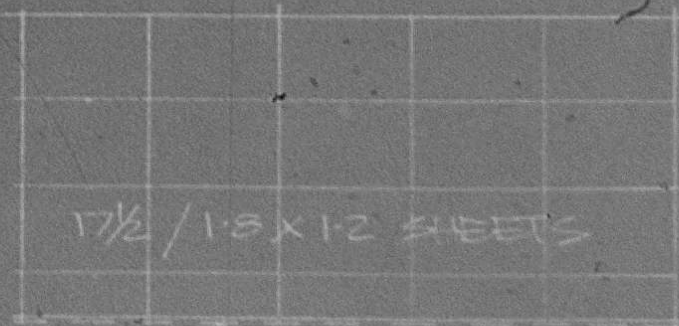
NOTE!

LAYOUTS REQUIRING CUTTING OF SHEETS
IN HALF. - CUT ONE SHEET AT A
TIME AND USE BOTH HALVES AS REQD.



DETAIL G5

LAYOUT OF SARKED CEILING scale 1:100



ALTERNATIVE LAYOUT

DEAN

RUSTIC

HOMES

General

details

NOTES

IMPORTANT CONSTRUCTION NOTES

GENERAL: ALL BUILDING CONSTRUCTION MUST BE IN ACCORDANCE WITH

① N.Z.S. 3604 AND AMENDS.
(OR EQUIVALENT N.Z.S. SPECIFICATION THAT THE LOCAL BODY CURRENTLY IS USING.)

② AND ALL DRAWINGS AND DETAILS THAT FORM THE CONTRACT DOCUMENTS FOR THIS BUILDING (SOME SPECIFIC DETAILS MAY OVER-RIDE GENERAL BUILDING PRACTICE)

THE ERECTION OF RUSTIC HOMES COTTAGES IN HIGH WIND COASTAL AREAS AND THE LIKE MAKES ADHERANCE TO THE ABOVE NOTES OF THE UTMOST IMPORTANCE

FIXING REQUIREMENTS:

AS PER N.Z.S. 3604 BUT ESP. THE FOLLOWING:

JOINING OF BEARERS - CLEAT OR NAIL PLATES

SEE N.Z.S. 3604 P 43

BRACING CONNECTIONS - USE: NAIL PLATES, NAILS

SEE N.Z.S. 3604 P 47

NAILING SCHEDULE (based on pp 99-103 N.Z.S. 3604)

SOE PLATE TO JACK STUDS 100x3.75 galv. 3 skew

JACK STUD TO BEARER 100x3.75 galv. 2 skew

4 skew at brace

JOIST TO BEARER 100x3.75 galv. 2 skew

BOUNDARY JOIST & BLOCKING TO JOIST 90x3.75 2

STEEL ANGLE BRACE TO STUDS 60x3.15 2

" " " " FURLINS 60x3.15 2

STEEL ANGLE BRACE TO PLATES 60x3.15 2

" " " " FURLINS ATTENDS 60x3.15 2

RAPTER TO RIDGE BOARD 100x3.75 2

90x3.75 3 skew

NOTE: GENERALLY 90mm NAILS MAY BE

USED IN PLACE OF 100mm NAILS

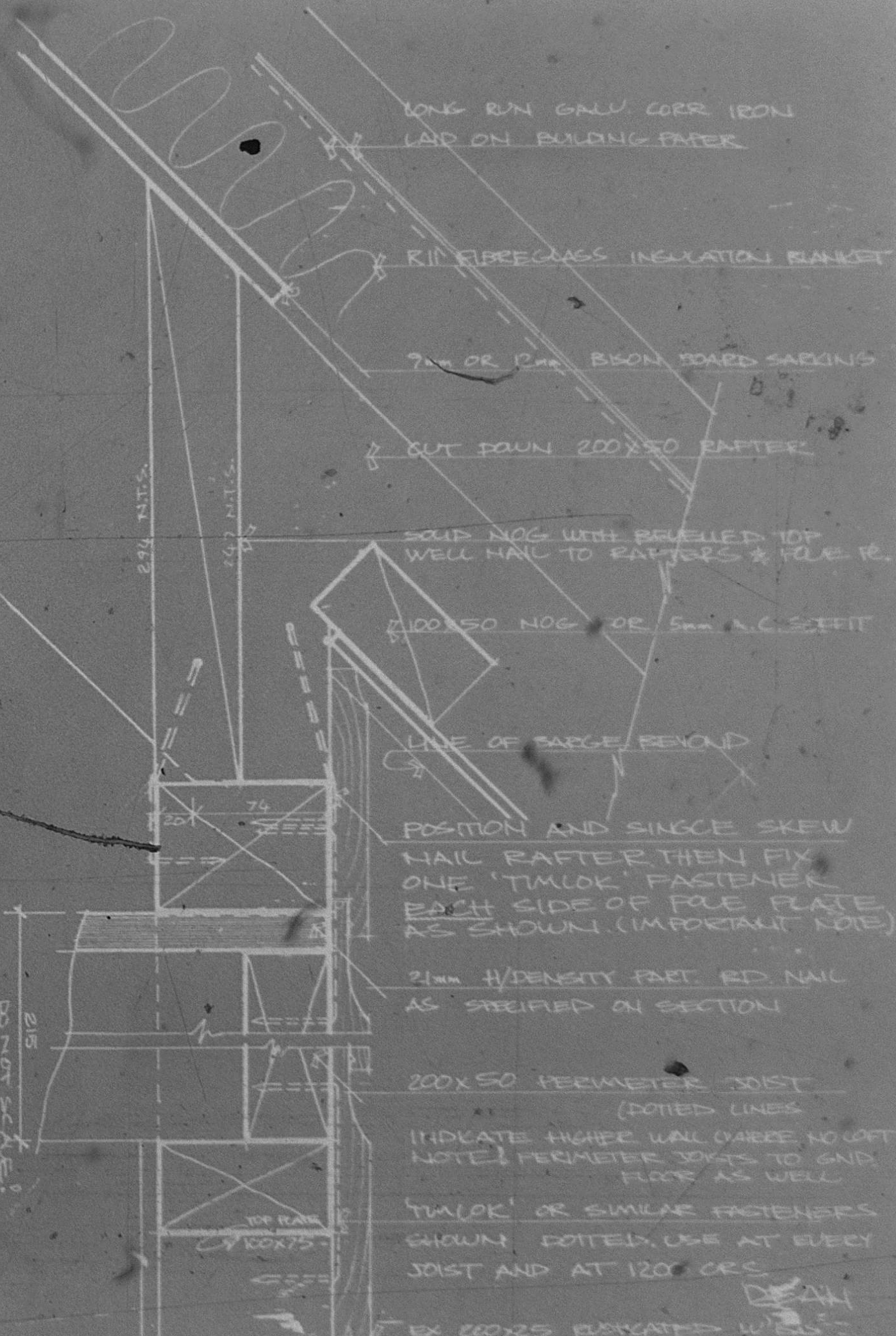
PROUTING

DEAN

ROOSTING HOMES

Forming Detail

DETAIL E



LONG RUN GALV. CORR IRON
Laid ON BUILDING PAPER

RIP FIBREGLASS INSULATION BLANKET

7mm OR 12mm BROWN BOARD SARKINS

CUT DOWN 200x50 RAFTER

SOLID NOG WITH BEVELLED TOP
WELL NAIL TO RAFTERS & FOLR PL.

200x50 NOG OR 5mm A.C. SHEET

LINE OF BARGE BEYOND

POSITION AND SINGLE SKEW
NAIL RAFTER THEN FIX
ONE 'TIMLOK' FASTENER
EACH SIDE OF FOLR PLATE
AS SHOWN (IMPORTANT NOTE)

21mm H/DENSITY PART. RD. NAIL
AS SPECIFIED ON SECTION

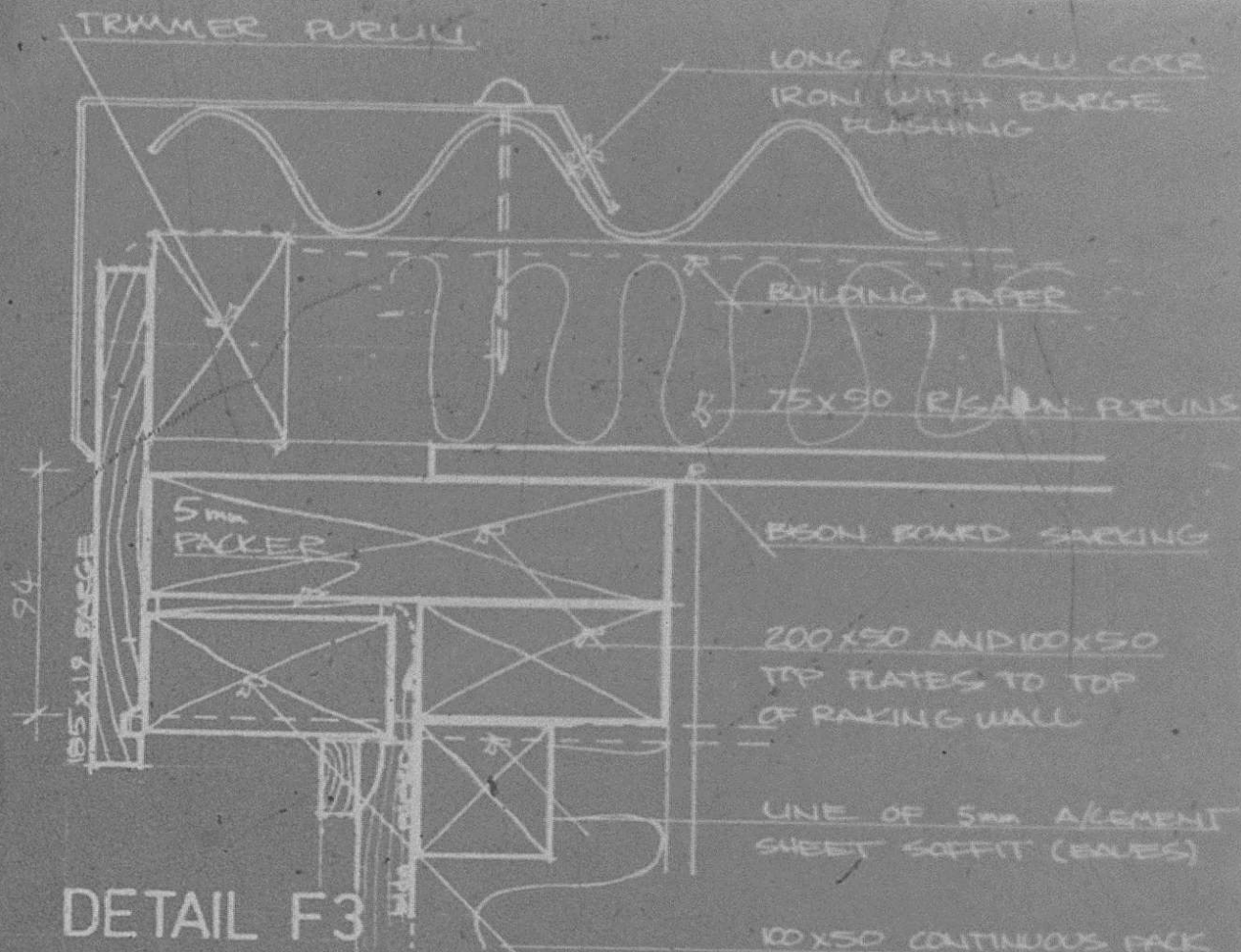
200x50 PERMETER JOIST
(DOTTED LINES)

INDICATE HIGHER WALL (WHERE NO GFT)
NOTE! PERMETER JOISTS TO GND.
FLOOR AS WELL

'TIMLOK' OR SIMILAR FASTENERS
SHOWN DOTTED, USE AT EVERY
JOIST AND AT 1200 CRS

EX 200x25 INDICATED IN E.D.

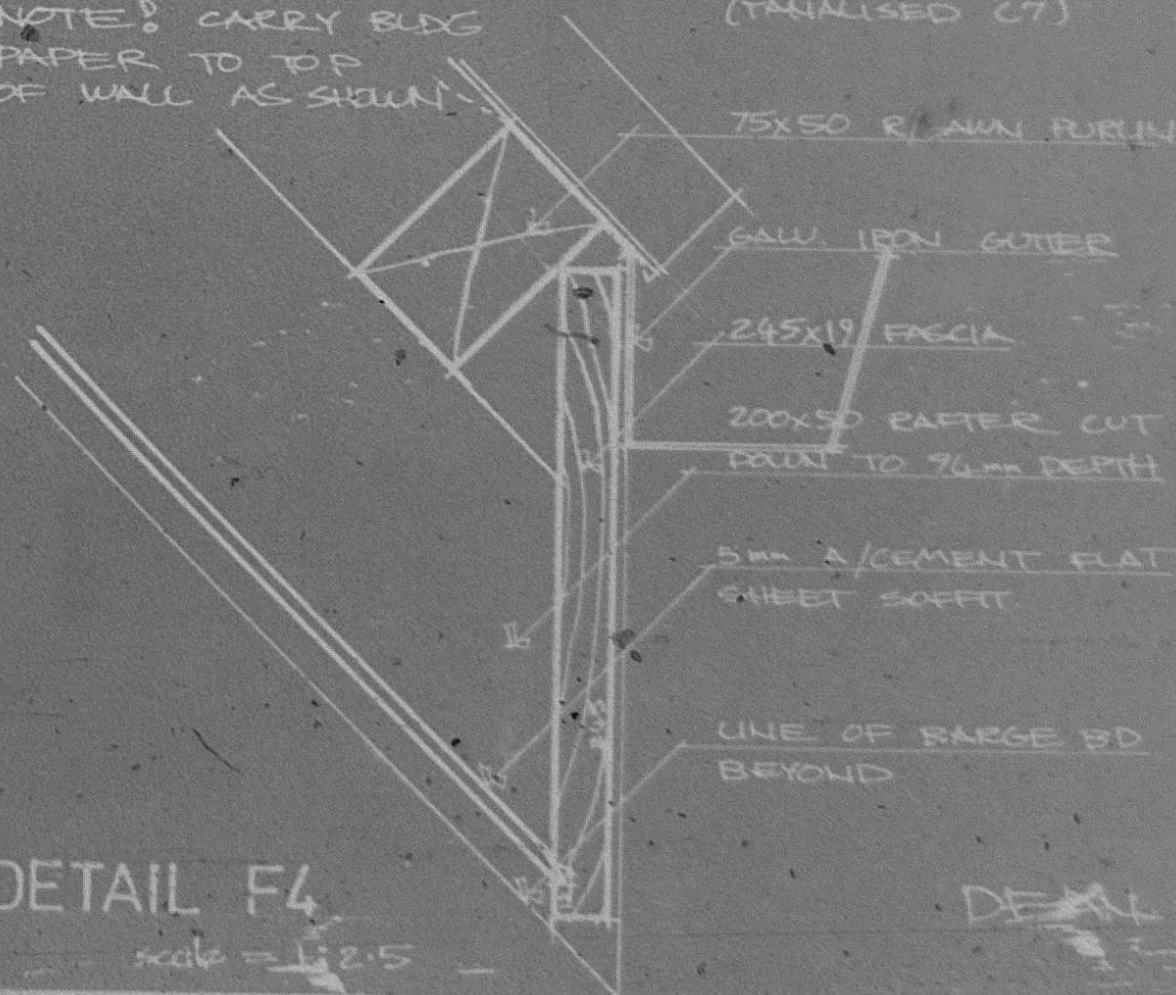
RUSTIC HOMES FRAMING details



DETAIL F3

scale = 1:25

NOTE: CARRY BLDG PAPER TO TOP OF WALL AS SHOWN.



DETAIL F4

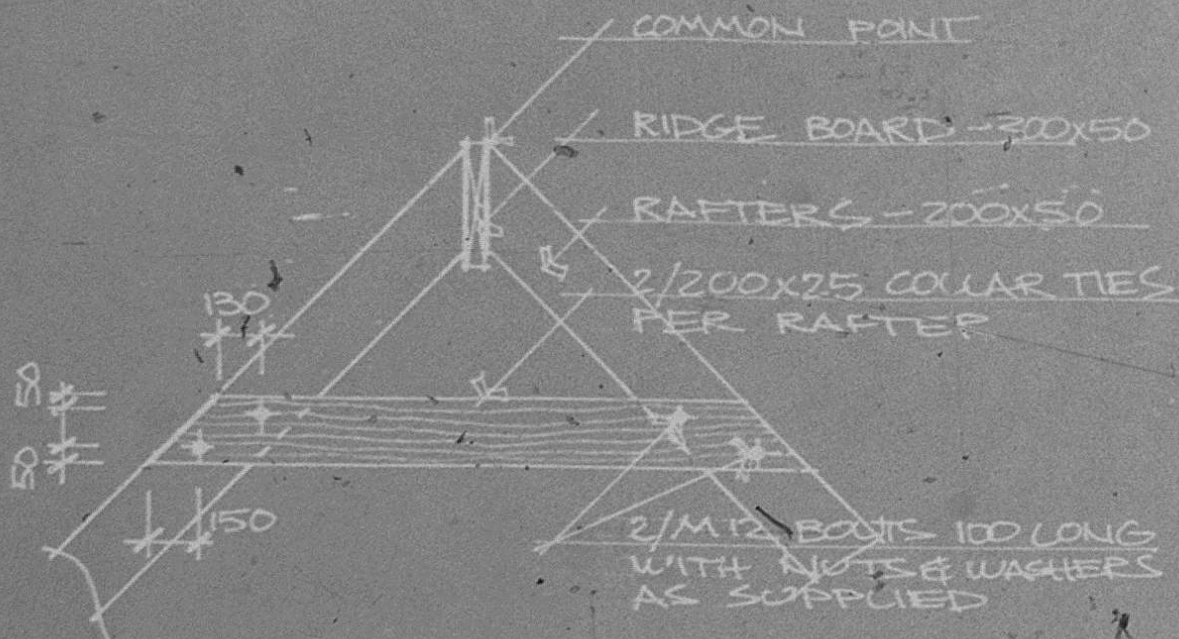
scale = 1:25

DETAIL

RUSTIC

HOMES

FRAMING details



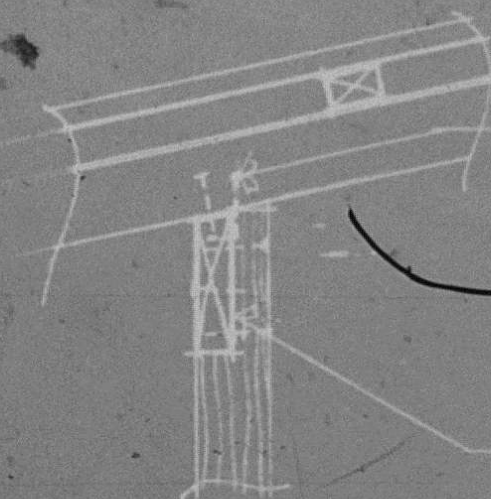
DETAIL F5

NOTE! NAIL COLLAR TIES IN POSITION. DRILL HOLES TO CRS AS SHOWN. BOLT WITH MR. BOLTS.

D

3

DEAN

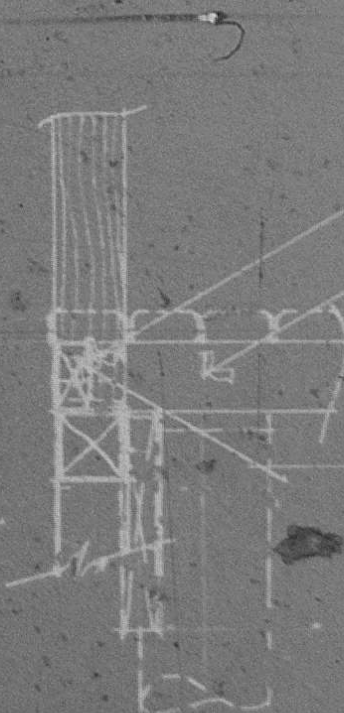


100X50 VERANDAH RAFTERS
FIX TO BEVELLED BEAM
WITH 1/2" TIMLOK FASTENER
AND 1/100mm GALV. NAIL OR
3/100mm GALV. NAILS

100X100 E/SAWN POST FIX
TO BEVELLED BEAM
WITH 3/100mm NAILS OR
4/90mm NAILS

DETAIL D2

scale 1:10



100X100 E/SAWN POST FIX
TO PERIMETER DECK JOIST
WITH 3/100mm NAILS

DECK JOIST & WELL NAIL
TO BEAMER AND PERIMETER
JOIST

PERIMETER DECK JOIST
NAIL TO BEAMER AT 200mm
CENTRES WITHIN 600mm OF POST
600mm CENTRES ELSEWHERE

NOTE!
PLACE A JOIST BOTH SIDES
OF VERANDAH POST FOR
POLE PLATFORMS AND ONE
SIDE FOR STANDARD SURFACE

DETAIL D3

scale 1:10

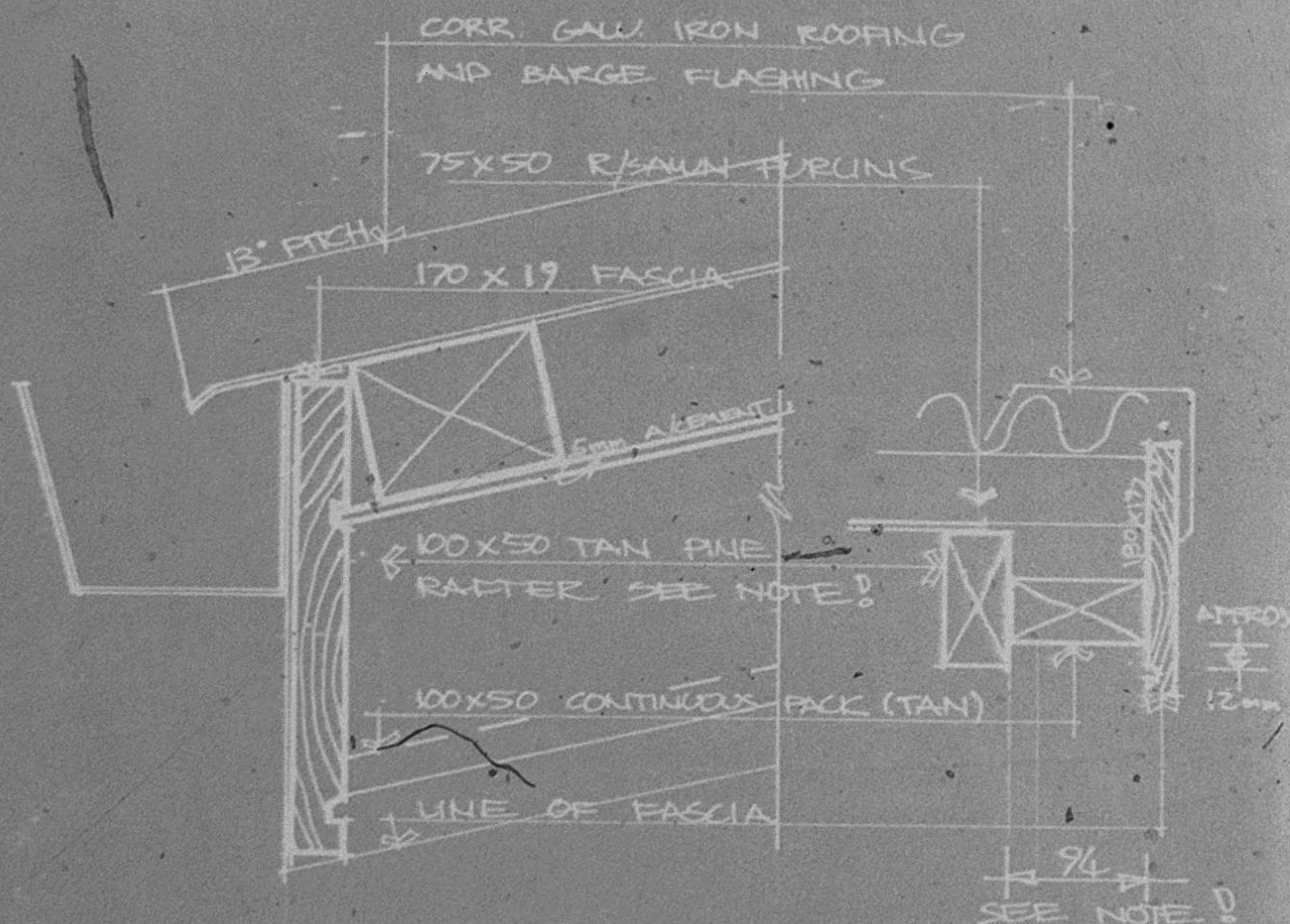
DEAN

RUSTIC

HOMES

Deck

details



DETAIL D1

NOTE! POSITION OUTSIDE RAPTER
94mm FROM FASCIA AS SHOWN

RUSTIC HOMES

timber schedule

CLIENT: DEAN.

DATE: 20/7/80 JOB No:

ITEM	SIZE	DESCRIPTION	REMARKS
<u>FLOOR</u>			
FLOOR JOISTS	200X50	JAN RAD. BT. Ggd.	600 MAX CRS (325 MAX SPAN)
SOUND BLOCKING	200X50	RAD. BT. Ggd.	
FLOORING	21 mm	H/DENSITY	PARTICLE BOARD (36X1.8M SHEETS)
BEAM	300X100	RAD. BT. Ggd.	4.3M MAX SPAN
POST	100X100	RAD. BT. Ggd.	
NOTE!	FLOORING	IS 'FINAFLOOR 600' WHICH IS DESIGNED TO SPAN FLOOR JOISTS AT 600 CRS	
<u>WALLS</u>			
PLATES	100X75	RAD. BT. Ggd.	600 MAX CRS 2 ROWS UP TO 2.4M SPAN UP TO 1.8M SPAN UP TO 1.2M SPAN RUSTICATED PROFILE
STUDS	100X50	RAD. BT. Ggd.	
NOGS	100X50	RAD. BT. Ggd.	
TRIMMERS	300X100	RAD. BT. Ggd.	
	150X100	RAD. BT. Ggd.	
	100X100	RAD. BT. Ggd.	NOTE! SOME NON-BEARING PARTITIONS ARE 75X50. STUD & NOG SPACINGS AS FOR 100X50 WALLS.
EXT. SHEATH.	200X25	RAD. TAN	
INT. SHEATH.			
POLE PLATE	100X75	RAD. BT. Ggd.	
<u>PORCH</u>			
BEARER	100X75	RAD. TAN Ggd.	300X50 FOR POLE SUB-FLOOR
STRINGER	100X50	RAD. TAN Ggd.	
JOISTS	100X50	RAD. TAN Ggd.	AT 600 MAX CRS
DECKING	100X40	RAD. TAN Ggd.	BEVELLED AND SHOT EDGED
KAPTEERS	100X50	RAD. TAN Ggd.	AT 900 MAX CRS
POSTS	100X100	RAD. TAN. R/S	
BEAM	200X50	RAD. TAN. R/S	BEVELLED TOP EDGE
HANDRAIL ETC.	EX 50	RAD. TAN. R/S	

RUSTIC HOMES

timber schedule

CLIENT: DEAN.

DATE: 20/7/80. JOB No:

ITEM	SIZE	DESCRIPTION	REMARKS
<u>SUB-FLOOR</u>			
(FILES)	200x200 x 600	CONC. BLKS ON 300x300x100 CONC. PAD.	
SOLE PLATE	100x50	RAD TAN Ggd.	
JACK STUDS	100x75	RAD TAN Ggd.	
BRACES	100x75	RAD TAN Ggd.	
BEAKERS	150x75	RAD TAN Ggd.	
(D.P.C.)	100mm	MAINTHOLD.	
<u>POLE SUB-FLOOR</u>			
POLES	175 DIA.	RAD. TAN (C2)	
BEARERS	300x50	RAD. TAN R/Sawn	DOUBLE, EXCEPT AT DECK
BRACES	200x50	RAD. TAN R/Sawn	REQD ONLY WHERE SHOWN ON DWGS.
<u>ROOF</u>			
PURLINS	75x50	RAD. BT. R/S.	0.75 METRES MAX CRS.
FASCIA.	EX 25	RAD TAN DRESS	GROOVED.
RAFTERS	200x50	RAD. BT. Ggd.	900 MAX CRS
COLLAR TIES	200x25	RAD. BT.	DOUBLE BOLTED BOTH ENDS
RIDGE BD.	300x50	RAD. BT. Ggd.	JOINED AT RAFTERS
SARKING	9 or 12mm	BEECH BOARD.	

A/2/4/2

21st. November, 1935

Mrs. H. H. H.
P.O. Box 20205,
Glen Eden
AUCKLAND

Dear Sir,

Re: Proposed residence for Ed D. & E. I. Dean, Stirling St.
To Archa

Your client Mrs. Dean called recently and paid the fees for the Building Permit, Building Research Levy etc. However, as yet we have not received any fees or application for plumbing and drainage. Your co-operation in this respect would be most appreciated.

Yours faithfully,

G. C. Reid
BUILDING INSPECTOR

21st. November, 1980

Rustic Homes,
P.O. Box 20283,
Glen Eden
AUCKLAND

Dear Sir,

Re: Proposed residence for Ed D. & E. I. Dean, Stirling St.
Tu Araha

Your client Mr. Dean called recently and paid the fees for the Building Permit, Building Research Levy etc. However, as yet we have not received any fees or application for plumbing and drainage. Your co-operation in this respect would be most appreciated.

Yours faithfully,

D. E. Reid
BUILDING INSPECTOR

SHEET B

1 Total B.U.'s Required	3 Wall Line	4	5 Wall Bracing Elements Provided	6	7	8		
	Label	Minimum B.U.'s Required	Label No.	Type	Rating B.U.'s/m	Length (m)	B.U.'s Provided	
ALONG	A	90	①	1	50	1.7	85	
			②	1	50	3.5	175	
			Sub-total					260
	B	70	③	4	74	3.0	222	
			④		74	3.0	222	
			Sub-total					444
	C	90	⑤		50	2.2	110	
			⑥	1	50	2.2	110	
			Sub-total					220
	D							
Sub-total								
798								
TOTAL		TOTAL					924 ✓	
ACROSS	L	60	⑦	10	83	5.8	481	
			Sub-total					481
			M	70	⑧	2	74	2.4
	⑨	10			83	0.9	75	
	⑩	10			83	0.9	75	
	⑪	2			74	2.2	163	
	N	60	⑫	10	83	0.9	75	
			⑬	10	83	1.8	150	
			Sub-total					225
	O							
Sub-total								
P								
		Sub-total						
1197								
TOTAL		TOTAL					1197 ✓	

SHEET A

(CIRCLE whichever is applicable)

NAME: MR & MRS DEAN

ADDRESS: STIRLING ROAD
TE ARHA

STOREY: Single or Uppermost
Lower of two or middle of three
Lower of three

ROOF TYPE: Light / Heavy

ROOF PITCH: 0° - 25° / 26° - 45°

WIND AREA: High / Medium / Low

W = 133 B.U.'s/m

EARTHQUAKE ZONE: A / B / C

E = 6 B.U.'s/m²

ROOF OR BUILDING LENGTH

BL = 9 m

ROOF OR BUILDING WIDTH

BW = 6 m

GROSS ROOF OR BUILDING PLAN AREA

GPA = 54 m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS

E x GPA = 6 x 54 = 324 B.U.'s

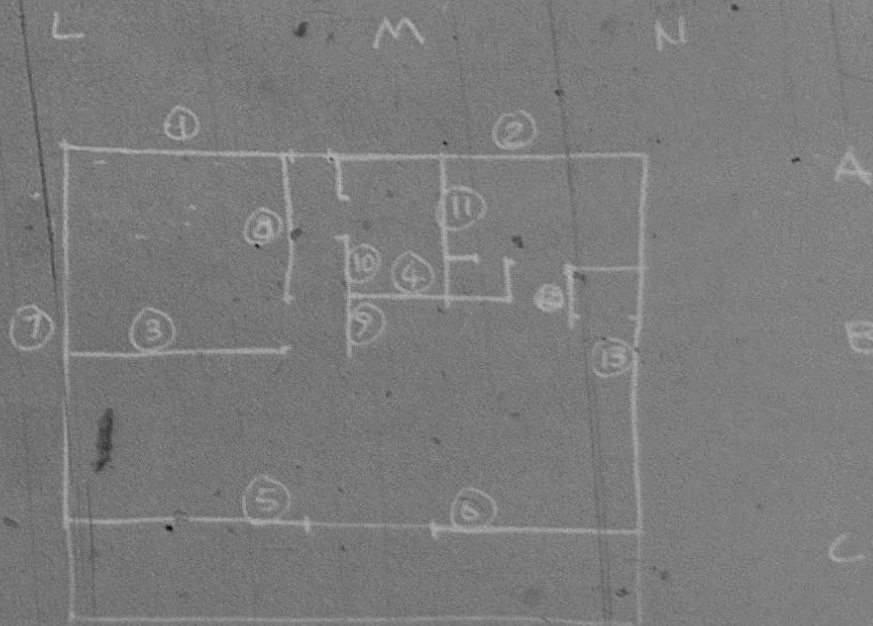
WIND: B.U.'s ALONG

W x BW = 133 x 6 = 798 B.U.'s

WIND: B.U.'s ACROSS

W x BL = 133 x 9 = 1197 B.U.'s

SKETCH PLAN (external and internal walls) :



Farley & Associates

Registered Consulting Engineers

Soils
Civil
Structural

122 Rialto Avenue, Henderson,
P.O. Box 21-385, Ph. 66-693 Han.

CLIENT : Rustic Homes Limited,
Glen Eden, Auckland, 7.

CALCULATIONS PREPARED FOR :

Dean - Te Aroha. Job No:

DATED : 28th July 1980

NZS 4203 '76
REF : NZS 1906 Chapt. 9.1
Walford & Hellowell
(TRADA)

① Pole Platform

a) Beams

Use a basic pole spacing of say 2.5×2.75

i) Exterior loads

$$(DL+R) \text{ Roof @ } 0.5 \text{ kN/m}^2 = (0.5 \times 3) = 1.5 \text{ kN/m}$$

$$(DL+R) \text{ floors (x2) @ } 1.8 \text{ kN/m}^2 = 2(1.8 \times 3) = 5.4$$

$$\underline{6.9 \text{ kN/m}}$$

assume continuity

BM

$$\left(\frac{6.9 \times 2.9^2}{8} \right) \text{ kNm}$$

$$6.76 \text{ kNm}$$

$$\text{So } Z_{min} = \left(\frac{6.76 \times 10^6}{6.95} \right) \text{ mm}^3 = 9.81 \times 10^5 \text{ mm}^3$$

Exterior

Beams

2 - ex 300 x 50

radiate

So use 2 - ex 300 x 50 radi pine.

(ii) Interior loads

$$(DL+R) \text{ floors (x2) @ } 1.8 \text{ kN/m}^2 = 2(1.8 \times 2.8) = 10.08 \text{ kN/m}$$

$$\text{So BM} = \left(\frac{10.08 \times 2.9^2}{8} \right) \text{ kNm}$$

$$9.85 \text{ kNm}$$

$$\text{So } Z_{min} = \left(\frac{9.85 \times 10^6}{6.95} \right) \text{ mm}^3 = 1.42 \times 10^6 \text{ mm}^3$$

Internal
Beams

So use 2 - 300 x 50 rough sawn pine

2 - rough sawn 300 x 50

radiate

(b) Poles.

Max load / pole = $(10.09 \times 2.8) \text{ kN} = 28.22 \text{ kN}$
(Intensity)

check pole dia.

(i) Seismic loads.

$C_d = C_1 C_2$ (Zone B) where $C_1 = 0.105$

$I = 10, S_M = 2.0, S_L = 1.0$

$C = 0.25$

$U = 0.85 C W_t = 0.2 W_t$

$U_t = D_1 \frac{W_t}{3} = 12.5 \text{ kN}$

$\therefore U = 2.51 \text{ kN/pole}$

(ii) Wind loads

$U_s = S_1 U$ where $S_1 = 1.0, S_2 = 0.65, U = 40 \text{ m/s}$

$\therefore U_s = 26 \text{ m/s}$

$\therefore q = 0.414 \text{ kPa}$

$C_{pe} \pm C_{pi} = 1.5$ Area exposed = 54 m^2

therefore 13.5 kN

this fence is taken over 12 principal poles.

10 2.78 m pole.

∴ wind load governs.

approx height 1.0 m above ground level.

$$\text{Embedment depth} = \frac{A}{2} \left(1 + \sqrt{1 + \frac{4.365}{A}} \right)$$

$$A = \frac{2.34 P}{S. b.} \quad \frac{2.34 \times 28}{75 \times 175} = 0.431 \text{ say } 0.5$$

$$\text{depth} = \left(\frac{0.5}{2} \right) \left(1 + \sqrt{1 + \frac{4.365}{0.5}} \right) \text{ metres}$$

$$= 1.03 \text{ metres}$$

Embedment depth due to vertical loads

$$R = 28.22 \text{ kN}$$

$$\therefore \text{depth (into firm natural soil)} = 1.73 \text{ metres}$$

depth of
embedment
into natural soil

So depths in summary (ref to soil report - dated 2003)

$$\text{Bore ①} = 3.4^{\circ}$$

$$\text{Bore ②} = 4.0^{\circ}$$

$$\text{Bore ③} = 2.3^{\circ}$$

$$\text{Bore ④} = 1.8^{\circ}$$

No bracing required in
Sub floor.

Pole ①

Using
710

175 mm poles - min set of 50 in one floor zone
with galv tanky dipping 1.5° - weight of 300 kg

RUSTIC HOMES

'IN CONTRACT' SPECIFICATION

FOR ERECTION OF COTTAGE

FOR:- MR and MRS DEAN.

AT:- STIRLING ROAD.
TE AROHA.

I N D E X

EXCAVATION

CONCRETE WORK

CARPENTRY

ROOF WORK

EXCAVATION

CLEARING OF SITE: Clear site of all vegetation, rubbish, etc., and any other material required to be moved for the erection of building. This part of the excavation to be arranged by client.

EXCAVATION: Excavate for all site levelling, footings, poles, blocks, walls, etc. to the required depths and levels required for the erection of the building. Refer to the 'Cross Section' and 'Site Plan' of the working drawings for these required depths and levels. The contractor shall advise the employer of any excavation extras involved prior to the commencement of the contract. See under 'Alteration and Extras'.

It is important that the excavations shall be clean cut and kept free of water and all loose material prior to the pouring of concrete. The bottom face of all footings shall be at least 300 mm below permanent ground level but always down to firm bearing. 1:6 concrete mix may be used between bottom of footing and firm bearing.

SAFE SLOPES:

SAFE SLOPE			
GROUND	BULKING	CUT FACE	LOOSE FILL
Sand	5%	45° to 60°	20° to 40°
Soil	10% to 30%	45° to 60°	30°
Clay	up to 70%	45° to 70°	30°
Shingle	15%	45°	40°

BACK FILLING: Return and thoroughly consolidate selected excavated material around footings, pile blocks and backs of walls, etc., up to the required level in layers not exceeding 300 mm thick.

CONCRETE WORK

GENERAL: Concrete shall be site mixed or at the approval of the employer shall be ready mixed.

MATERIALS:

Cement: All cement shall be Portland cement to comply with the current N.Z.S.S. 43. Properly stored so that it is adequately protected from dampness at all times. Lumpy cement shall not be used.

Aggregates: 'Builders Mix' as supplied by employer. In any case the 'builders mix' shall be an 'all in' crushed stone aggregate clean and free from vegetable and saline matter, earthy or adherent coatings.

Water: Water shall be free from salt, vegetable or organic matter, in solution or suspension. Water from local authority mains is acceptable.

MIXING AND PROPORTIONS: All materials are to be measured by volume.

Concrete shall be mixed in the proportion of 1 part cement to 5 parts builders mix. Each cubic metre shall contain a minimum of 300 kg of cement.

Mixing shall be done by a power driven mixer and shall continue until the mix is of a uniform colour and consistency.

STRENGTH: Concrete shall have a minimum 28 day crushing strength of 20 M.Pa.

PLACING:- All concrete shall be placed within 15 minutes of adding water to the mix.

No concrete shall be placed under unfavourable weather conditions. Excavations and any formwork shall be thoroughly free of water and all fallen material before placing of concrete.

Convey and deposit so that no separation of ingredients takes place. Concrete shall not be dropped from a height of more than 1500 except where a bremee or similar system is used.

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FIXINGS: Any fixings or hold down bolts shall be as shown on drawings. The spacing and sizes of such fixings shall be according to N.Z.S.S. 3604 and the working drawings. Always provide Malthoid d.p.c. between timber and concrete surfaces.

PILES: Piles to conform to N.Z.S.S. 3604 pages 32 to 34. Generally they shall be pre-cast concrete 200 square x 600 long set at least 300 mm into solid ground and bedded in or on concrete as shown on the working drawings. Piles shall have purpose made hole at one end to accommodate No. 8 gauge tie wire. All piles over 750 mm long shall be reinforced with one 10 mm diameter rod hooked at both ends and running the length of the pile.

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PROTECTION OF TIMBER FROM DECAY AND INSECT ATTACK:

Timber shall be as supplied by the employer and in any case all timber shall be treated to the N.Z.T.P.A. Commodity specification for its particular usage. Timber treatment shall be carried out using an approved process and in a plant licensed by the N.Z. Timber Preservation Authority.

Checking of timber shall be in accordance with N.Z.S.S. 3604 pp 53 & 59. Site damaged timber that impairs the structural integrity or appearance of the building shall under no circumstances be used.

INSULATION: Shall be strictly in accordance with drawings. Lay well lapped perforated foil insulation over floor joists; allow a sag of approximately 100 mm. Lay to external face of wall in all cases.

Lay 75 mm fibreglass insulation blankets between purlins, where required by contract. Lay to external face of wall in all cases. Protect immediately with building paper.

BUILDING PAPER AND D.P.C.: Lay building paper across fall of roof. Lay from bottom of roof and lap each length over previously laid length. It is most important that the bottom edge of the bottom length of building paper laps over the fascia into gutter.

Use 3 ply malthoid D.P.C. in every case where timber is adjacent to concrete or concrete block.

BUILDERS HARDWARE: It is most important that the Contractor uses the hardware supplied in accordance with the drawings - especially the detail drawings. In particular the following shall be noted:-

- (1) Fasten the bottom plates of all external 100 x 50 framing to perimeter joist below using 'Timlok' 'U' nails at 1200 centres, or 2/100 mm nails at 600 centres. Fasten the bottom plates of all internal 100 x 50 framing to floor below using 100 mm nails at 2/600 centres for braced partitions and 1/600 for non-braced partitions.
- (2) Timlok 'U' and 'Z' nails shall be used, as per drawings, to fasten top plates to structure below and to fasten rafters to plates.

BUILDERS HARDWARE (Continued):

- (3) Fasten porch rafters to cottage according to detail drawing.
 - (a) Fasten verandah posts to deck with 3/100 mm nails or as detailed.
 - (b) Fasten verandah rafters to verandah beam with 3/100 mm skew nails or 1/ Timlok fastener, or as detailed.
- (4) Strap nails shall be used to fasten all adjacent top plates.
- (5) Bolts supplied must be used and not thrown away and exchanged for nails.
- (6) Wire bearers to piles using a minimum of four staples per pile.
- (7) Refer to permit drawings for any special wiring, nailing or bolting details. These take precedence over standard practice and these specifications and must be adhered to.
- (8) In all cases galvanised fastenings and nails must only be used for external application.
- (9) Well nail all wall frames together. Braced partitions and external corners shall be ~~also~~ nailed at 450 centres max. For continuous stud gable end wall the above to apply and fix 2 nail straps, 1 inside and 1 outside near the top, at each end of the wall.
- (10) Contractor to take special note and adhere to the fixing notes as supplied with the drawing details.

EXTERNAL CLADDINGS: Weatherboards to be tanalised rusticated as supplied by employer. Place the bottom edge of the first board approximately 25 mm below the bottom of the bearers. Double nail weatherboards to each stud. Cut cleanly around openings and at gable end as required. Each length of weatherboard shall be nailed to at least 2 studs. Join only on studs using splay cut, and the end of each length of weatherboard must be double nailed. ~~Use 60mm~~
~~FLAT HEADS SUPPLIED, DO NOT USE NAIL GUNS.~~

Continue weatherboards well in behind window facings to allow adequate fixing of jamb flashings.

Set all w/boards from average of door & window head height

Flash and fix at corners as shown in detail. Continue box ends to bottom of weatherboards.

NOTE: PLACE EACH WINDOW IN OPENING AND
SCRIBE BOTH SIDES FOR JAMB FLASHINGS.

FASCIAS AND BARGE BOARDS: Fascias and barges to be pre-primed and grooved as supplied by employer. Line grooves of boards with verandah and cottage soffits strictly in accordance with the detail drawings. Double nail fascias to rafter ends and well nail barge boards to framing. Cut the top ends of barge boards neatly around finnules. (Alternatively contractor may elect to fix finnules on top of barge boards.)

Join verandah barge to cottage barge by one vertical cut to verandah barge and a vertical and bottom cut to cottage barge. Butt tightly.

SOFFITS: Soffits to eaves and verandah to be hardiflex as supplied by employer. Sheet sizes are to suit framing. Select correct sheet sizes. Nail along edges with 'fibrolite' clouts as supplied. Fit one edge securely into fascia groove. Refer to detail sheet for position of verandah soffit in relation to fascia groove.

Soffits to barges to be tanalised 100 x 50 as supplied. Well nail to wall framing. Pack as required to line with eaves soffit. (PACKING SUPPLIED).

WINDOW AND DOOR JOINERY: External joinery to be aluminium or timber as supplied by employer. Fit joinery using 'Fox wedges' as supplied according to best trade practice. Fit head flashings supplied to all windows and doors and jamb flashings supplied to all windows and doors directly exposed to weather. Contractor to note: where specifically required, scribes are to be used at jambs. Continue head flashings over jamb flashings. Saw cut for jamb flashing to be exact depth of short leg of jamb flashing (or alternatively 1 mm deeper cut dressed with sealant). Continue jamb flashings past last scollop in weatherboards before bottom of window. In the case of rebated jamb liners press window well back into wall, to allow easy fitting of 'Gibraltar Board' into rebate.

CONCRETE BLOCK SUBFLOOR: Follow working drawings - especially footing plan and cross section - explicitly for pile layout and type and bracing. Set level in rows or part rows so that the top of the pile is between 150 mm and 300 mm above finished ground level. *Pile bearing is 300 mm minimum or down to solid bearing. Concrete to be as under 'Concrete Work'. * 450 mm MIN RE BAKED PILE.

Set bearers to level with jack studs and packers as indicated on drawings. If rough sawn bearers are used pack beneath bearer for any variation in timber so as to maintain level building platform. Consult with client on the level of the building relative to finished ground level.

CONCRETE BLOCK SUBFLOOR (Continued):

Generally the highest point of the site is taken as the governing factor.

For fixing of bearers and braces see under 'Builders Hardware' and in any case fixings must comply with drawing details and/or N.Z.S.S. 3604.

POLE SUBFLOOR: Poles and bearers finished and tanalised to C17, and C3 retention as supplied. Follow pole set out shown on drawing. Poles to be driven or concrete encased to details supplied. Attach bearers to poles with 2/M 19 hot dip galvanised bolts with washers and nuts all as supplied. *ALL TO DETAIL* Well grease all galvanised iron hardware before use. Scarf join bearers as required to ensure that the join is at least 300 mm long and that the middle cut is slightly sloping. Leave bearers over long and ensure that the bearers form a level platform. *Leave poles oversize so that they are higher than the height mark indicated on profile.* Cut pole tops to level at the completion of pole placing operations.
NOTE: Poles are tanalised to C25 RETENTION.

FLOOR JOISTS: Sizes and types as supplied. Use double joists under external walls and perimeter joists as supplied. Double skew nail joists to bearers. Use full depth solid blockings supplied where spans are over 2.5 metres. Also use full depth solid blockings under *and over* braced partitions.

FLOOR JOISTS AT LOFT: Well nail outside joists to wall framing and perimeter joists to main joists. Use full depth solid blockings as supplied for spans of over 2.5 metres and over braced partitions.

PARTICLE BOARD: 21 mm high density flooring grade as supplied. Fix according to note shown on cross section. Fixings shall be galvanised nails as supplied and shall be no closer than 10 mm from edges of the sheets. Nail at 150 centres all along edges of sheets and at 300 centres along all intermediate supports. Sheets shall be set square and tightly butted and fixed along all edges using floor nogs supplied.

WALLS: Shall be timber framed pre-cut and pre-nailed as supplied. Erect, secure and fix as under 'Workmanship' and 'Builders Hardware'. It is most important that all braces for interior and exterior walls be nailed in position in sawcuts provided. For jobs where the employer supplies pre-cut only then the contractor will have to brace the external walls according to the working drawings and the internal walls to the satisfaction of the Local Authority building inspector.

SARKING: Use 9 mm or 12 mm bison board in sheet sizes as supplied. Lay out sheets according to drawing and fix with galvanised nails at 150 centres at sheet edges and 300 centres at intermediate supports. Fix up through purlin at join that is at right angles to rafters.

NAIL GUNS: USE OF NAIL GUNS SHALL ONLY BE ALLOWED ON STRUCTURAL FRAMING AND PARTICLE BOARD FIXING. UNDER NO CIRCUMSTANCES SHALL NAIL GUNS BE USED ON ANY FINISHING LINES WITHOUT THE PRIOR WRITTEN CONSENT OF RUSTIC HOMES.

SHORT DRIVEN (OR PLACED) POLE SUBFLOOR:
AS FOR 'POLE SUBFLOOR' ABOVE BUT WIRE FIXING OF BEARERS TO TOPS OF POLES STRICTLY TO DETAILS SUPPLIED WITH DOUBLED BEARERS LAPP JOINED OVER POLES.

ROOF WORK

GENERAL: All roofing shall be carried out in a true and workmanlike manner, and in strict accordance with the drawings and specifications, so that the roof fabric is absolutely waterproof in every respect. All fixings to be made through the high points of the corrugations.

MATERIALS: Hot dip galvanised corrugated roofing and flashings as supplied.

CORRUGATED GALVANISED IRON: Purlins to be spaced at 750 centres max. for 26 s.w.g. roofing. Building paper to be laid under iron as specified under 'Carpentry'.

Preferably join so that exposed edge of sheet is on the leeward side. Fix with lead headed galvanised nails as supplied. Fix at not more than 100 mm from the bottom edge of each sheet. Fix at sheet edges and along purlins at not more than 300 mm max. centres. FIX BOTH EDGES AND TOPS OF SHEETS EVERY SECOND CORRUGATION

RIDGE FLASHING: Dress lead edging down into main roof corrugations and fix along flashing edges at 200 mm centres. Lap ridge flashings over barge flashings and lap them 200 mm on each other.

BARGE FLASHING: Lap 200 mm and fix at 400 centres.

VERANDAH ROOF TO MAIN ROOF: Prepare verandah roofing sheets at top end by folding hollows up. Use the lead edged apron flashing supplied to waterproof this inter-section of the roof.

GUTTER: Use P.V.C. gutter, jointing compound and fittings supplied. Fix gutter brackets at 600 centres. FIX FIRST AND LAST BRKTS SO AS TO ALLOW A MIN. FALL OF 8mm IN EVERY 10 M. USE A STRING LINE TO ESTABLISH THE HEIGHT OF INTERMEDIATE BRKTS. DO NOT SOLVENT WELD EXPANSION OUTLETS.

GENERALLY FOLLOW MANUFACTURERS INSTRUCTIONS SUPPLIED