

SOUTH DUBLIN COUNTY COUNCIL
COMHAIRLE CHONTAE ÁTHA CLIATH THEAS

F

Bosca 4122,
Lár an Bhaile, Tamhlacht,
Baile Átha Cliath 24.

Telefon: 01-462 0000
Facs: 01-462 0104



PLANNING
DEPARTMENT
P.O. Box 4122,
Town Centre, Tallaght,
Dublin 24.

Telephone: 01-462 0000
Fax: 01-462 0104

Date: 10th June 1997

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1993

Register Reference : 91A/0961/EP

Development : Dwelling and access drive & septic tank

Location : Site No 10, Redgap, Rathcoole, Co. Dublin.

Applicant : Patrick Becton,

App. Type : Further Extension of Duration of Perm

Date Recd : 26th May 1997

Dear Sir/Madam,

Your application in relation to the above was submitted with a fee of £30.00 .

On examination of the plans submitted it would appear that the appropriate amount should be £40.00.

I should be obliged if you would submit the balance of £10.00 as soon as possible as a decision cannot be made on this application until the correct fee is received.

Yours faithfully

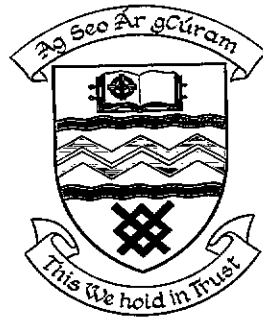

.....
for SENIOR ADMINISTRATIVE OFFICER

Patrick Becton,
18 Greenogue Drive,
Rathcoole,
Co. Dublin.

**SOUTH DUBLIN COUNTY COUNCIL
COMHAIRLE CHONTAE ÁTHA CLIATH THEAS**

Bosca 4122,
Lár an Bhaile, Tamhlacht,
Baile Átha Cliath 24.

Telefon: 01-462 0000
Facs: 01-462 0104



PLANNING
DEPARTMENT
P.O. Box 4122,
Town Centre, Tallaght,
Dublin 24.

Telephone: 01-462 0000
Fax: 01-462 0104

Date : 03/06/97

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963-1993

Register Reference : 91A/0961/EP
Development : Dwelling and access drive & septic tank
Location : Site No 10, Redgap, Rathcoole, Co. Dublin.
Applicant : Patrick Becton,
18 Greenogue Drive, Rathcoole, Co. Dublin.
App. Type : Further Extension of Duration of Perm

Dear Sir/Madam,

With reference to the above, I acknowledge receipt of your application received on 26th May 1997.

Yours faithfully,

M. Keely
.....
for Senior Administrative Officer

Patrick Becton,
18 Greenogue Drive,
Rathcoole,
Co. Dublin.

91A/0961/EP

COMHAIRLE CHONTAE ATHA CLIATH THEAS
(SOUTH DUBLIN COUNTY COUNCIL)

P.O. BOX 4122
South Dublin County Council
TOWN CENTRE
Planning Dept. Registry Section
TALLAGHT,
DUBLIN 24.
TEL: 462 0000
APPLICATION RECEIVED
REG. No. 91A/0961/EP

SOUTH DUBLIN
COUNTY COUNCIL
26 MAY 1997
RECEIVED
PLANNING DEPT.

APPLICATION FOR EXTENSION OF PERMISSION

1. NAME AND ADDRESS OF APPLICANT FOR EXTENSION OF PERMISSION :
2. LOCATION OF STRUCTURE OR LAND TO WHICH THE PERMISSION RELATES :
3. THE DEVELOPMENT TO WHICH THE PERMISSION RELATES :
4. PARTICULARS OF THE INTEREST HELD IN THE STRUCTURE OR LAND BY THE APPLICANT :
5. PLANNING REFERENCE NUMBER AND DATE OF PERMISSION SOUGHT TO BE EXTENDED :
6. IN THE CASE OF AN OUTLINE PERMISSION THE PLANNING REFERENCE NUMBER OF ANY SUBSEQUENT APPROVAL OR APPROVALS :
7. DATE PERMISSION WILL CEASE OR HAS CEASED TO HAVE EFFECT :
8. DATE DEVELOPMENT COMMENCED :
9. PARTICULARS OF THE SUBSTANTIAL WORKS CARRIED OUT BEFORE THE PERMISSION EXPIRED :
10. PERIOD BY WHICH THE PERMISSION IS SOUGHT TO BE EXTENDED :
11. DATE ON WHICH THE DEVELOPMENT IS EXPECTED TO BE COMPLETED :
12. AMOUNT OF FEE ENCLOSED.
NOTE: FEE PAYABLE IS £30.00.
13. SIGNATURE OF APPLICANT (OR HIS AGENT) :
14. ADDRESS TO WHICH NOTIFICATIONS SHOULD BE SENT :

PATRICK BECTON
18 GREENOGUE DRIVE RATHCOOLE
CODUBLIN.

SFE NO 10
REDGAR RATHCOOLE, CODUBLIN

Dwelling and access
sewer & septic tank.

Owner
91A/0961
14.10.1991

13.10.1996.

15th Sept 1996

House constructed
to roof level.

31.12.1997

Sept 1997

£30.00

Patrick Becton.
18 GREENOGUE DRIVE,
RATHCOOLE,
CODUBLIN.

5.00

DUBLIN COUNTY COUNCIL

GRANT OF PERMISSION

Tel. 724755 (ext. 262/264)

GRANT ORDER NO AND DATE

PLANNING DEPARTMENT,
BLOCK 2,
IRISH LIFE CENTRE,
LR. ABBEY STREET,
DUBLIN 1.

P 758 56 / 91 18 DEC 1991

Notification of Grant of Permission/

Local Government (Planning and Development) Acts, 1963-1983

To: Mr. P. Becton, 18, Greenogue Park, Rathcoole, Co. Dublin

Decision Order No. P/4682/91 dated 14.10.1991

Number and Date of the proposed development: 91A/0961

Register Reference No. and date of commencement of development: 16.08.1991

Planning Control No.

Application Received on 16.08.1991

Applicant: Mr. P. Becton

Financial contribution in the sum of £375.00 to be made to Dublin County Council towards the cost of water

A PERMISSION/..... has been granted for the development described below subject to the undermentioned conditions.

relocation of septic tank, dwelling and access drive and change of front elevation treatment to approved house at Site no. 10 Redgap, Rathcoole.

CONDITIONS	REASONS FOR CONDITIONS
1. The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application, save as may be required by the other conditions attached hereto.	1. To ensure that the development shall be in accordance with the permission and that effective control be maintained.
2. That before development commences, approval under the Building Bye-Laws be obtained, and all conditions of that approval be observed in the development.	2. In order to comply with the Sanitary Services Acts, 1878-1964.
3. That the proposed house be used as a single dwelling unit.	3. To prevent unauthorised development.
4. That the proposed arrangements for the septic tank drainage system comply with I.I.R.S. SR6 and the requirements of the Senior Environmental Health Officer, Eastern Health Board.	4. In the interest of the proper planning and development of the area.

South Dublin County Council
Planning Dept. Registry Section

26 MAY 1997

APPLICATION RECEIVED

REG. No. 91A/0961/EP

Signed on behalf of the Dublin County Council

[Signature]
For Principal Officer

Date: 18 DEC 1991

Approval of the Council under Building Bye-Laws must be obtained before the development is commenced and the terms of approval must be complied with in the carrying out of the work.

5. That evidence of an adequate and potable water supply be submitted to and agreed with the Planning Authority, prior to commencement of development.

5. In the interest of the proper planning and development of the area.

6. That satisfactory proposals for landscaping and boundary treatment for the site of the proposed dwelling, to be submitted to and agreed with the Planning Authority prior to commencement of development.

6. In the interest of visual amenity.

7. In the event of a connection being made to the public water supply, a financial contribution in the sum of £375. to be made to Dublin County Council towards the cost of water supply.

7. In the interest of the proper planning and development of the area.

A PERMISSION TO DEVELOP THE SITE DESCRIBED BELOW SUBJECT TO THE UNDERTAKINGS AND CONDITIONS SET OUT IN THESE CONDITIONS. A PERMITS OFFICE, DUBLIN COUNTY COUNCIL, 18 DEC 1991. The applicant is required to relocate the dwelling and access drive and change of front elevation treatment to approved house at site no. 10 Regent, Rathcoole.



6 MAY 1997

APPLICATION RECEIVED

REG. No. 91A/96/1EP

ALL Applications MUST be forwarded to TALLAGHT.

COMMENCEMENT NOTICE

NOTICE OF COMMENCEMENT UNDER PART II OF THE BUILDING CONTROL REGULATIONS, 1991

1. COMMENCEMENT DATE of works or the making of material change of use 30.6.96

2. LOCATION - particulars of the location of the building to which the notice relates and the use or intended use of the building
SITE No 10.
REDEAP, RATHCOOLE Co. Dublin.

3. DESCRIPTION of proposed works or of material change of use
1 DWELLING HOUSE WITH GARAGE.

4. OWNER (of the building or works to which the notice relates)
Name PATRICK & PATRICKIA BECTON
Address 18 GREENOQUE DRIVE, Tel. No. 01-4588007
RATHCOOLE, Co. Dublin. Fax. No. 01-4588011

5. BUILDER (person who is to carry out works to which the notice relates)
Name JOE MURPHY
Address 23 GREENOQUE DRIVE, Tel. No. 01-4589513
RATHCOOLE, Co. Dublin. Fax. No. _____

6. DESIGNER - person or persons from whom such plans, documents and information as may be necessary to show that the building or works will comply with the requirements of the Building Regulations may be obtained
Name HAYES ESTATES
Address 34 PRIORS LANE ROAD, Tel. No. 2983618.
Dublin 14. Fax. No. _____

7. ENGINEER - engineer, if any, responsible for the structural design
Name PAUL HAYES
Address 34 PRIORS LANE ROAD, Tel. No. 2983618
Dublin 14. Fax. No. _____

8. FOUNDATIONS & DRAINAGE - person or persons from whom notification may be obtained of (i) the pouring of any foundations, or (ii) the covering up of any drainage system
Name JOE MURPHY
Address 23 GREENOQUE DRIVE, Tel. No. 01-4589513
RATHCOOLE, Co. Dublin. Fax. No. _____

SOUTH DUBLIN COUNTY COUNCIL
Planning Dept. Registry Section
23-8-1996
APPLICATION RECEIVED

9. Planning Permission Reg. Ref. No. 91A 0961 Fire Safety Certificate No. _____
(if applicable)

Signature of Owner (or his agent) P. Patrick Becton
Date 23.8.96

(This notice is to be submitted not less than seven days and not more than twenty-one days before commencement of the works or the material change of use).

REPORT
PRODUCTION
DATE

NAME NO: NAME: UNIT: SHEETS: UNIT: SHEETS: UNIT: SHEETS: UNIT: SHEETS:

South Dublin County Council

Ref 91A/0961/EP

Att MR. Philip Murphy
Planning Dept

Enclose please find
invoice for house at Redgate Dr.

Hoping this meets with
your approval

Sincerely
Becton

South Dublin County Council
Planning Dept. Registry Section
26 MAY 1997
APPLICATION RECEIVED
REG. No. 91A/0961/EP

JOSEPH MURRAY

27 Greenogue Drive
Rathcoole
Co. Dublin

Tel: (01) 458 9437

South Dublin County Council
Planning Dept. Registry Section

26 MAY 1997

APPLICATION RECEIVED

REG. No. 91A/0961/EP

Mr. & Mrs. P. Becton,
18 Greenogue Drive,
Rathcoole,
Co. Dublin.

27th October, 1996.

INVOICE

Re: Construction of House to Roof Level
at Redgap, Rathcoole

Labour and material	£24,295.00
Plus V.A.T. @ 12½ %	3,037.00
Total:	£27,332.00

Paid with thanks

Sean Reid,
The Old Orchard,
Red Gap,
Rathcoole,
Co. Dublin.

Our Ref: 91A/0961

5 November 1991

Re: Relocation of septic tank, dwelling and access drive and change of front elevation treatment to approved house at site no. 10 Redgap, Rathcoole for Mr. P. Becton.

Dear Sir/Madam,

I enclose, herewith, correspondence dated 17th October, 1991 which was sent to you by Registered Post on 17th October, 1991 and which was returned by the Postal Authority marked "REFUSED"

I trust you will now receive same safely.

Yours faithfully,

S.
for Principal Officer.

PK

Res 25/10

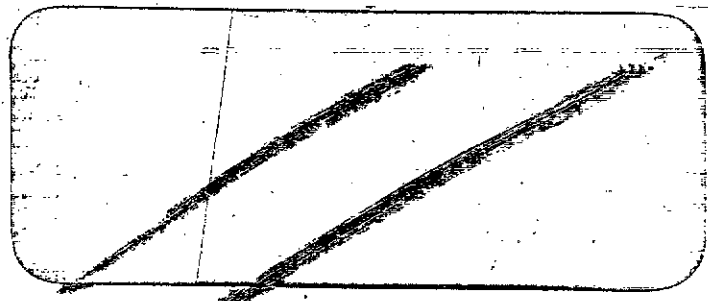
P.

RECEIVED
23 OCT 1991
SECTION

DEVELOPMENT
29 OCT 1991
CONTROL

BAILE ATHA CLIAITH
17.10.91

POSTAS
137
EF 65119



RECEIVED
24 OCT 1991
PLANNING DEPT.

R
Baile Atha Cliath
(DN) 169
No. 449

BAILE ATHA CLIAITH
16
18
CHAIL CO.

Refused
BIC-18-10,91

Sub Comp Plan
Sub Life Center
Sub 1

6

COMHAIRLE CHONTAE ATHA CLIATH

Register Reference No.: 91A 961

Letter No.: 1007

Planning Department,
Block 2, Irish Life Centre,
Lower Abbey St.,
Dublin 1.

Tel: (01) 724755
Fax: (01) 724896

17TH OCTOBER 1991

SEAN REID,
THE OLD ORCHARD,
REDGAP, RATHCOOLE,
Co. DUBLIN.

RE: RELOCATION OF SEPTIC TANK, DWELLING AND ACCESS DRIVE
AND CHANGE OF FRONT ELEVATION TREATMENT TO APPROVED
HOUSE AT SITE NO. 10 REDGAP, RATHCOOLE, FOR MR P. BECTON.

Date of decision to grant permission 14TH OCTOBER '91 subject to 7
conditions.

Dear Sir/Madam,

With reference to your representations/objections, I wish to inform you that a decision has been made on the above planning application. This decision has been entered in the Planning Register which is available for inspection at the Planning Department, Irish Life Centre, Lower Abbey Street, Dublin 1, during office hours (9 a.m. to 12.30 p.m. and 2.15 p.m. to 4.30 p.m.) A certified copy of the entry in the register may be purchased on payment of £5.00.

Yours faithfully,

L. Doyle
for Principal Officer.

NOTE: An appeal against this decision by an aggrieved person must be made within the period of twenty one days beginning on the date of the decision to grant permission, indicated above. The appeal shall be in writing and shall state the subject matter of the appeal and the grounds of appeal and shall be addressed to An Bord Pleanala, Floor 3, Blocks 6 and 7, Irish Life Centre, Lower Abbey Street, Dublin 1.

1. An appeal by an aggrieved person to An Bord Pleanala will be invalid unless accompanied by a fee of £50.00
2. A party to an appeal making a request to An Bord Pleanala for an oral hearing of an appeal must, in addition to '1' above, pay to An Bord Pleanala, a fee of £50.00
3. A person who is not a party to an appeal must pay a fee of £15.00 to An Bord Pleanala when making submissions or observations to An Bord Pleanala in relation to an appeal.
4. Interested parties are advised to consult the Planning Authority or An Bord Pleanala to ascertain if an appeal has been lodged by an applicant.

91A/0961

1007

The Old Orchard
Red GAP
Bathcoole
Co. Dublin
9th October 1991

Re - Planning Application 8.891 91A/0961

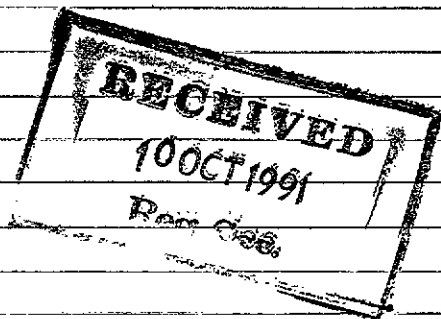
Dear Sir,

I wish to object to the above application on the following grounds.

- 1/ The change of septic tank site will greatly endanger the purity of the water in my well as it is directly downhill from the proposed new site.
- 2/ The distances indicated on the planning application from the proposed new site to my well and septic tank are totally inaccurate.
- 3/ The map shows my well to be at the front of my garage which is totally wrong. It is well to the re of my garage.

I have no objections to the other changes applied for.

Yours sincerely,
Sean Reid



BYE LAW APPLICATION FEES

REF. NO.: 9/A/0961

CERTIFICATE NO.: 152838

PROPOSED: House

LOCATION: 10 Lodgep Rathcoole

APPLICANT: P. Becton

	1	2	3	4	5	6	7
CLASS	DWELLINGS/AREA LENGTH/STRUCTURE	RATE	AMT. OF FEE REQUIRED	AMT. LODGED	BALANCE DUE	RED. FEE APPL.	AMT. OF RED. FEE
A	Dwelling (Houses/Flats)	@ £55	<u>£55</u>	<u>£55</u>	<u>-</u>		
B	Domestic Ext. (Improvement/Amts.)	@ £30					
C	Building for office or other comm. purpose	@ £3.50 per M ² or £70					
D	Building or other structure for purposes of agriculture	@ £1.00 per M ² in excess of 300 M ² Min. £70					
E	Petrol Filling Station	@ £200					
F	Dev. of prop. not coming within any of the forgoing classes	£70 or £9 per .1 hect. whichever is the greater					

Column 1 Certified: Signed: _____ Grade: _____ Date: _____

Column 1 Endorsed: Signed: _____ Grade: _____ Date: _____

Columns 2,3,4,5,6 & 7 Certified: Signed: [Signature] Grade: See Date: 12/6/91

Columns 2,3,4,5,6 & 7 Endorsed: Signed: _____ Grade: _____ Date: _____

91A/0961

OFFICIAL: House
 LOCATION: 10 Redgar Rd, Rathcoole, Dublin
 APPLICANT: Boston

1	2	3	4	5	6	7
DWELLINGS/AREA LENGTH/STRUCT	RATE	AMT. OF FEE REQ.	AMOUNT LOGGED	BALANCE DUE	BALANCE DUE	DATE/ RECEIPT
Dwellings	EE32	£32	£32	—		
	EE33					
	EE34					
	EE35					
	EE36					
	EE37					
	EE38					
	EE39					
	EE40					
	EE41					
	EE42					
	EE43					
	EE44					
	EE45					
	EE46					
	EE47					
	EE48					
	EE49					
	EE50					

Certified: Signed: _____ Date: _____
 Endorsed: Signed: _____ Date: _____
 Items 2, 3, 4, 5, 6 & 7 Certified: Signed: *Rathcoole* Date: 13/6/91
 Items 2, 3, 4, 5, 6 & 7 Endorsed: Signed: _____ Date: _____

LOCATION GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1953 TO 1962

ASSESSMENT OF FINANCIAL CONTRIBUTION

REG. REF.: _____
CONT. REG.: _____
SERVICES INVOLVED: WATER/FOUL SEWER/SURFACE WATER _____
AREA OF SITE: _____
FLOOR AREA OF PRESENT PROPOSAL: _____
MEASURED BY: _____
CHECKED BY: _____
METHOD OF ASSESSMENT: _____
TOTAL ASSESSMENT _____
MANAGER'S ORDERED NO: P/ / _____
DATE _____
ENTERED IN CONTRIBUTIONS REGISTER: _____

*£375 to be held in
event of connection to
water supply
DU*

DEVELOPMENT CONTROL ASSISTANT GRADE

*Security
£8,000 Cost Budget
Relel. J
14/10/91*

K. Rose.

EASTERN HEALTH BOARD

P.C. _____ Reg. Ref: 9012/861

Proposed: EMONY LE INVESTMENTS LTD

At: LANDS AT SWORDS ROAD AND OLD AIRPORT ROAD.

For: _____

Plans lodged: _____

Architect: _____

Observations and recommendations of Env. Health Officers and/or Supervising Env. Health Officer.

5/ Ventilation ~~to all~~ ~~of~~ which has not been indicated for all areas (i.e. kitchen + Gym. Area.)

6/ Kitchen usage ~~to~~ extent - it has not been indicated

note (kitchen location is distanced from the service lift / Personnel lift which is not the optimum location)

7/ Information on kitchen usage - this is important in calculating the final volume of effluent which is given

as 50L / head for 60 ~~per~~ persons =

Note

There is confusion regarding drawings submitted relating to waste water treatment plants as to which system is ~~the~~ intended (bio-oxidation or bio-cycle) and final disposal

Endorsed -
Donal, Cooney

John Sherry 29/10/91

PLANNING DEPT.
DEVELOPMENT CONTROL SECT
Date 6.11.91
Time 1.00

P/4682/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

CONTRIBUTION:	6523
Standard:	BN 966
Roads:	well + Section
S Sers:	Took
Open Space:	£375
Other event of water	ord
SECURITY:	
Bond/C.I.F.:	
Cash:	already lodged

Register Reference : 91A/0961

Date Received : 18th August 1991

Correspondence : P. Becton,
 Name and : 18, Greenogue Park,
 Address Rathcoole,
 Co. Dublin

Development : Relocation of septic tank, dwelling and access drive and change of front elevation treatment to approved house

Location : site no. 10 Redgap, Rathcoole

Applicant : Mr. P. Becton

App. Type : Permission

Zoning : A

Floor Area : Sq.metres

(GB/BB)

Report of the Dublin Planning Officer dated 4 October, 1991.

This is an application for was originally PERMISSION for change of front elevation treatment to an already approved house at site No. 10 Redgap, Rathcoole.

~~Additional information regarding the advertisement was sought on 8th August, 1991.~~

The area in which the site is located is zoned with the objective "to protect and/or improve residential amenity" in the Development Plan. This is a pocket of residential zoning within a rural area.

The history of the site is as follows:

- ZA.1309 - Permission granted for 8 bungalows.
- 85A/0415 - Permission granted for an additional 2 bungalows.
- 89A/2014 - Permission refused for large two-storey house.
- 90A/0544 - Permission granted for same design by Section 4 procedure.
A complete history is contained in that file.

Condition No. 4 of the previous permission 90A/0544 (Order No. P/3067/90) stated that "the brick finish proposed be omitted and a rendered finish, painted a uniform white or off white colour used instead. The roof to be finished in blue/black slates".

Applicant is now proposing a combination of brick and plaster, to avoid the possibility of cracking in the large expanse of plaster. This proposal is unlikely to make a substantial difference to the appearance of the house. In

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Reg.Ref: 91A/0961

Page No: 0002

Location: site no. 10 Redgap, Rathcoole

addition, several of the other dwellings in this estate are of brick.

Conditions 5 & 6 of the previous permission referred to the unsatisfactory septic tank system and lack of evidence of an adequate water supply. A redesigned septic tank system was indicated on the layout contained in the current application, and the site boundaries seem to have been altered at the rear. However, the elevational details only were dealt with in this application. As the layout on the site and the position of the septic tank had been altered in this application it was recommended that the applicant be requested to submit a revised newspaper notice.

Additional Information was requested from the applicant with regard to the following:-

1. The applicant is requested to submit a revised newspaper notice in the following manner:

"Co. Dublin. Permission sought for relocation of septic tank, dwelling and access drive and change of front elevational treatment to approved house at Site No. 10 Redgap, Rathcoole for Mr. P. Becton".

The revised advertisement was submitted on 16th August, 1991.

I recommend that a decision to GRANT PERMISSION be made under the Local Government (Planning and Development) Acts, 1963-1990 subject to the following () conditions:-

C O N D I T I O N S / R E A S O N S

01 The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application save as may be required by the other conditions attached hereto.

REASON: To ensure that the development shall be in accordance with the permission and that effective control be maintained.

02 That before development commences, approval under the Building Bye-Laws be obtained and all conditions of that approval be observed in the development.

REASON: In order to comply with the Sanitary Services Acts, 1878-1964.

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Reg.Ref: 91A/0961

Page No: 0003

Location: Site no. 10 Redgap, Rathcoole

- 03 That the proposed house be used as a single dwelling unit.
REASON: To prevent unauthorised development.
- 04 That the proposed arrangements for the septic tank drainage system comply with I.I.R.S. SR6 and the requirements of the Senior Environmental Health Officer, Eastern Health Board.
- 04 REASON: In the interest of the proper planning and development of the area.
- 05 That evidence of an adequate and potable water supply be submitted to and agreed with the Senior ^{Planning} ~~Environmental Health Officer~~ ^{Officer}, Eastern Health Board, prior to commencement of development.
- 05 REASON: In the interest of the proper planning and development of the area.
- 06 That satisfactory proposals for landscaping and boundary treatment for the site of the proposed dwelling be submitted to and agreed with the Planning Authority prior to commencement of development.
Reason: In the interest of visual amenity.
- 07 In the event of a connection being made to the public water supply, a financial contribution in the sum of £375 to be made to Dublin County Council towards the cost of provision of water supply.
- 07 REASON: In the interest of proper planning and development of the area.

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Reg.Ref: 91A/0961

Page No: 0004

Location: Site no. 10 Redgap, Rathcoole

Endorsed:-.....
P. Kenny
for Principal Officer

Richard Cennamo SEP
for Dublin Planning Officer 8.10.91

Order: A decision pursuant to Section 26(1) of the Local Government (Planning and Development) Acts, 1963-1990 to GRANT PERMISSION for the above proposal subject to the (7) conditions set out above is hereby made.

Dated : 14 October 1991.
ASSISTANT CITY & COUNTY MANAGER. Approved Officer
to whom the appropriate powers have been delegated by order of the Dublin City and County Manager dated 4 September, 1991.
14th October

P/3573/91

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Register Reference : 91A/0961

Date Received : 10th June 1991

Correspondence : P. Becton,
Name and : 18, Greenogue Park,
Address : Rathcoole,
Co. Dublin

Development : Change of front elevational treatment to an already approved house

Location : Site no. 10 Redgap, Rathcoole

Applicant : Mr. P. Becton

App. Type : Permission

Zoning :

(GB/AC)

Report of the Dublin Planning Officer dated 29 July 1991.

This is an application for PERMISSION for change of front elevational treatment to an already approved house at Site No. 10 Redgap, Rathcoole.

The area in which the site is located is zoned with the objective "to protect and/or improve residential amenity" in the Development Plan. This is a pocket of residential zoning within a rural area.

The history of the site is as follows:

- ZA.1309 - Permission granted for 8 bungalows.
 - 85A/0415 - Permission granted for an additional 2 bungalows.
 - 89A/2014 - Permission refused for large two-storey house.
 - 90A/0544 - Permission granted for same design by Section 4 procedure.
- A complete history is contained in that file.

Condition No. 4 of the previous permission 90A/0544 (Order No. P/3067/90) stated that "the brick finish proposed be omitted and a rendered finish, painted a uniform white or off white colour used instead. The roof to be finished in blue/black slates".

Applicant is now proposing a combination of brick and plaster, to avoid the possibility of cracking in the large expanse of plaster. This proposal is unlikely to make a substantial difference to the appearance of the house. In addition, several of the other dwellings in this estate are of brick.

Conditions 5 & 6 of the previous permission referred to the unsatisfactory septic tank system and lack of evidence of an adequate water supply. A

CN8939

Handwritten notes:
N.L.:
Private Well
& septic tanks

CONTRIBUTION
Standard: <i>Met</i>
Roads: <i>Met</i>
S. Serv: <i>under</i>
Open Space: <i>700/500</i>
Other: <i>Met</i>
SECURITY
Bond / C.I.F.
Cash:

Handwritten signature/initials

COMHAIRLE CHONTAE ÁTHA CLIATH

Record of Executive Business and Manager's Orders

Proposed change of front elevation treatment to an already approved house at No. 10 Redgap, Rathcoole for Mr. P. Becton.

redesigned septic tank system is indicated on the layout contained in the current application, and the site boundaries seem to have been altered at the rear. However, the elevational details only have been dealt with in this application. As the layout on the site and the position of the septic tank has been altered in this application I recommend that the applicant be requested to submit a revised newspaper notice.

I recommend that **ADDITIONAL INFORMATION** be requested from the applicant with regard to the following:-

1. The applicant is requested to submit a revised newspaper notice in the following manner:

"Co. Dublin. Permission sought for relocation of septic tank, dwelling and access drive and change of front elevational treatment to approved house at Site No. 10 Redgap Rathcoole for Mr. P. Becton".

(RC/AC)

Endorsed: 
for Principal Officer


For Dublin Planning Officer

7.8.91

Order:- I direct that **ADDITIONAL INFORMATION** be requested from the applicant for planning permission as set out in the above report and that notice thereof be served on the applicant.

Dated: 8 August, 1991.


APPROVED OFFICER

to whom the appropriate powers have been delegated by Order of the Dublin City and County Manager, dated 6 August, 1991.

DUBLIN COUNTY COUNCIL

PLANNING AND BUILDING CONTROL DEPARTMENT

Senior Environmental Health Officer,
33 Gardiner Place.

Register Reference : 91A/0961

Date : 11th June 1991

Development : Change of front elevational treatment to an already approved house

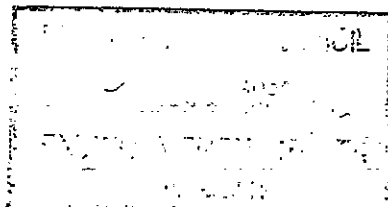
LOCATION : Site no. 10 Redgap, Rathcoole

Applicant : Mr. P. Becton

App. Type : PERMISSION/BUILDING BYE-LAW APPROVAL

Planning Officer :

Date Recd. : 10th June 1991



Attached is a copy of the application for the above development. Please ensure that your report is received within 5 weeks from 10th June 1991.

PLANNING DEPT.
DEVELOPMENT CONTROL SECT.
Date 13.08 Time
Day

Yours faithfully,

.....
PRINCIPAL OFFICER

This proposal is acceptable subject to

evidence of adequate and potable water supply being provided.

*TRIAL HOLES INSPECTED ON THE 1/8/91.
OVER 7 FT. DEEP. BOTH HOLES WERE DRY.
SOIL WAS SUITABLE FOR SEPTIC TANK DRAINAGE.*

*John Healy
2/8/91*

*Peter W. O'Brien
2/8/91*

DUBLIN COUNTY COUNCIL

Tel. 724755 (ext. 262/264)

PLANNING DEPARTMENT,
BLOCK 2,
IRISH LIFE CENTRE,
LR, ABBEY STREET,
DUBLIN 1.

Notification of Decision to Grant Permission/A

Local Government (Planning and Development) Acts, 1963-1983

To: P. Becton,
18, Greenogue Park,
Rathcoole,
Co. Dublin.

Decision Order: P/4682/91 = 14.10.1991
Number and Date: 91A/0961
Register Reference No.
Planning Control No.
Application Received on: 16.08.1991

Applicant: Mr. P. Becton.

In pursuance of its functions under the above-mentioned Acts, the Dublin County Council, being the Planning Authority for the County Health District of Dublin, did by Order dated as above make a decision to grant Permission/A for:-
relocation of septic tank, dwelling and access drive and change of front elevation treatment to approved house at Site no. 10 Redgap, Rathcoole.

SUBJECT TO THE FOLLOWING CONDITIONS

CONDITIONS	REASONS FOR CONDITIONS
1. The development to be carried out in its entirety in accordance with the plans, particulars and specifications lodged with the application, save as may be required by the other conditions attached hereto.	1. To ensure that the development shall be in accordance with the permission and that effective control be maintained.
2. That before development commences, approval under the Building Bye-Laws be obtained, and all conditions of that approval be observed in the development.	2. In order to comply with the Sanitary Services Acts, 1878-1964.
3. That the proposed house be used as a single dwelling unit.	3. To prevent unauthorised development.
4. That the proposed arrangements for the septic tank drainage system comply with I.I.R.S. SR6 and the requirements of the Senior Environmental Health Officer, Eastern Health Board.	4. In the interest of the proper planning and development of the area.

Signed on behalf of the Dublin County Council

Rose Kennedy
For Principal Officer

14th October, 1991.

Date

IMPORTANT: Turn overleaf for further information

CONDITIONS

REASONS FOR CONDITIONS

5. That evidence of an adequate and potable water supply be submitted to and agreed with the Planning Authority, prior to commencement of development.

5. In the interest of the proper planning and development of the area.

6. That satisfactory proposals for landscaping and boundary treatment for the site of the proposed dwelling ^{be submitted} to and agreed with the Planning Authority prior to commencement of development.

6. In the interest of visual amenity.

7. In the event of a connection being made to the public water supply, a financial contribution in the sum of £375. to be made to Dublin County Council towards the cost of water supply.

7. In the interest of the proper planning and development of the area.

NOTE:

If there is no appeal to An Bord Pleanala against this decision PERMISSION/APPROVAL will be granted by the Council as soon as may be after the expiration of the period for the taking of such appeal. If every appeal made in accordance with the Acts has been withdrawn, the Council will grant the PERMISSION/APPROVAL after the withdrawal.

An appeal against the decision may be made to An Bord Pleanala. The applicant may appeal within one month from the date of receipt by him of this notification. ANY OTHER PERSON may appeal within twenty-one days beginning on the date of the decision.

An appeal shall be in writing and shall state the subject matter and grounds of the appeal. It should be addressed to:— An Bord Pleanala, Blocks 6 and 7, Irish Life Centre, Lower Abbey Street, Dublin 1.

(1) An appeal lodged by an applicant or his agent with An Bord Pleanala will be invalid unless accompanied by a fee of £36 (Thirty-six Pounds). (2) A party to an appeal making a request to An Bord Pleanala for an Oral Hearing of an appeal must, in addition to (1) above, pay to An Bord Pleanala a fee of £36 (Thirty-six Pounds). (3) A person who is not a party to an appeal must pay a fee of £10 (Ten Pounds) to An Bord Pleanala when making submissions or observations to An Bord Pleanala in relation to an appeal.

Approval of the Council under Building Bye-Laws must be obtained and the terms of the approval must be complied with in the carrying out of the work before any development which may be permitted is commenced.

Building Control Department,
Liffey House,
Tara Street,
Dublin 1.
Telephone:773066



Bloc 2, Ionad Bheatha na hEireann,
Block 2, Irish Life Centre,
Sraid na Mainistreach Iacht,
Lower Abbey Street,
Baile Atha Cliath 1.
Dublin 1.
Telephone. (01)724755
Fax. (01)724896

Register Reference : 91A/0961

Date : 19th August 1991

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1990

Dear Sir/Madam,

DEVELOPMENT : Relocation of septic tank, dwelling and access drive
and change of front elevation treatment to approved
house

LOCATION : Site no. 10 Redgap, Rathcoole

APPLICANT : Mr. P. Becton

APP. TYPE : Additional Information

With reference to the above, I acknowledge receipt of your application
received on 16th August 1991.

Yours faithfully,

.....

for PRINCIPAL OFFICER

P. Becton,
18, Greenogue Park,
Rathcoole,
Co. Dublin

DUBLIN COUNTY COUNCIL
Planning Dept. Registry Section
APPLICATION RECEIVED
16 AUG 1991
REG No. 91A/961

Principal Officer,
Planning Dept.,
Dublin County Council,
Block 2,
Irish Life Centre.

Reg. Ref. 91A/961.
Additional Information.
Aug. 15th 1991.

To whom it may concern,
Please find enclosed an amended newspaper advert. Irish Press
dated 13/8/'91 as requested. I look forward to an early deter-
mination of my application.

CO. DUBLIN Permission
sought for relocation of
septic tank dwelling and
access drive and change of
front elevation treatment to
approved house at Site No.
10 Redgap, Rathcoole, for Mr
P. Becton.

Yours Sincerely.

P. Becton.

*J. Press
13/8/91*

16 AUG 91

*AT
1.0.0.*

P. Becton,
18 Greenogue Park,
Rathcoole,
Co. Dublin.

Reg. Ref. No. 91A/0961

8 August 1991

Re: Proposed change of front elevational treatment to an already approved house at Site No. 10 Redgap, Rathcoole for Mr. P. Becton.

Dear Sir,

With reference to your planning application, received here on 10 June 1991, in connection with the above, I wish to inform you, that before the application can be considered under the Local Government (Planning and Development) Acts, 1963-1983, the following additional information must be submitted in quadruplicate:-

1. The applicant is requested to submit a revised newspaper notice in the following manner:

"Co. Dublin. Permission sought for relocation of septic tank, dwelling and access drive and change of front elevational treatment to approved house at Site No. 10 Redgap Rathcoole for Mr. P. Becton".

Please mark your reply "ADDITIONAL INFORMATION" and quote the Reg. Ref. No. given above.

Yours faithfully,

J. de Bantser
for Principal Officer.

Building Control Department,
Liffey House,
Tara Street,
Dublin 1.
Telephone:773066



Bloc 2, Ionad Bheatha na hÉireann,
Block 2, Irish Life Centre,
Sraid na Mainistreach Iacht,
Lower Abbey Street,
Baile Atha Cliath 1.
Dublin 1.
Telephone. (01)724755
Fax. (01)724896

Register Reference : 91A/0961

Date : 11th June 1991

LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1990

Dear Sir/Madam,

DEVELOPMENT : Change of front elevational treatment to an already
approved house

LOCATION : site no. 10 Redgap, Rathcoole

APPLICANT : Mr. P. Becton

APP. TYPE : PERMISSION/BUILDING BYE-LAW APPROVAL

With reference to above, I acknowledge receipt of your application received
on 10th June 1991.

Yours faithfully,

.....

PRINCIPAL OFFICER

P. Becton,
18, Greenogue Park,
Rathcoole,
Co. Dublin



PLEASE READ INSTRUCTIONS AT BACK BEFORE COMPLETING FORM. ALL QUESTIONS MUST BE ANSWERED.

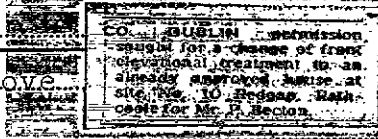
1. Application for Permission Outline Permission Approval Place in appropriate box.
Approval should be sought only where an outline permission was previously granted. Outline permission may not be sought for the retention of structures or continuances of uses.

2. Postal address of site or building Site No. 10, Redgap, Rathcoole, Co. Dublin
(If none, give description sufficient to identify)

3. Name of applicant (Principal not Agent) Patrick Becton
Address 18, Greenogue Park, Rathcoole, Co. Dublin Tel. No.

4. Name and address of P. Becton, 18, Greenogue Park, Rathcoole, Co. Dublin
person or firm responsible for preparation of drawings Tel. No.

5. Name and address to which As 4. above
notifications should be sent



6. Brief description of Change of front elevational treatment to an
proposed development already approved xxx house

7. Method of drainage Septic tank 8. Source of Water Supply Deep bored well

9. In the case of any building or buildings to be retained on site, please state:
(a) Present use of each floor or use when last used. N/A
(b) Proposed use of each floor N/A

Shed
Lanes

10 Does the proposal involve demolition, partial demolition or change of use of any habitable house or part thereof? No

31/5/91

11. (a) Area of Site 6,873 sq. mts. Sq. m.
(b) Floor area of proposed development 350 sq. mts. Sq. m.
(c) Floor area of buildings proposed to be retained within site Sq. m.

Stamp: 19/6
N 41150
BYE LAW APPLICATION
REC N 41524

12. State applicant's legal interest or estate in site (i.e. freehold, leasehold, etc.) Freehold

13. Are you now applying also for an approval under the Building Bye Laws? Yes No Place in appropriate box.

14. Please state the extent to which the Draft Building Regulations have been taken in account in your proposal:
All relevant sections taken into account

15. List of documents enclosed with 4 copies of Plans, Sections, Elevations, Block application.
Plan, site location map, specification, Septic Tank
Newspaper advert.

16. Gross floor space of proposed development (See back) 350 sq. mts. Sq. m.
No of dwellings proposed (if any) One Class(es) of Development Class 1 Planning & A Bye-Laws
Fee Payable £ 87.00 Basis of Calculation £32.00 Planning + £55 Bye-Laws.
If a reduced fee is tendered details of previous relevant payment should be given

Signature of Applicant (or his Agent) P. Becton Date 6th June 1991

Application Type P/B FOR OFFICE USE ONLY 10/6
Register Reference 91R/0961
Amount Received £ 2.248
Receipt No
Date 21/13

COMHAIRLE CHONTAE ATHA CLIATH

PAID BY DUBLIN COUNTY COUNCIL
46/49 UPPER O'CONNELL STREET,
DUBLIN 1.

[RECEIPT CODE]

CASH
CHEQUE
P.M.O.
E.B.L.

BYE LAW APPLICATION.
REC. No. N 41524

£55.00

Received this 10th day of June 1977

from P. Becton (Osvale Ltd)
18 Greenogue Park
Rathcoole

the sum of fifty five Pounds

Pence, being for

bye-law application at 10 Redgap

Adrian O'Leary Cashier

S. CAREY Principal Officer

COMHAIRLE CHONTAE ÁTHA CLIATH

RECEIPT CODE

PAID BY DUBLIN COUNTY COUNCIL
46/49 UPPER O'CONNELL STREET
DUBLIN 1.

Issue of this receipt is not an acknowledgment that the fee tendered is the prescribed application fee. N 41150

CASH
CHEQUE
M.O.
S.L.

£ 32.00

Received this 10th day of June 1991

from P. Barton (Orvale Hd.)
18 Greenogue Park
Rathcoole

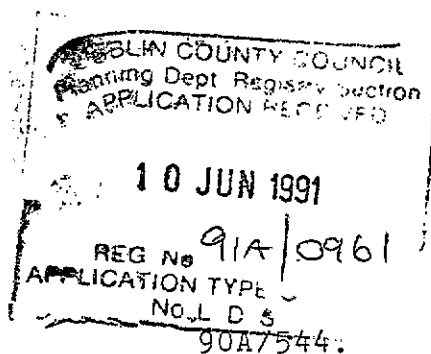
The sum of thirty two Pounds

planning application Pence being 00/-

Doane Cashier

S. CAREY Class 1
Principal Officer

Principal Officer,
Dublin County Council,
Planning Dept.,
Block 2,
Irish Life Centre.



Site No. 10 Redgap,
Rathcoole, Co, Dublin.
6th June 1991.

In relation to condition No. 4 6f Grant of permission dated 23rd. Aug. 1990, I propose an alternative elevational treatment in respect of introducing brick panels to the front elevation. My reason for this is that the expanse of plasterwork in the front elevation would lead to cracking and the possible ingress of moisture. By introducing brick panels it will help to create control joints at predetermined points and alleviate the incidence of cracking and also improve the aesthetic nature of the front elevation.

Anticipating a favourable decision to my proposal.

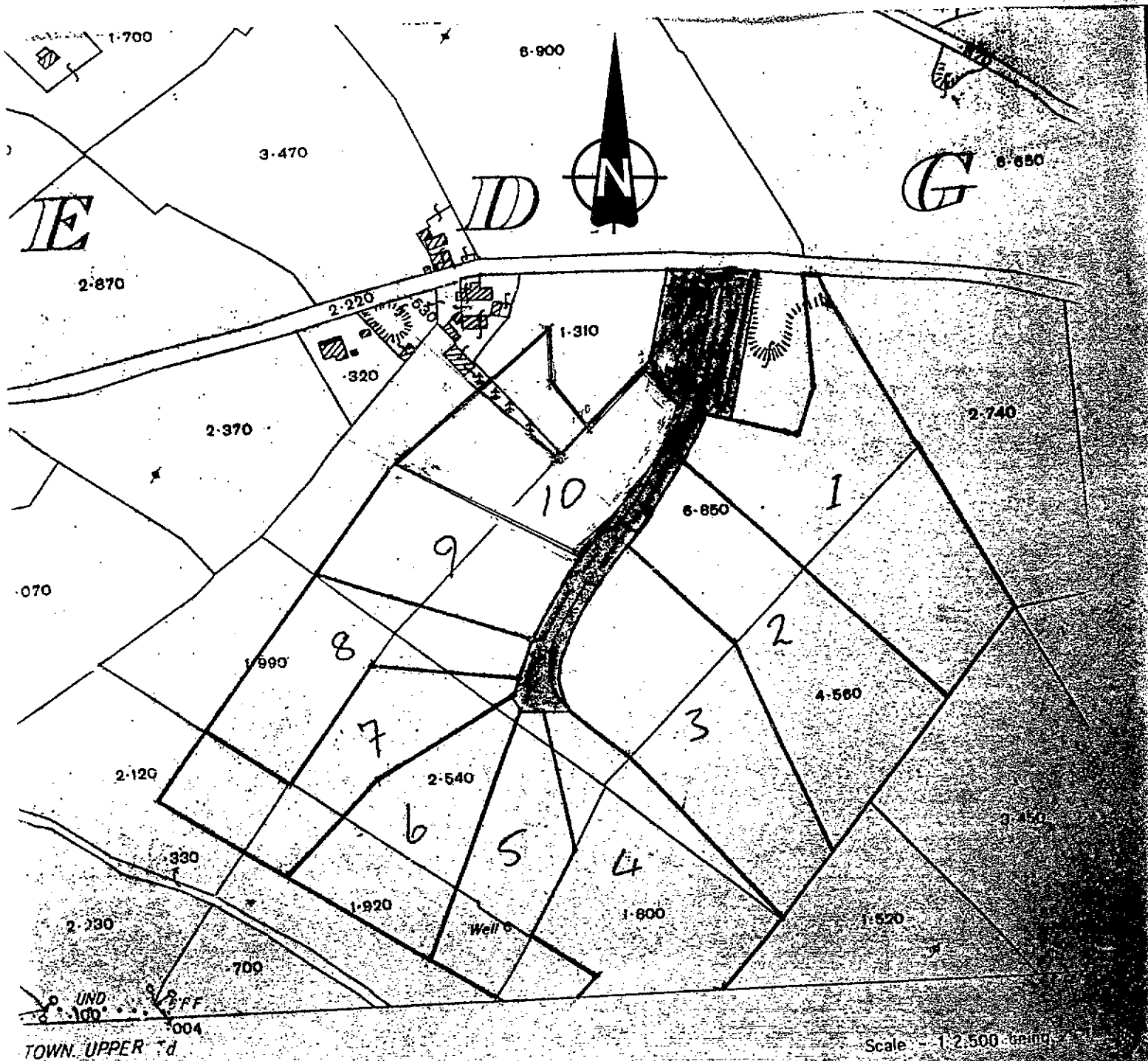
Yours Sincerely.

P. Becton.

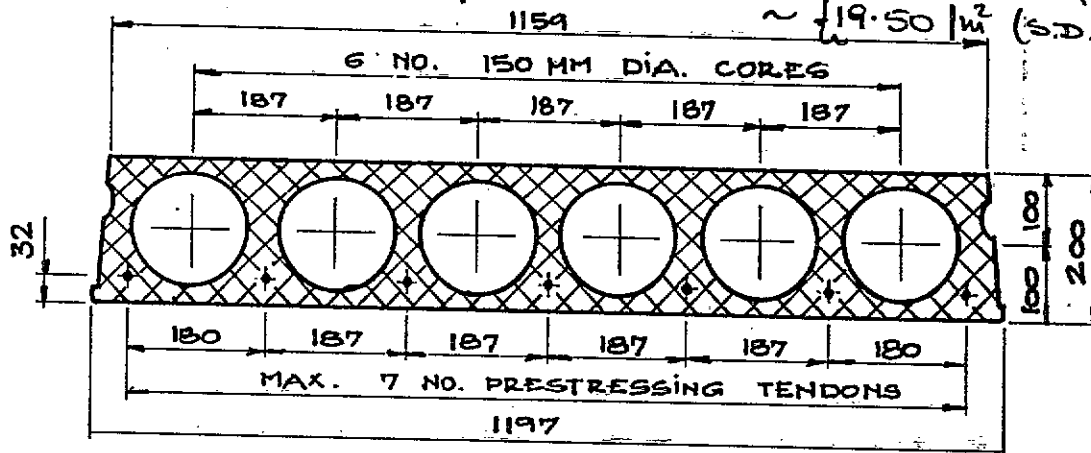
Site Location Map
Site No. 10
Redgap Rathcoole
P. Becton

DUBLIN COUNTY COUNCIL
Planning Dept. Registry Section
APPLICATION RECEIVED
10 JUN 1991
REG. NO. 91A/0961
APPLICATION BY
NO. L.L.

Scale 1:2500



location & quantity a.b.
 $\sim 19.50 \text{ m}^2$ (S.D.E.)



200 MM DEEP PRESTRESSED HOLLOW CORE SLABS

- CROSS SECTION AREA $130 \times 10^3 \text{ mm}^2$
- SECTION MODULUS (TOP) $631 \times 10^4 \text{ mm}^3$
- SECTION MODULUS (BOTTOM) $643 \times 10^4 \text{ mm}^3$
- MOMENT OF INERTIA $657 \times 10^6 \text{ mm}^4$
- TOTAL BREADTH OF WEB 278 mm
- HEIGHT OF NEUTRAL AXIS 99 mm
- CONCRETE GRADE 50 N/mm²
- CONCRETE STRENGTH AT TRANSFER 35 N/mm²
- MODULUS OF ELASTICITY OF CONCRETE 24.5 kN/mm²
- CHARACT. STRENGTH OF 12.5 MM STRAND 165 kN
- SECTION AREA OF 12.5 MM STRAND 94.2 mm²
- PRESTR. FORCE TO CHAR. STRENGTH 70 %
- STANDARD FIRE-RESISTANCE -1 HOUR
- COVER TO STEEL 25 mm

B200, TABLE BASED ON CP 110 SELFWEIGHT = 2.56 kN/m²

SAFE		SUPERIMPOSED (SERVICE) LOADS - kN/m ²										
TYPE	M _u kNm	V _{co} kN	EFFECTIVE SPAN - M									
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	
B20.56	65.2	80.7	5.0	3.9	3.1							
B20.76	89.5	86.1	7.7	6.3	5.1	4.1	3.4					
B20.58	109.7	90.4	10.2	8.3	6.9	5.7	4.7	3.9	3.2			
B20.68	128.5	94.1	12.3	10.1	8.4	7.0	5.9	5.0	4.2	3.5	3.0	
B20.78	143.1	97.5	13.7	11.3	9.5	8.0	6.7	5.7	4.8	4.1	3.5	

NOTE: TABLE IS NOT INTENDED AS A SUBSTITUTE FOR DESIGN.
 MAY 1983

Universal Conservatory Introduction & Specification

INTRODUCTION TO THE UNIVERSAL CONSERVATORY

UNIVERSAL ARCHITECTURAL SYSTEMS are now one of the U.K. market leaders for the supply of victorian style conservatory systems to the conservatory/window industry.

The system is now extensively used by companies in the private and commercial sectors who specialize in the manufacture of conservatories for use on hotels, pubs, listed buildings and residential homes.

The system is also successfully employed for use on swimming pool enclosures, covered walkways, canopies and glazed roof areas.

The profiles are all aluminium with a choice of cast and extruded cresting, finial dentil and fixtures all faithfully reproduced to original designs.

With the use of aluminium throughout the entire structure you embrace the combined qualities of strength, versatility and low maintenance not found in other materials.

The standard finish is white polyester powdercoat but other paint and anodised finishes are available.

Ease of fabrication and on-site installation, utilising modern materials and technology has been the prime objective from the outset, allowing for modular units to be made considerably quicker than similar timber etc. types of conservatories.

The end result is an elegant glass room that will enhance the appearance of any commercial or residential property.

The construction allows for use of single or double glazing; or polycarbonate or perspex TW sheet with our special purpose roof bars. The side wall aluminium profiles may be insulated by thermal barrier, where considered necessary. The roof glazing profiles are not insulated, as we found this to be an unnecessary expense.

In this type of conservatory there is generally a humid environment, by necessity to preserve plants, etc., and resulting condensation cannot be controlled by insulation, but principally, by ventilation. To provide adequate ventilation for this, and equally important, to minimise the heat build up and oven effect in summer months and sunny days, we include special purpose roof opening lights. These opening lights, with the side wall opening lights, allow for cooler or drier air intake at low level, expelling hot or moist air through the roof. A traditional and practical means of achieving the ideal conservatory environment.

In the following pages, general details, profiles, components and construction details are illustrated to demonstrate the flexibility of the UNIVERSAL CONSERVATORY, engineered for excellence, providing simplicity of construction for the supplier and satisfaction for the customer.

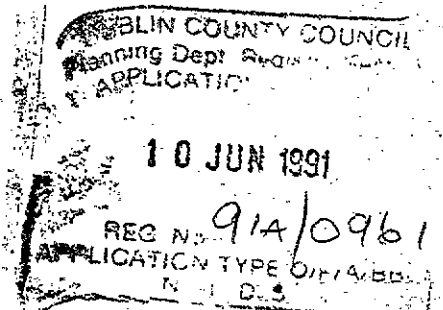
SPECIFICATION

Side wall frame and construction conform generally to BS 4873: 1986, 'Specification for Aluminium Alloy Windows'.

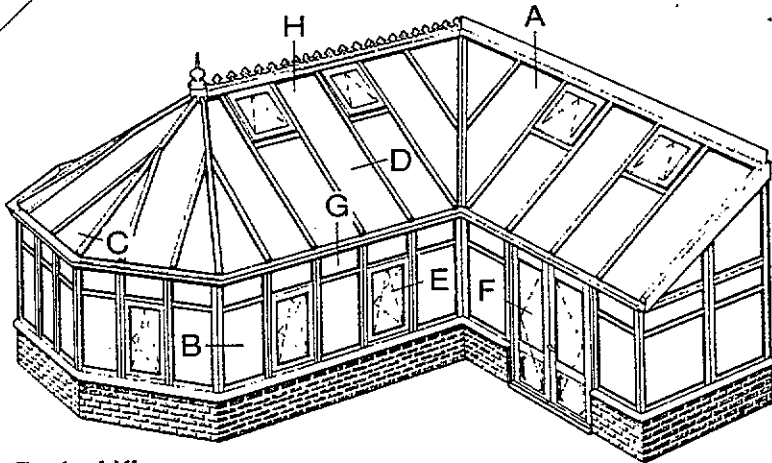
Roof glazing conforms generally to BS 5516: 1977, 'Code of practice for patent glazing'.

Compliance with these British Standards is all embracing as it implies that the product conforms to most other standards on materials, finishes, performance, etc., contained within. ie.

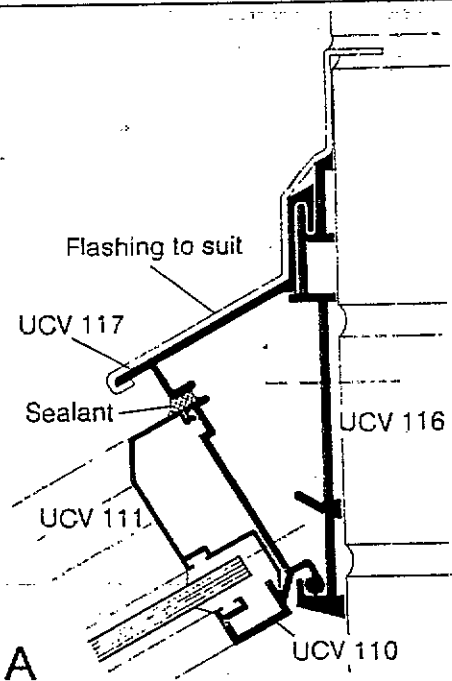
Extruded aluminium alloy 6063TF or TE, to BS 1474:
White polyester powder coating to, BS 6496: etc.



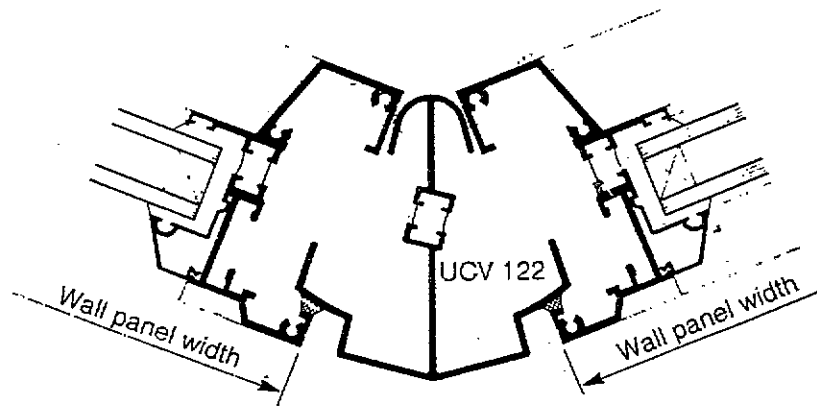
Universal Conservatory General Details



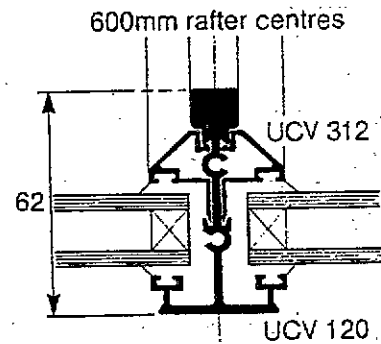
Typical View
To show construction details for double or single glazing.



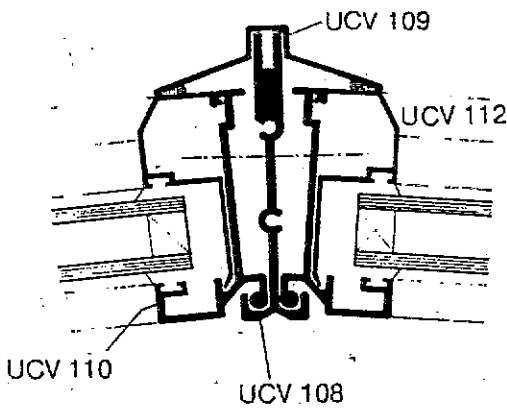
A Adjustable Angle Wall Plate Fixing
For roof pitch of $12\frac{1}{2}^\circ$ to 30°
Shows single glazing. Double glaze with bead profile UCV 112.



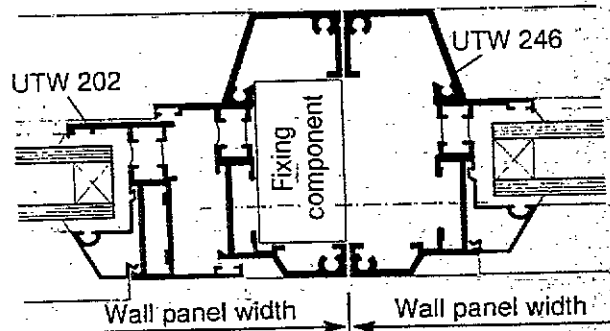
B Bay Window Mullion
For three or five segment bays.



Standard Rafter
Single or double glazed.

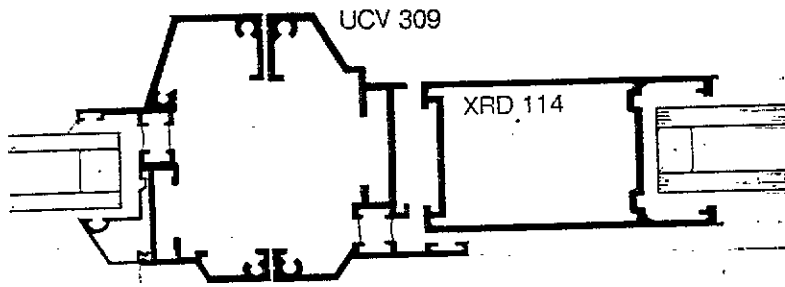


C Adjustable Angle Hip
For three or five segment bays.
Single or double glazed.

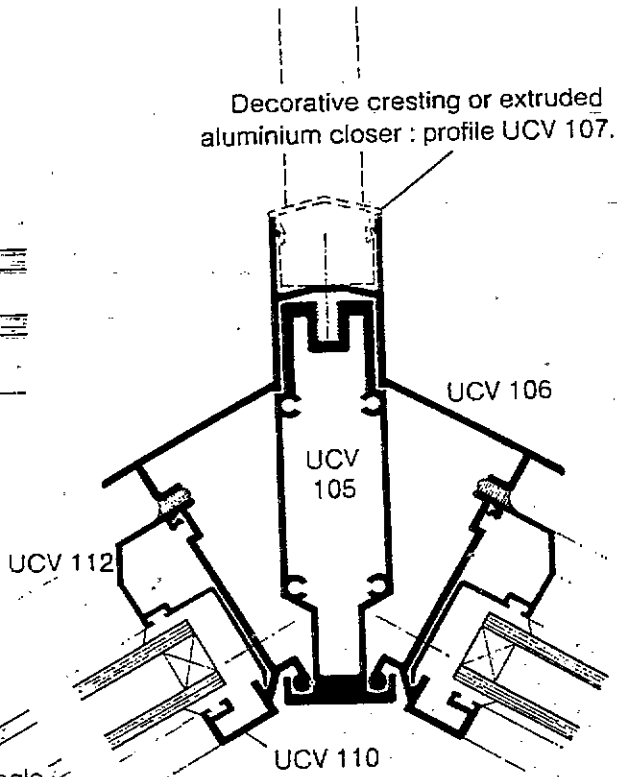


E Typical Mullion Connection
Shows fixed and opening lights.
Single glaze with bead profile UTW 220

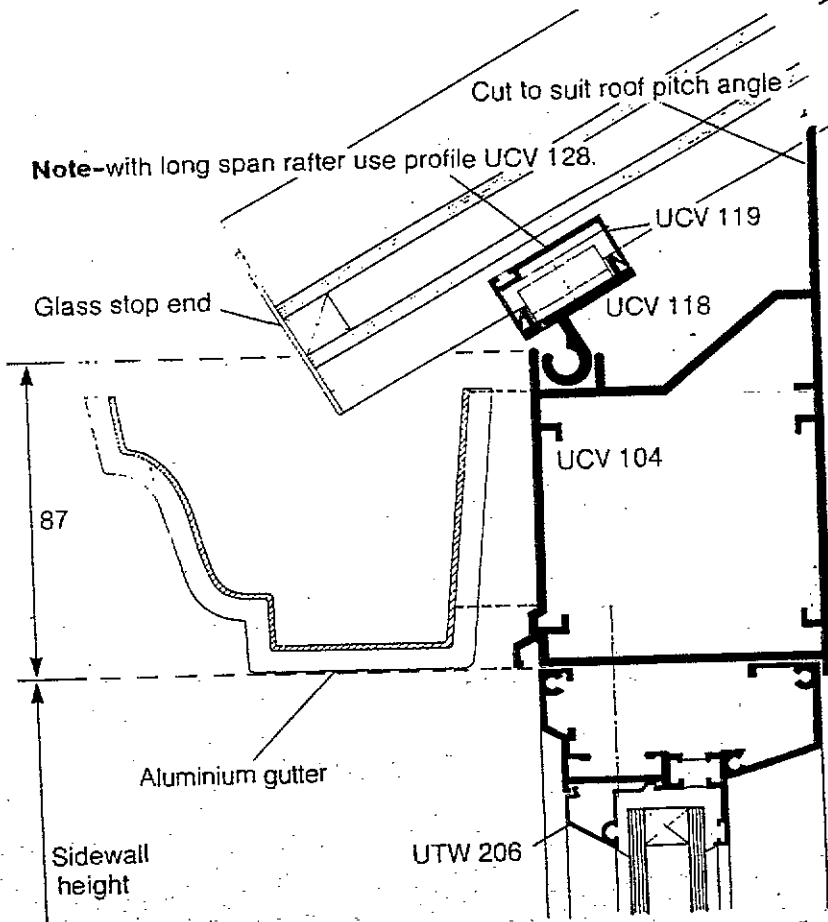
Scale: 50% Full size



F Typical Door Jamb
Horizontal detail.

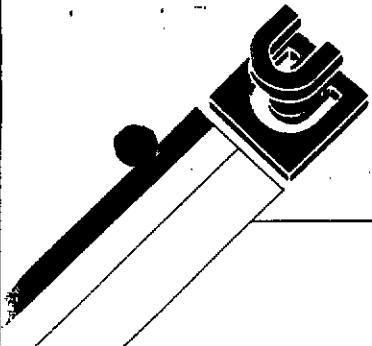


H Adjustable Angle Ridge
For roof pitch of $12\frac{1}{2}^\circ$ to 30° .



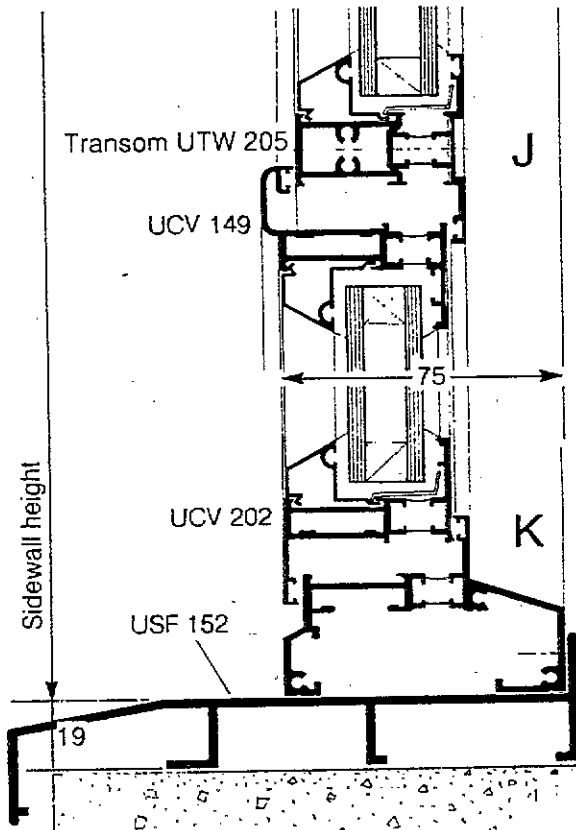
G Adjustable Eaves
For roof-to wall junction.
Roof pitch of $12\frac{1}{2}^\circ$ to 30° .

All dimension in millimetres

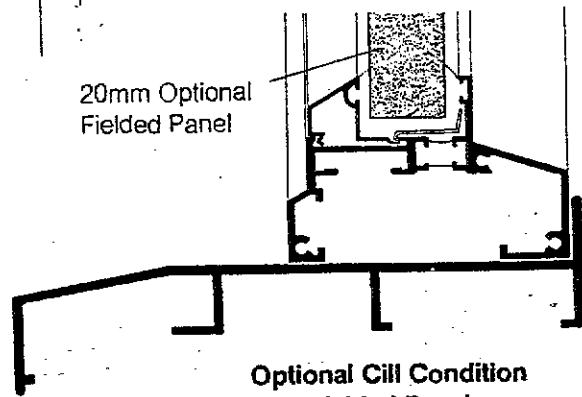


Universal Conservatory General Details

J-K Typical Opening Light
Vertical sidewall detail.

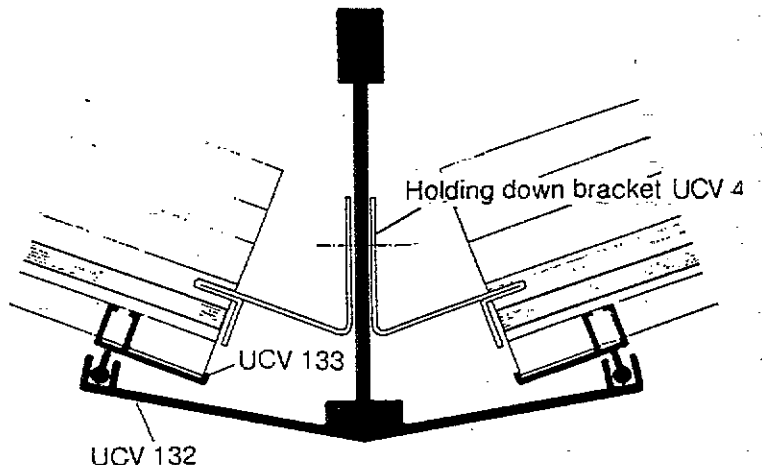


Typical Cill Condition
Vertical sidewall detail.

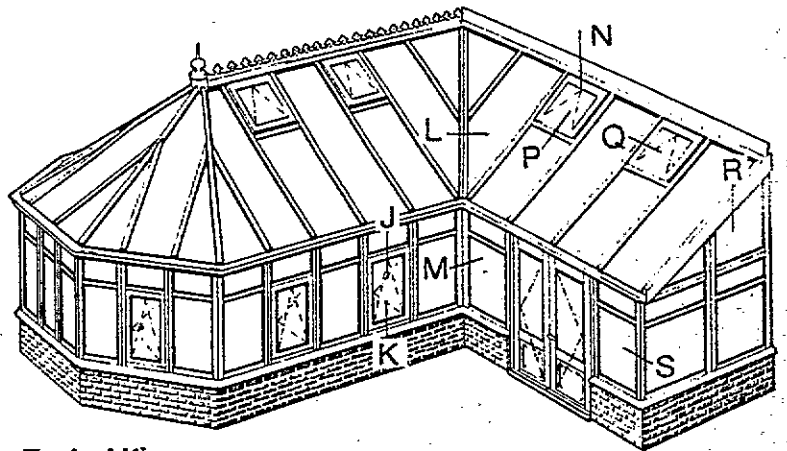


Optional Cill Condition with Fielded Panel
Vertical Sidewall Detail

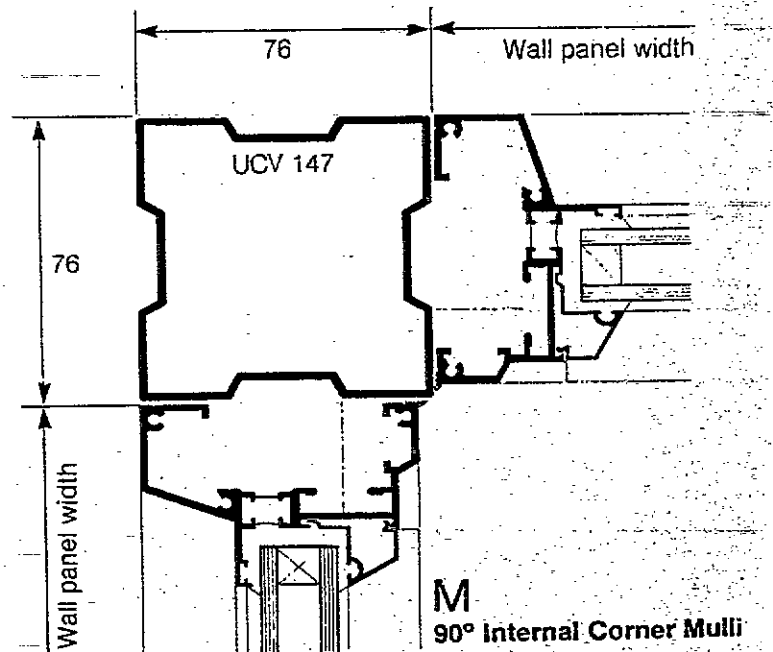
Scale: 50% Full size



L Adjustable Angle Valley
Single or double glazed.

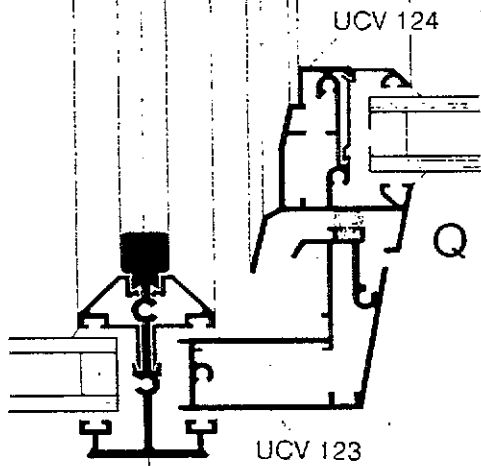


Typical View
To show construction details for double or single glazing.



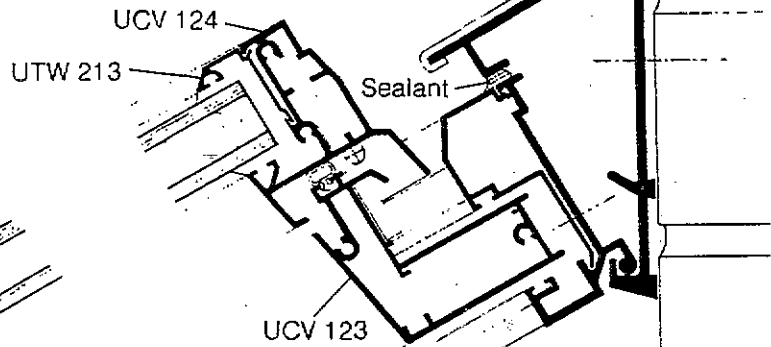
M 90° Internal Corner Mulli

600mm rafter centres

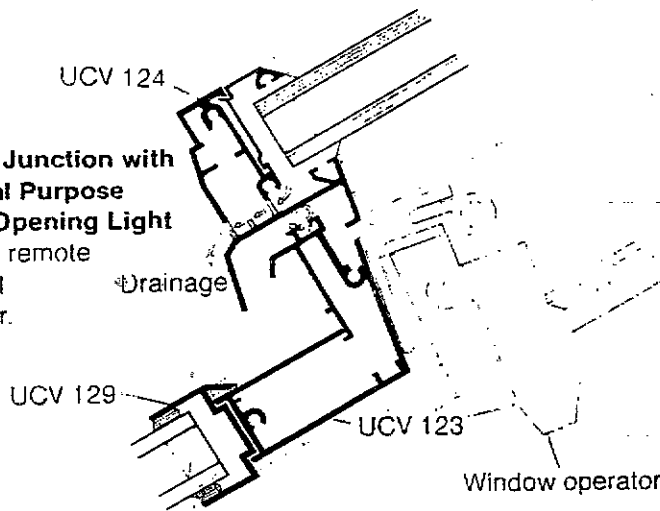


N Adjustable Angle Wall Plate Fixing with Special Purpose Roof Opening Light Shows double glazing.

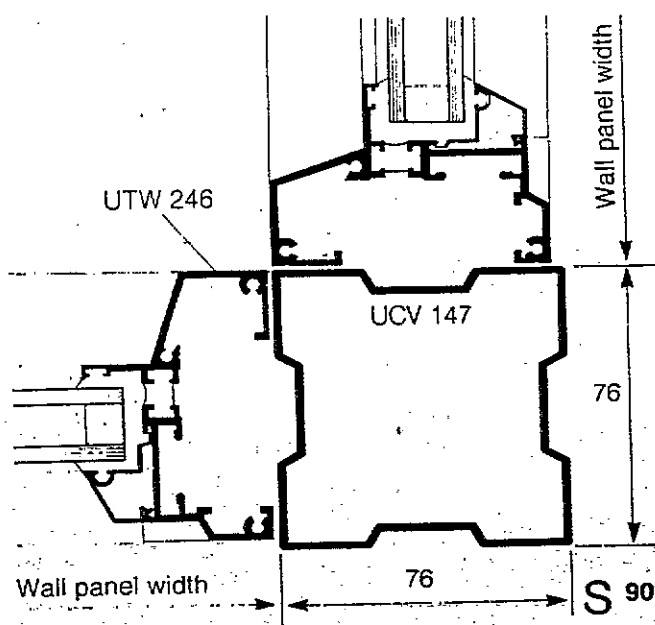
Q Standard Rafter with Special Purpose Roof Opening Light



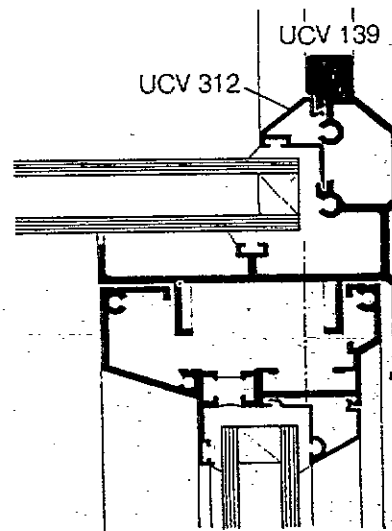
P Purlin Junction with Special Purpose Roof Opening Light Shows remote control opener.



R Gable End Barge Board



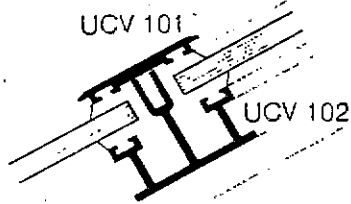
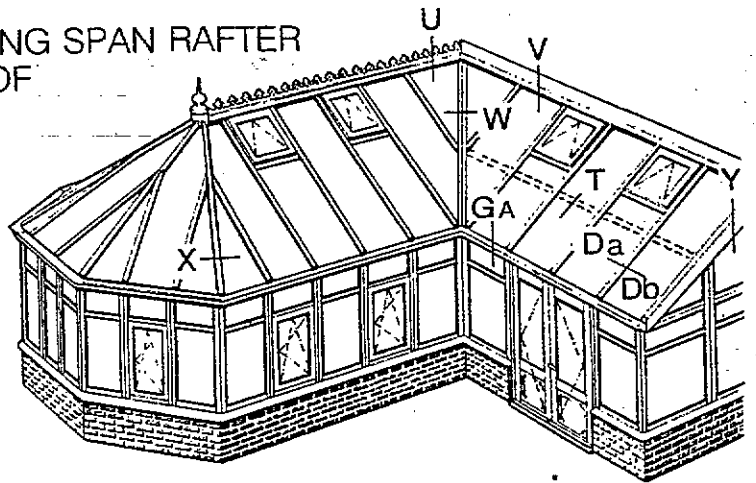
S 90° External Corner Mullion



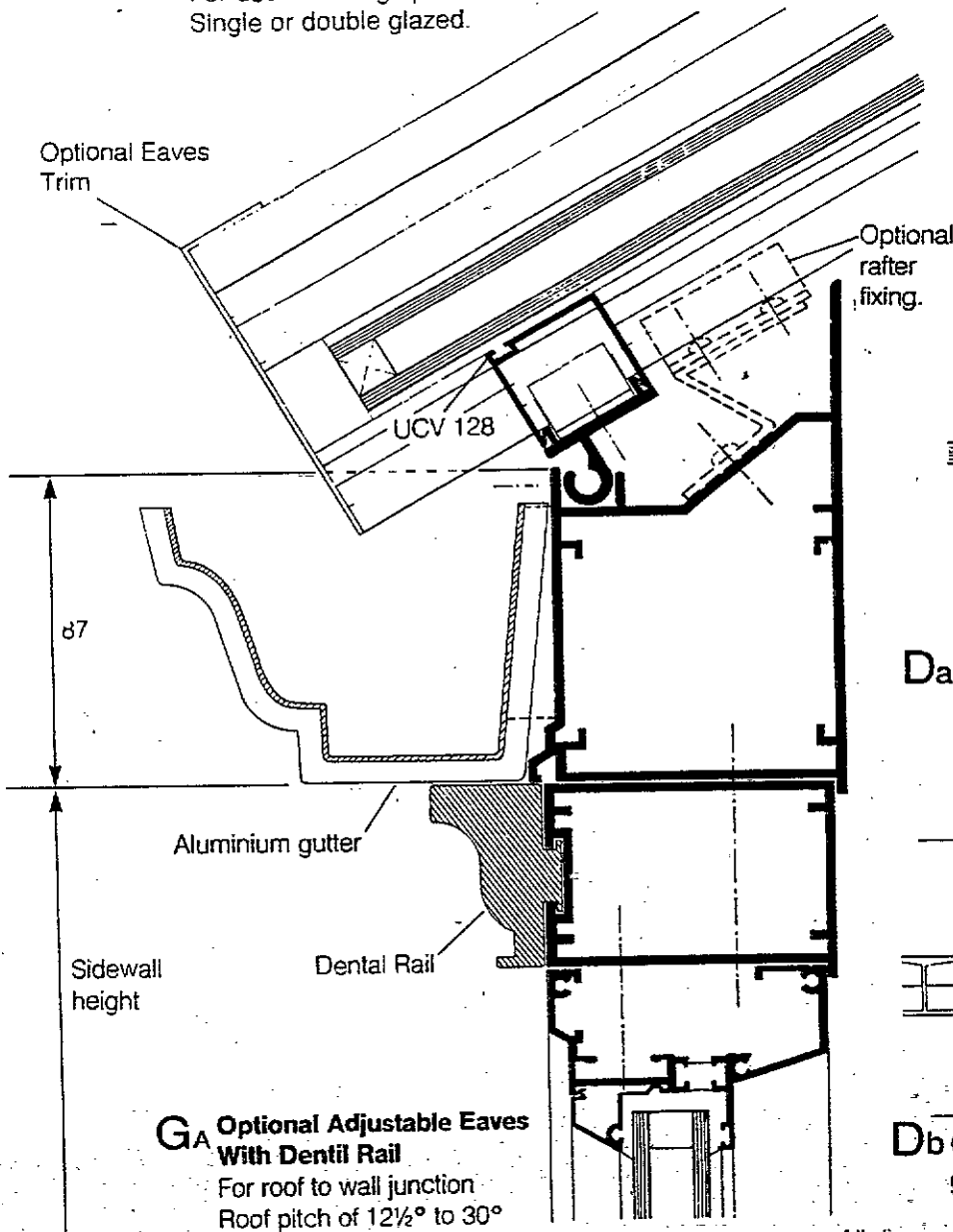
All dimension in millimetres

Universal Conservatory General Details

OPTIONAL DETAILS FOR LONG SPAN RAFTER AND POLYCARBONATE ROOF CONSTRUCTION

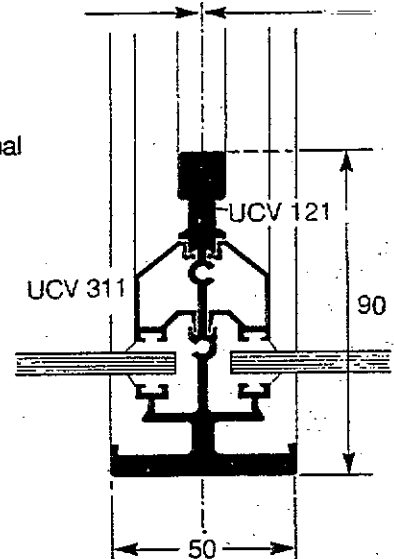


T Optional Purlin
For use with long span rafter.
Single or double glazed.

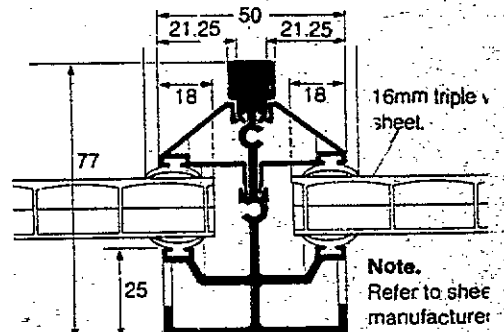


GA Optional Adjustable Eaves With Dental Rail
For roof to wall junction
Roof pitch of $12\frac{1}{2}^\circ$ to 30°

600mm rafter centres

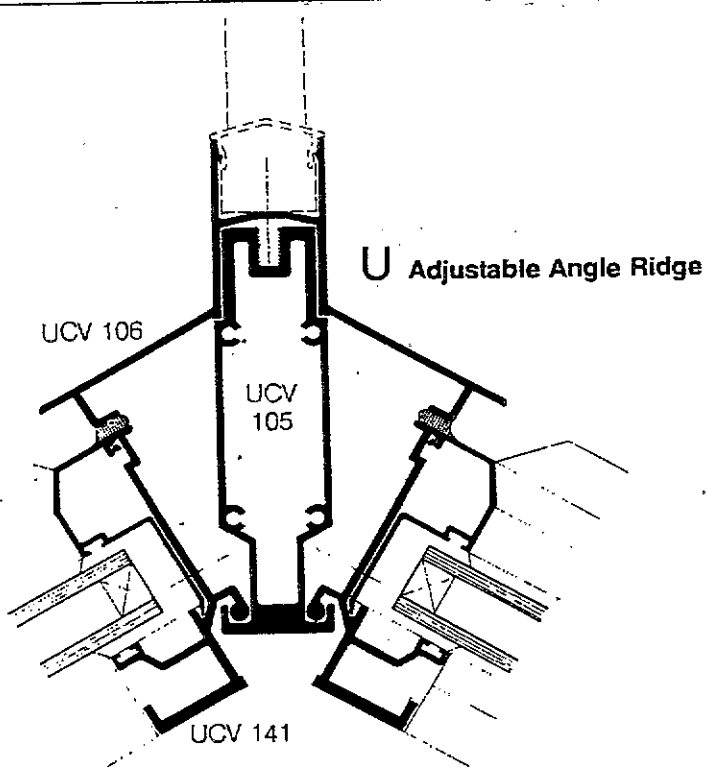


Da Optional Long Span Rafter
Shows single glazing
Double glaze with bead profile USF 15

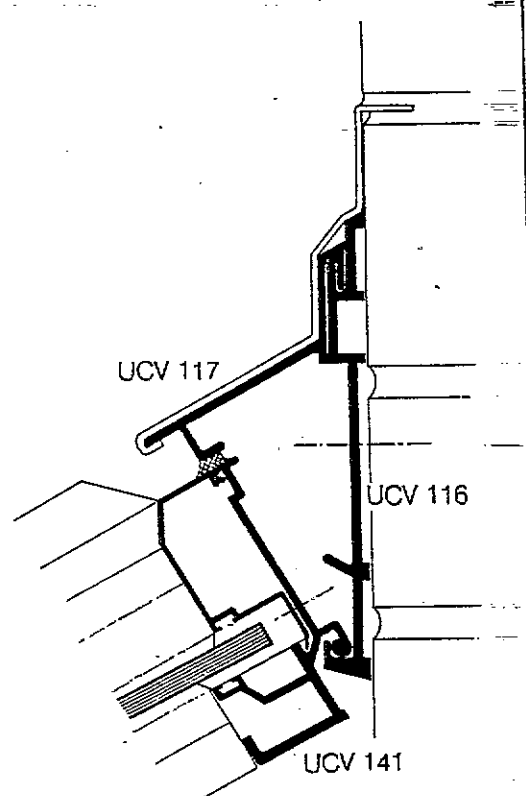


Db Optional Polycarbonate glazed rafter.
Note. Refer to sheet manufacturer specification for cut edge glazing.

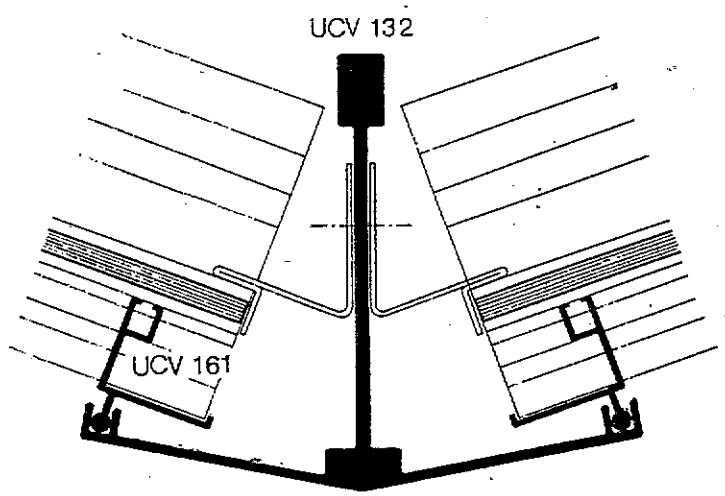
All dimensions in millimetres Scale: 50% Full size



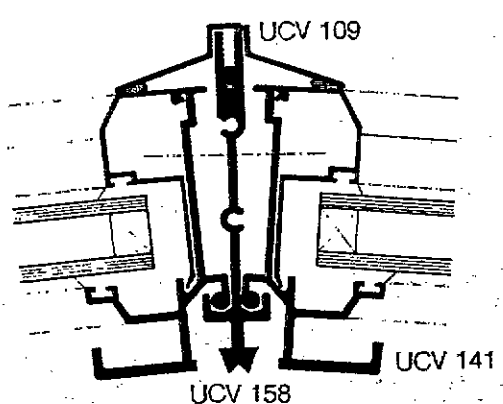
U Adjustable Angle Ridge



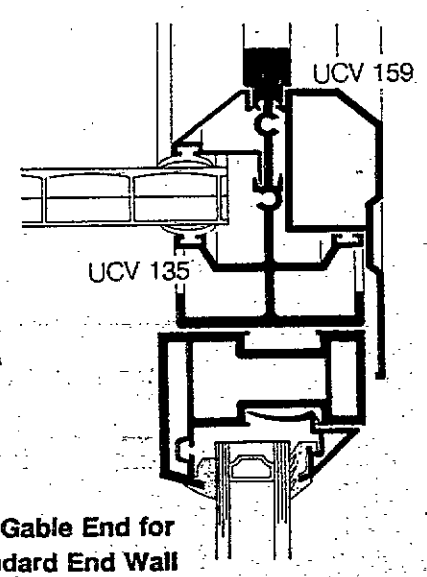
V Adjustable Angle Wall Plate



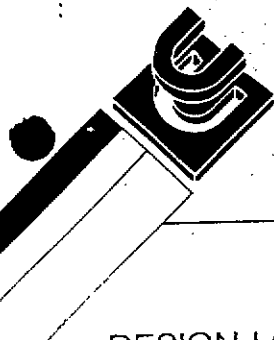
W Adjustable Angle Valley



X Adjustable Angle Hip



Y Optional Gable End for Non-standard End Wall



Universal Conservatory Load & Span Limitations

DESIGN LOAD AND RAFTER SPAN LIMITATIONS.

The following information is presented to give guidance on design wind pressure, self load and snr load, etc. and maximum rafter spans to suit various loading conditions. The information in the tables is based on the recommendations of BS 5516, Code of practice for patent glazing.

Table 1. Design wind pressures for conservatory roofs with a height of 3m to eaves.

Basic wind speed m/s	0 to 30° Pitched or monopitch roof				45° Pitched or monopitch (+ load apply to pitched roofs only)			
	Locality 1	Locality 2	Locality 3	Locality 4	Locality 1	Locality 2	Locality 3	Locality 4
52	+0 -1945	+0 -1460	+0 -1155	+0 -885	+860 -1715	+645 -1290	+510 -1020	+390 -780
50	+0 -1795	+0 -1350	+0 -1070	+0 -820	+795 -1585	+565 -1125	+475 -945	+360 -720
48	+0 -1655	+0 -1245	+0 -985	+0 -755	+730 -1460	+550 -1100	+435 -870	+335 -665
46	+0 -1520	+0 -1145	+0 -905	+0 -695	+670 -1340	+505 -1010	+400 -800	+305 -610
44	+0 -1390	+0 -1045	+0 -830	+0 -635	+615 -1230	+465 -925	+365 -730	+280 -560
42	+0 -1270	+0 -953	+0 -755	+0 -580	+560 -1120	+420 -840	+335 -665	+255 -510
40	+0 -1150	+0 -865	+0 -685	+0 -525	+510 -1015	+385 -770	+305 -605	+235 -465
38	+0 -1040	+0 -780	+0 -620	+0 -475	+460 -915	+345 -690	+275 -545	+240 -420

This information is intended for ground level installations only.
For installations above ground floor or large constructions consult a Structural Engineer.

Note - In the table above

- Locality 1. Denotes, open country with no obstructions and coastal situations.
- Locality 2. Denotes, open country with scattered wind breaks.
- Locality 3. Denotes, country with many wind breaks; small towns; outskirts of large cities.
- Locality 4. Denotes, surfaces with large and frequent obstructions, e.g. city centres.

To establish working load for rafter add the positive self and snow load, in table 2, to any positive load in design wind pressure, table 1, and use the greater load of positive or negative to select appropriate rafter from table 3. (Note: Pa denotes load in pressure, pascals, in table 1, and 1 Pa = 1 N/m²).

Table 2 Self load and snow load, perpendicular to the glass

Roof pitch	Double glazed	Single glazed	Polycarbonate
5°	1085 N/m ²	920 N/m ²	850 N/m ²
10°	1065	905	825
15°	1030	875	800
20°	985	835	750
25°	925	780	700
30°	860	720	650
35°	730	595	525
40°	605	480	425
45°	490	380	325

Note - selection of glazing should be based on the recommendations of BS 5516 and the Glass and Glazing Federation.

Note - Table 3. Maximum rafter spans, these are based on the formula, $d = 5Wl^3/384EI$ with deflection allowance of 1/175, for double glazing and 1/125 up to 3mm and 1/250 + 12mm over 3m span, for single glazing.

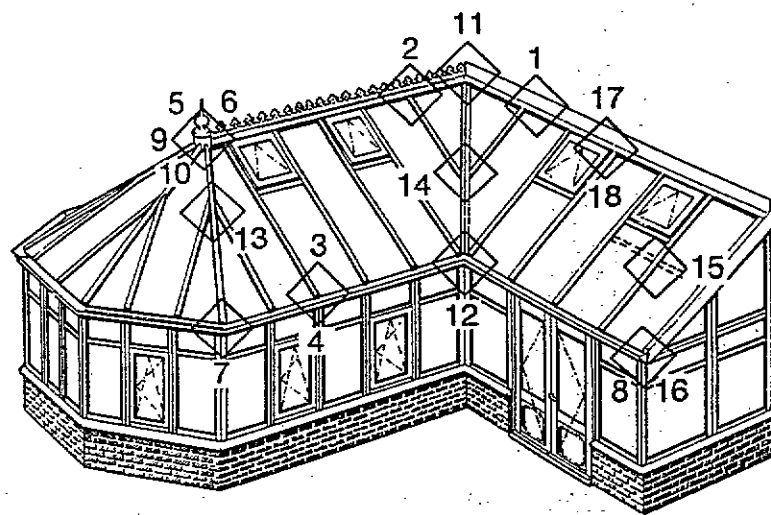
The maximum spans allow for some sag under self load, particularly on longer spans. This is more apparent on low pitch roofs, when double glazed. To control this, rafter UCV 120 should not exceed 2000mm, or 3000mm for UCV 121 in this type of situation. If in doubt consult our Technical Services.

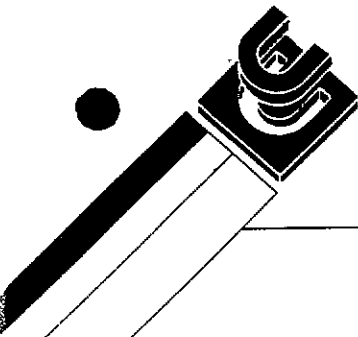
Table 3 Maximum Rafter Spans

Load Pa	Maximum spans D. G.			Maximum spans S.G. and Polycarbonate		
	Rafter centres			Rafter centres		
	600	900	1000	600	900	1000
	UCV 120					
500	2650	2385	2250	2975	2600	2500
750	2300	2025	1950	2600	2275	2175
1000	2100	1850	1775	2350	2050	1975
1250	1950	1725	1650	2175	1900	1850
1500	1825	1625	1550	2050	1775	1725
1750	1750	1550	—	1950	1700	1650
	UCV 135					
500	3450	3025	2925	3725	3325	3250
750	3025	2625	2550	3325	2950	2850
1000	2750	2400	2300	3050	2675	2575
1250	2550	2225	2150	2850	2475	2400
1500	2400	2100	2025	2675	2325	2250
1750	2275	1975	1925	2525	2225	2150
2000	2175	1900	1925	2425	2125	2050
	UCV 121 and UCV 140					
500	4450	3900	3750	4675	4150	4025
750	3900	3400	3275	4150	3675	3575
1000	3550	3100	2975	3825	3400	3275
1250	3275	2850	2775	3575	3174	3100
1500	3100	2700	2600	3400	3025	2925
1750	2925	2575	2475	3250	2875	2775
2000	2800	2450	2375	3125	2750	2650

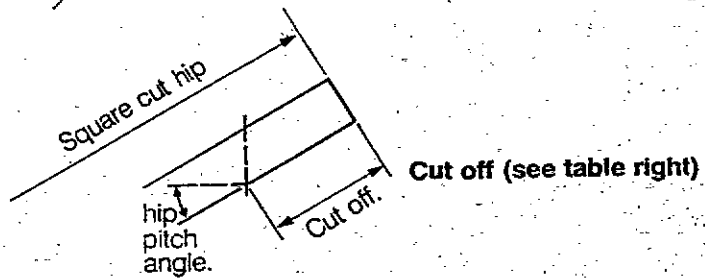
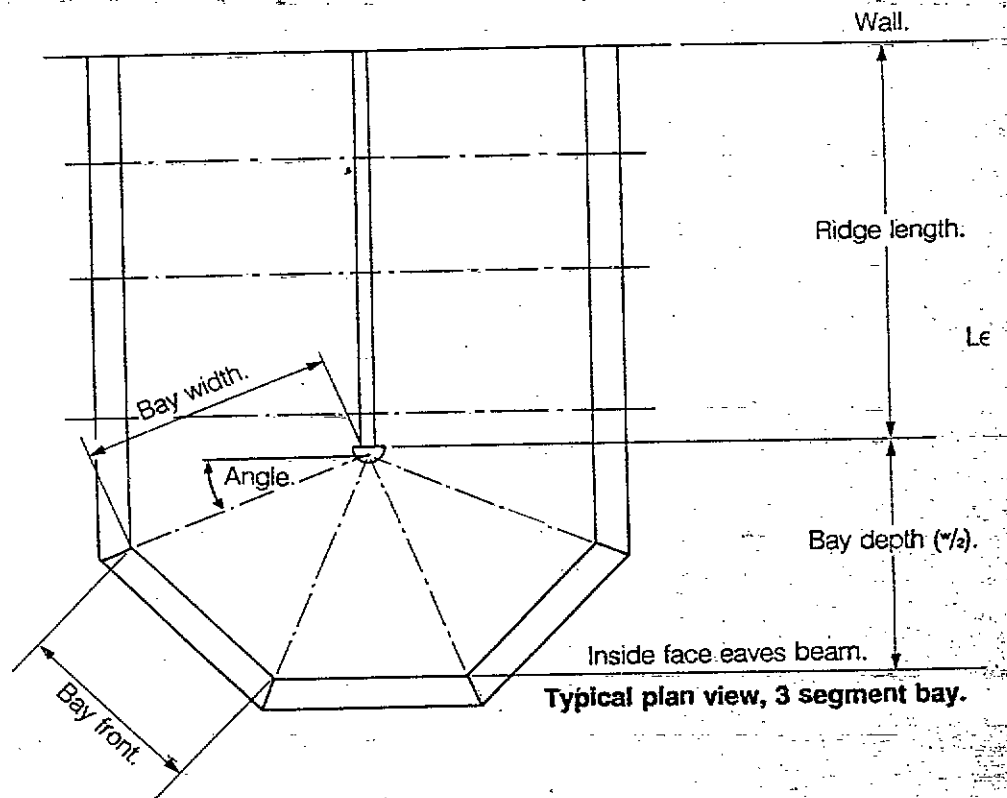
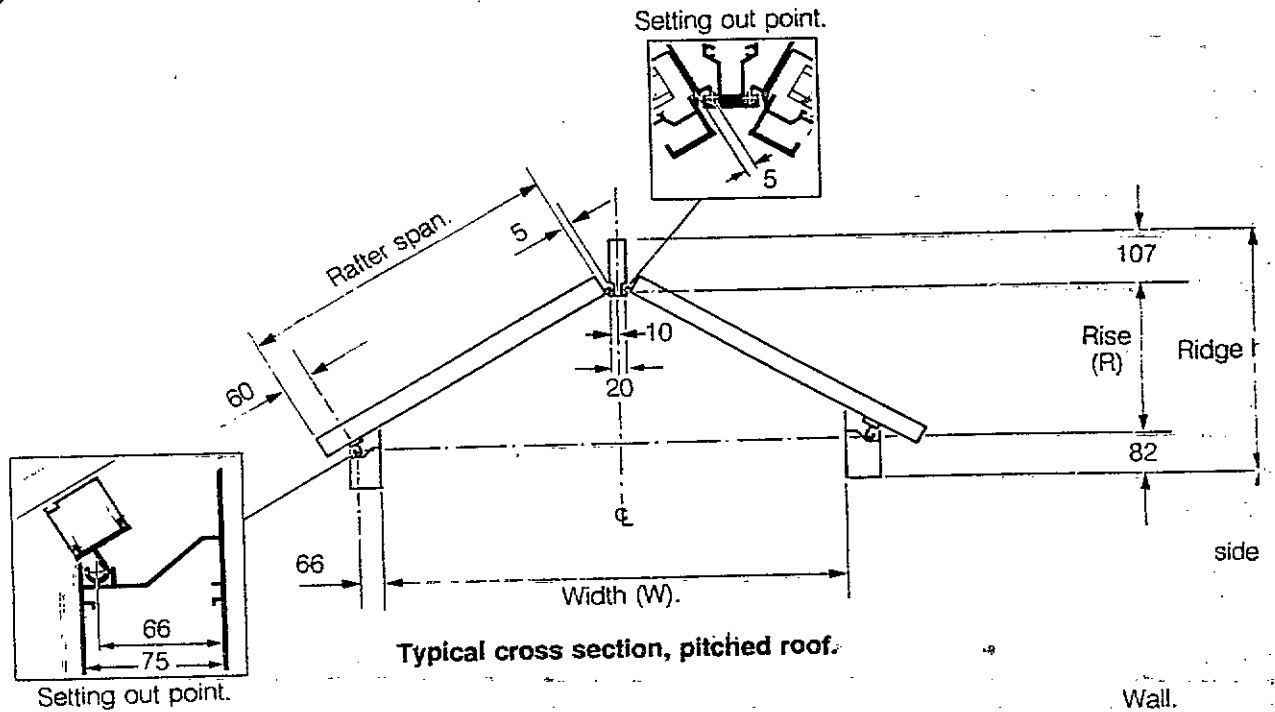
Universal Conservatory Construction and Assembly Details

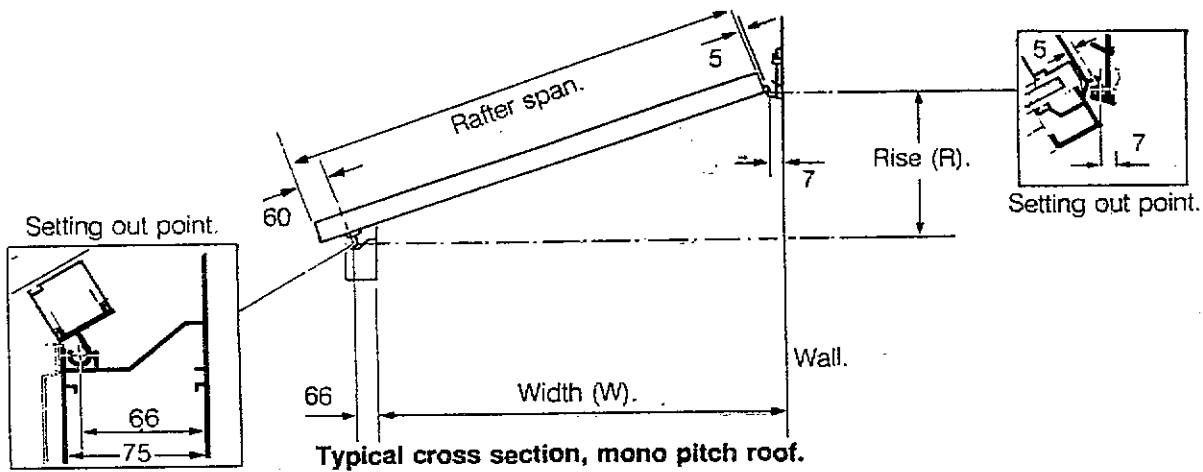
CONTENTS	page	fig.no.
Cutting formulae	18-19	
Ridge, wall plate and eaves connections	20	1-4
Hip to ridge connection (variable pitch roof) ...	21	5-6
Hip to eaves connections	21	7
Standard corner connection	21	8
Hip to ridge connection (fixed pitch roof)	22	9-10
Valley connections	22	11-12
Rafter connections	23	13-15
Non standard corner connection	23	16
Roof opening light cutting formula	24	
Roof opening light assembly	25	17-18





Universal Conservatory Profile Cutting Formulae





UNIVERSAL CONSERVATORY CUTTING FORMULA

Formula for profile cutting	
Rise (R)	= $(\frac{1}{2} + 56) \times \text{TAN pitch angle}$
Ridge height	= Rise + 189
Rafter span, pitched roof	= $((\frac{1}{2} + 56) / \text{COS pitch angle}) + 55$
Rafter span, mono roof	= $((W + 59) / \text{COS pitch angle}) + 55$
Ridge length	= Length - (bay depth + 6)
Bay width	= $\frac{1}{2}$ Angle (22.5°, 3 segment or 15°, 5 segment bay)
Bay front	= (Bay width \times COS angle) \times 2
Hip span (variable pitch)	
3 segment bay	= (Bay width + 61) / COS hip pitch angle
5 segment bay	= (Bay width + 58) / COS hip pitch angle
Hip span (fixed pitch)	
3 segment only	= (Bay width + 15 / COS 28.1°) + 62

Table of hip pitch angles

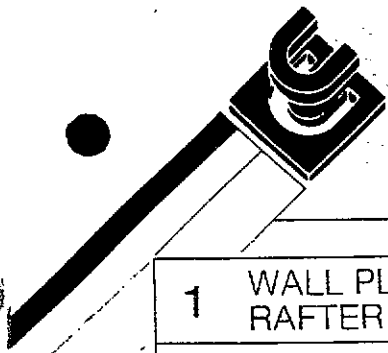
Pitch angle	3 segment bay Hip pitch angle	5 segment bay Hip pitch angle
15°	13.9°	14.5°
20°	18.6°	19.4°
25°	23.3°	24.2°
30°	28.1°	29.1°

For other roof pitch angles:
Hip pitch angle = Arch. TAN of Rise/Bay width.

Table of angled 'cut off' dimensions for top of variable pitched roof hip bar: (Fixed pitch hip bars are square cut each end)

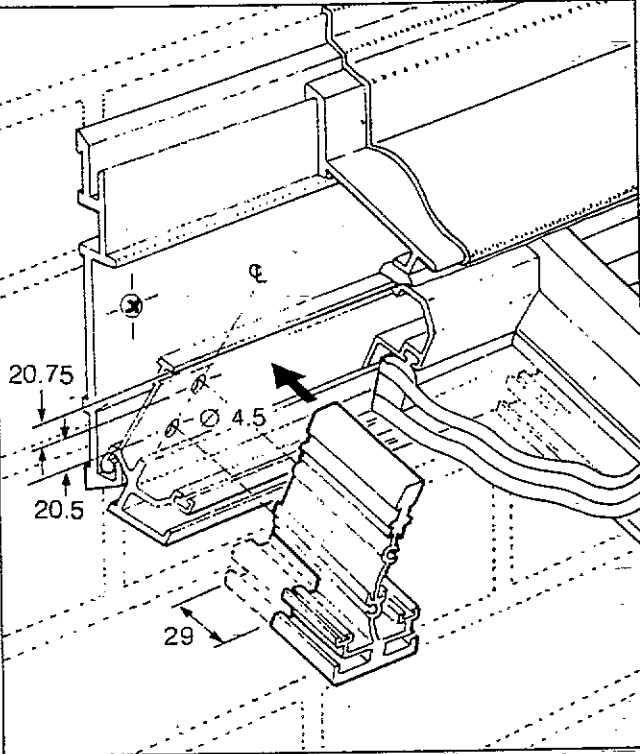
Pitch angle	Cut off, as diagram left
15°	49mm
20°	52mm
25°	56mm
30°	62mm

Note: datum points used in pitch angle formula are such that actual roof pitch will vary by up to 0.60, on a three metre heavy duty rafter span and less with standard rafter.

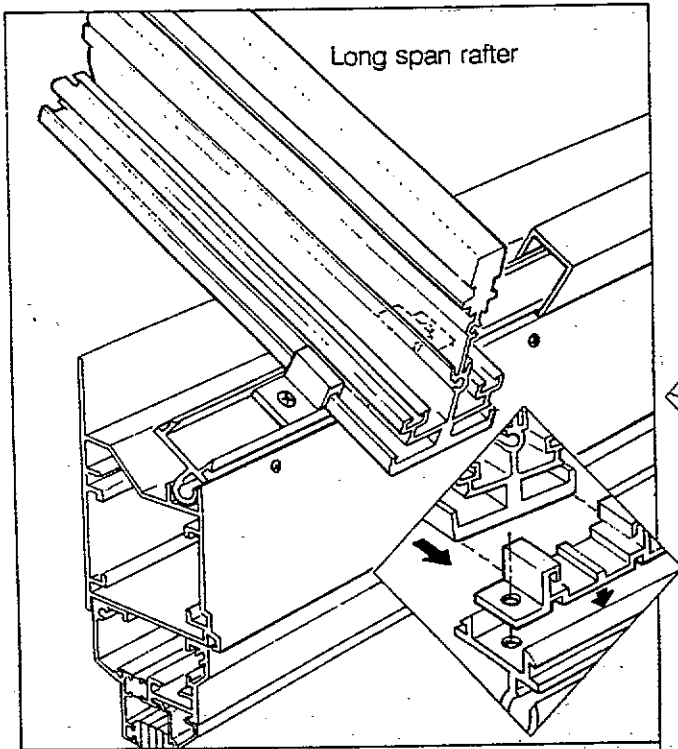
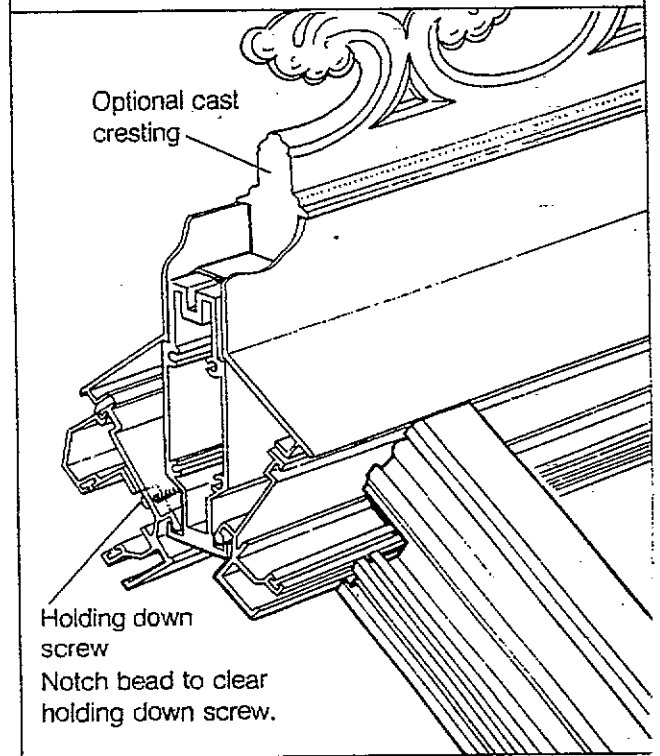


Universal Conservatory Construction & Assembly

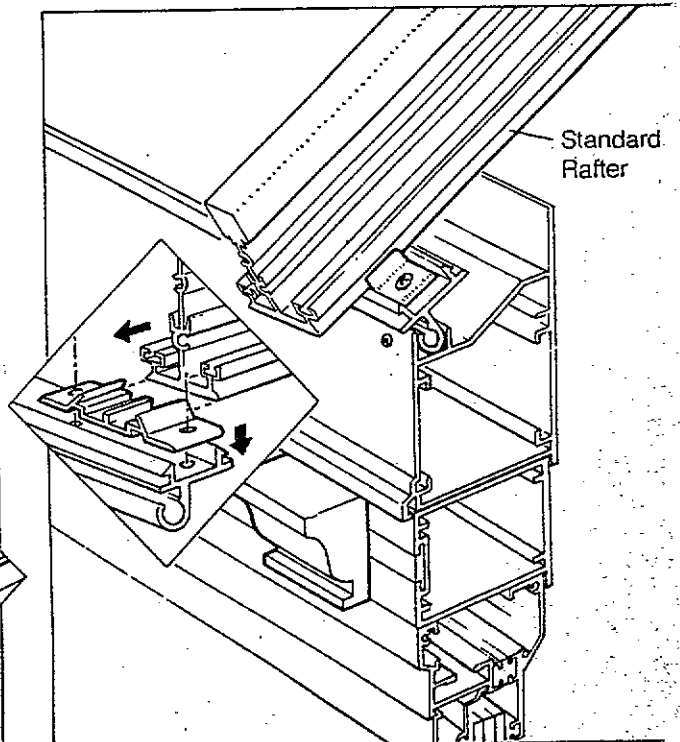
1 WALL PLATE
RAFTER CONNECTION



2 RIDGE CONNECTION



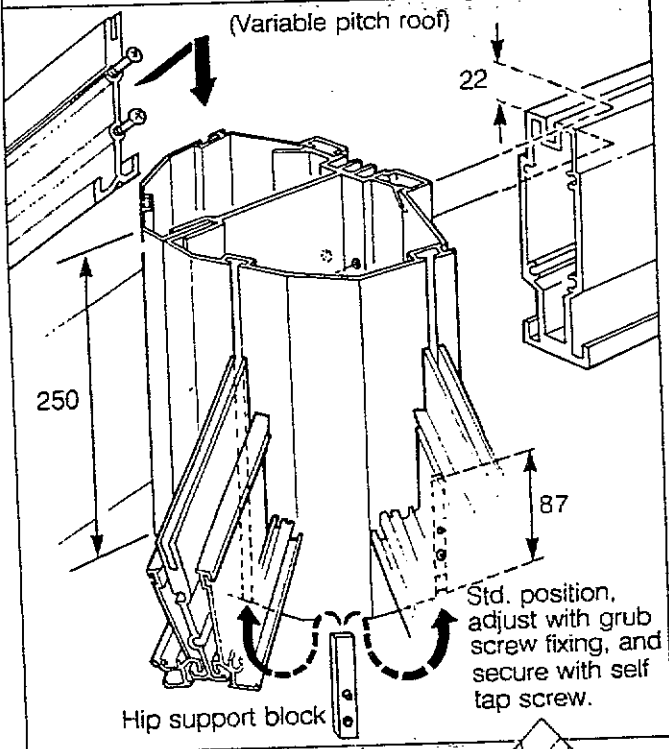
3 RAFTER TO
EAVES CONNECTION



4 RAFTER TO EAVES
CONNECTION WITH DENTAL

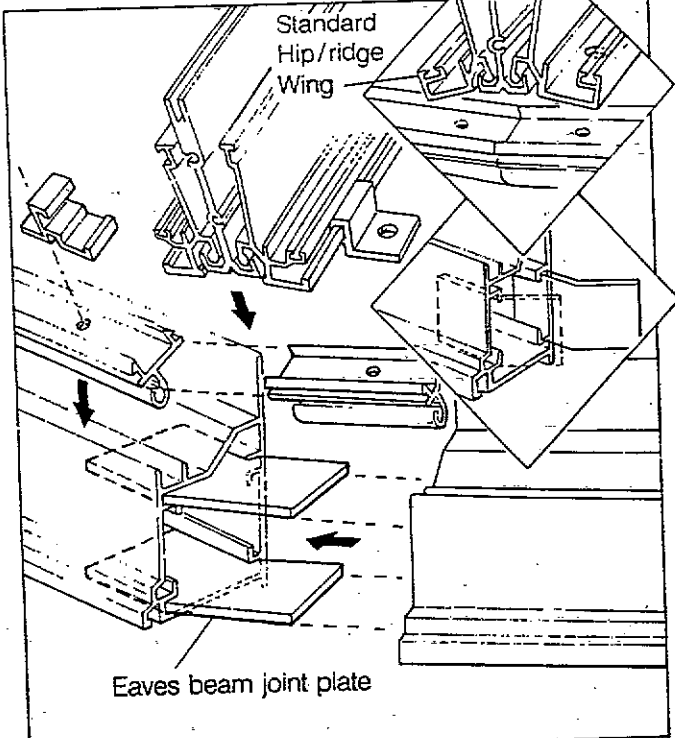
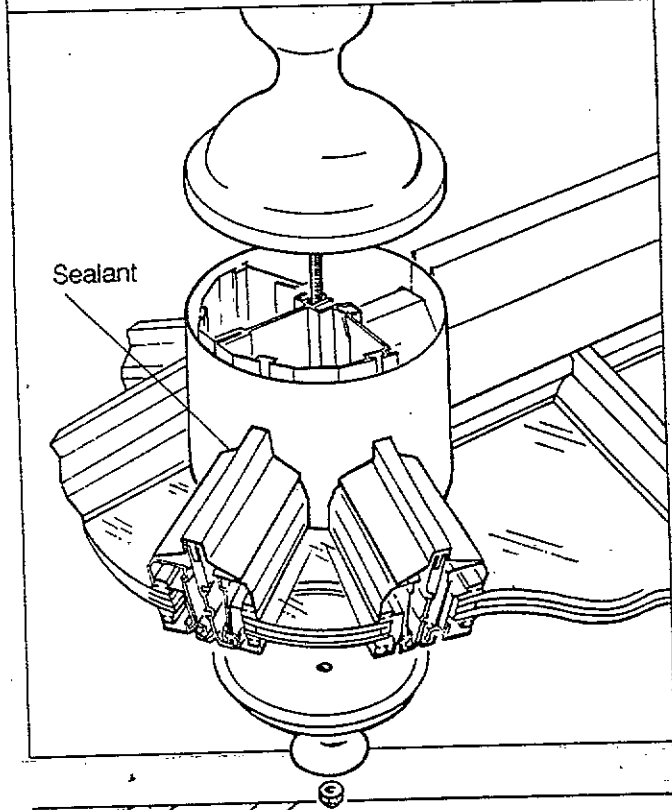
5

HIP TO RIDGE CONNECTION FOR 3 SEGMENT BAY



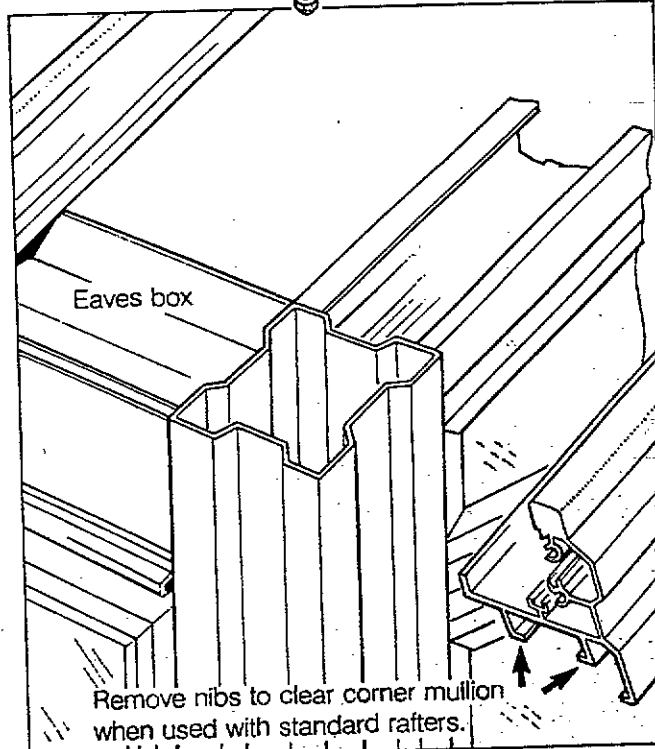
6

FINIAL FOR VARIABLE PITCH ROOF



7

HIP TO EAVES CONNECTION



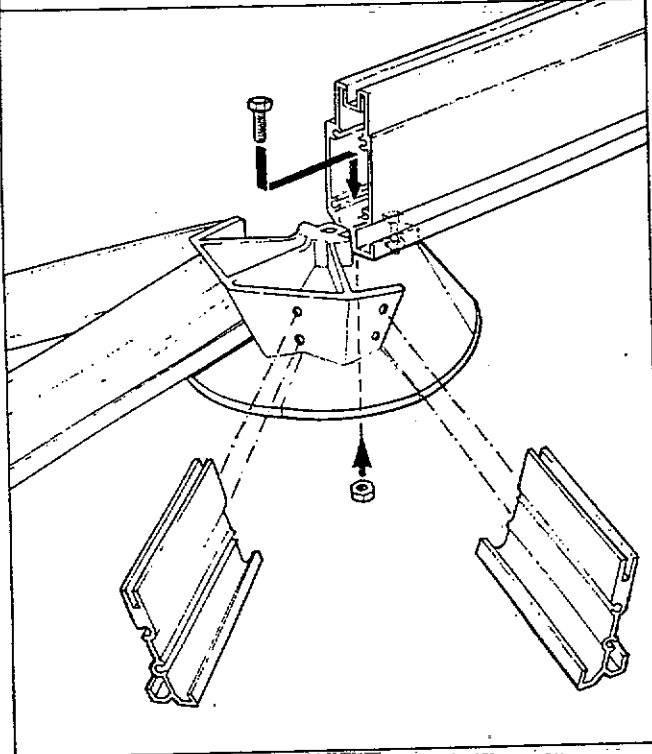
8

CORNER MULLION AND END RAFTER CONNECTION

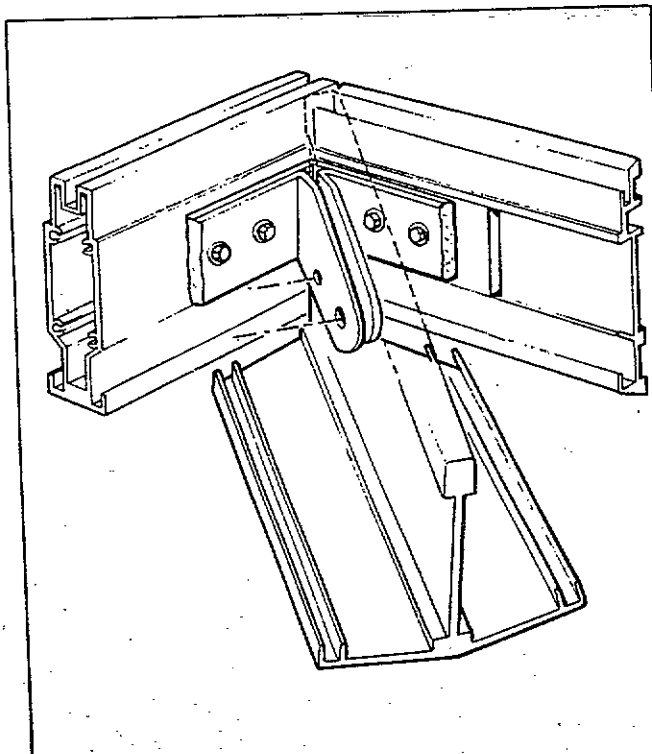
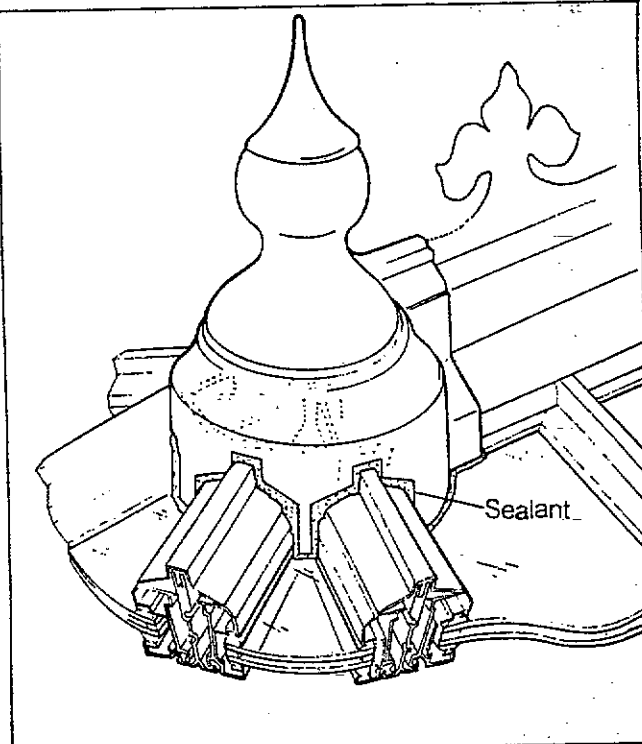


Universal Conservatory Construction & Assembly

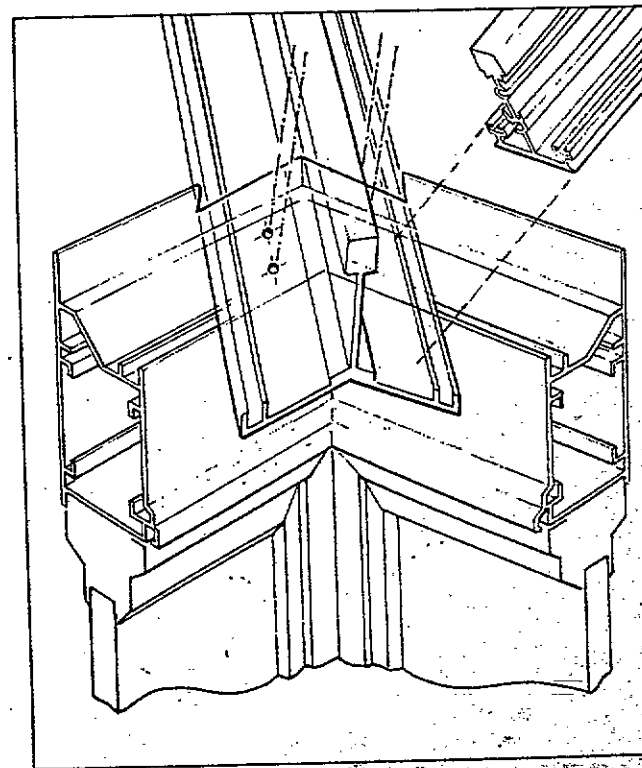
9 HIP TO RIDGE CONNECTION
FOR 3 SEGMENT BAY (30° Fixed pitch)



10 FINIAL FOR 30° FIXED
PITCH ROOF

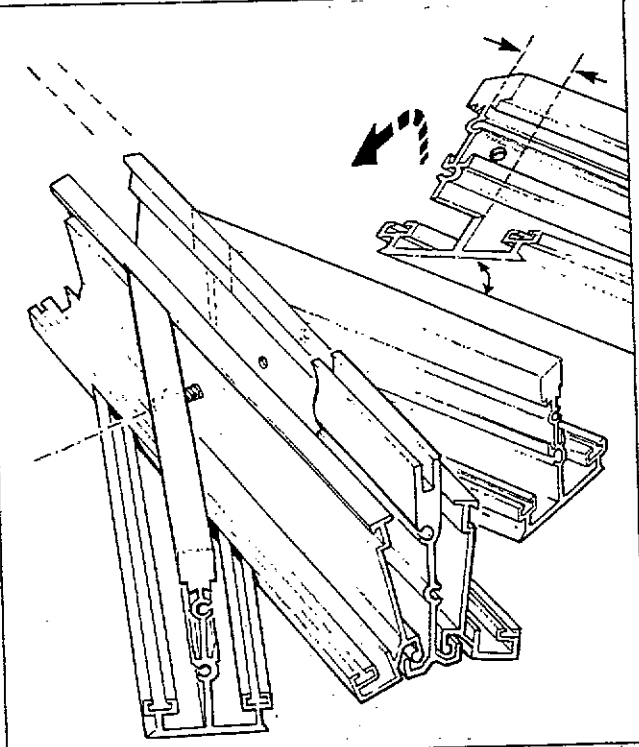


11 VALLEY TO RIDGE
WALL PLATE FIXING

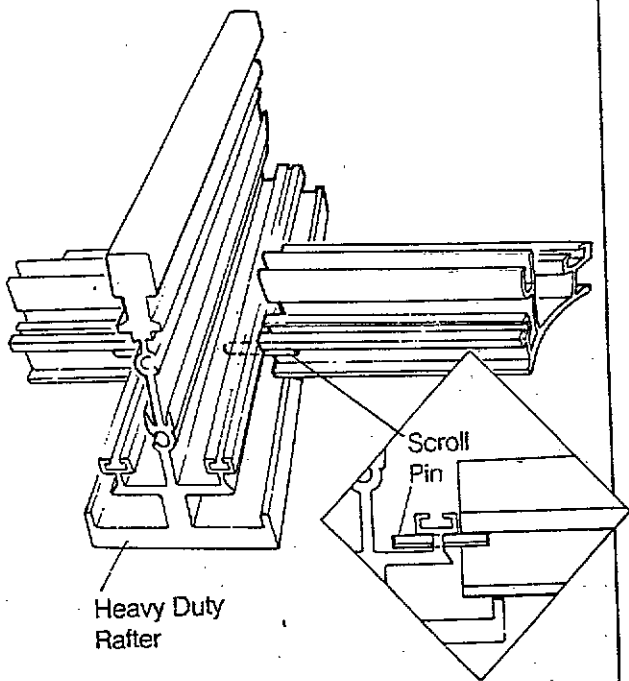
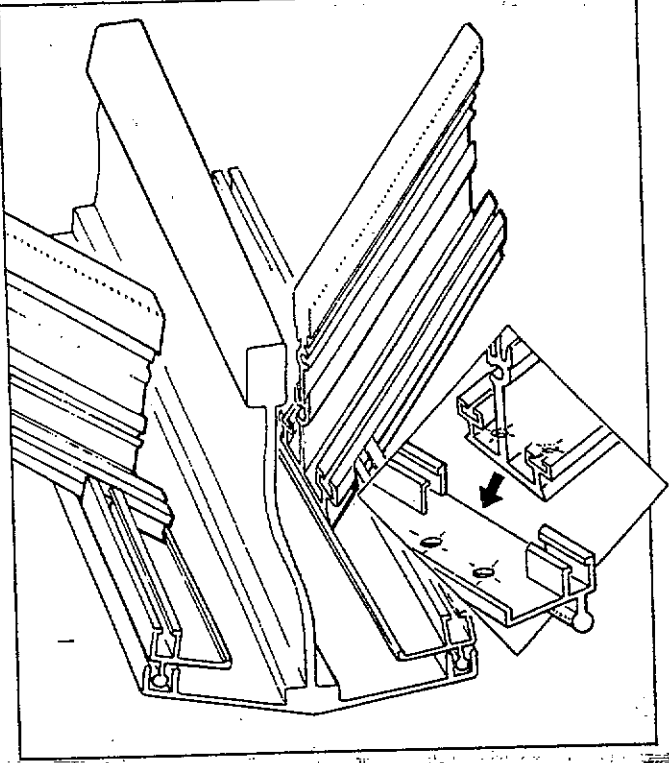


12 VALLEY TO EAVES
CONNECTION

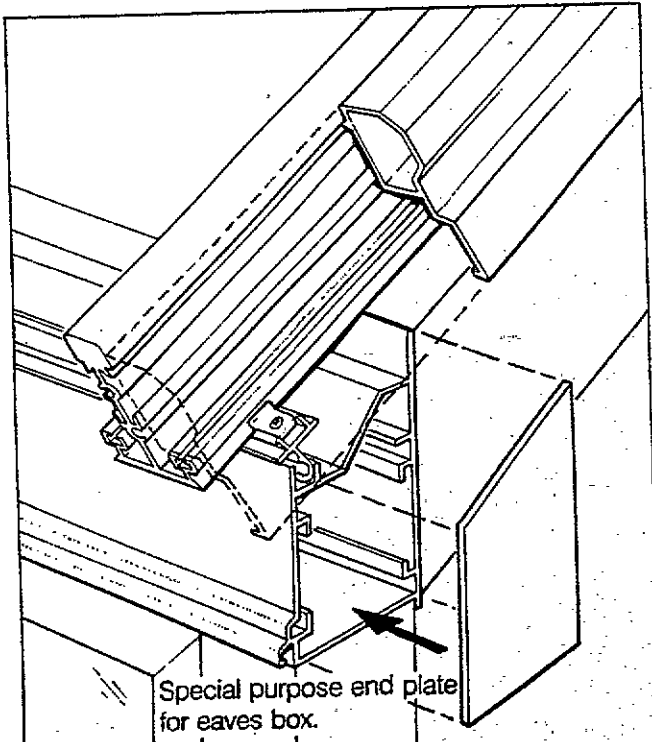
13 JACK RAFTER TO HIP CONNECTION



14 RAFTER TO VALLEY CONNECTION



15 PURLIN TO RAFTER CONNECTION

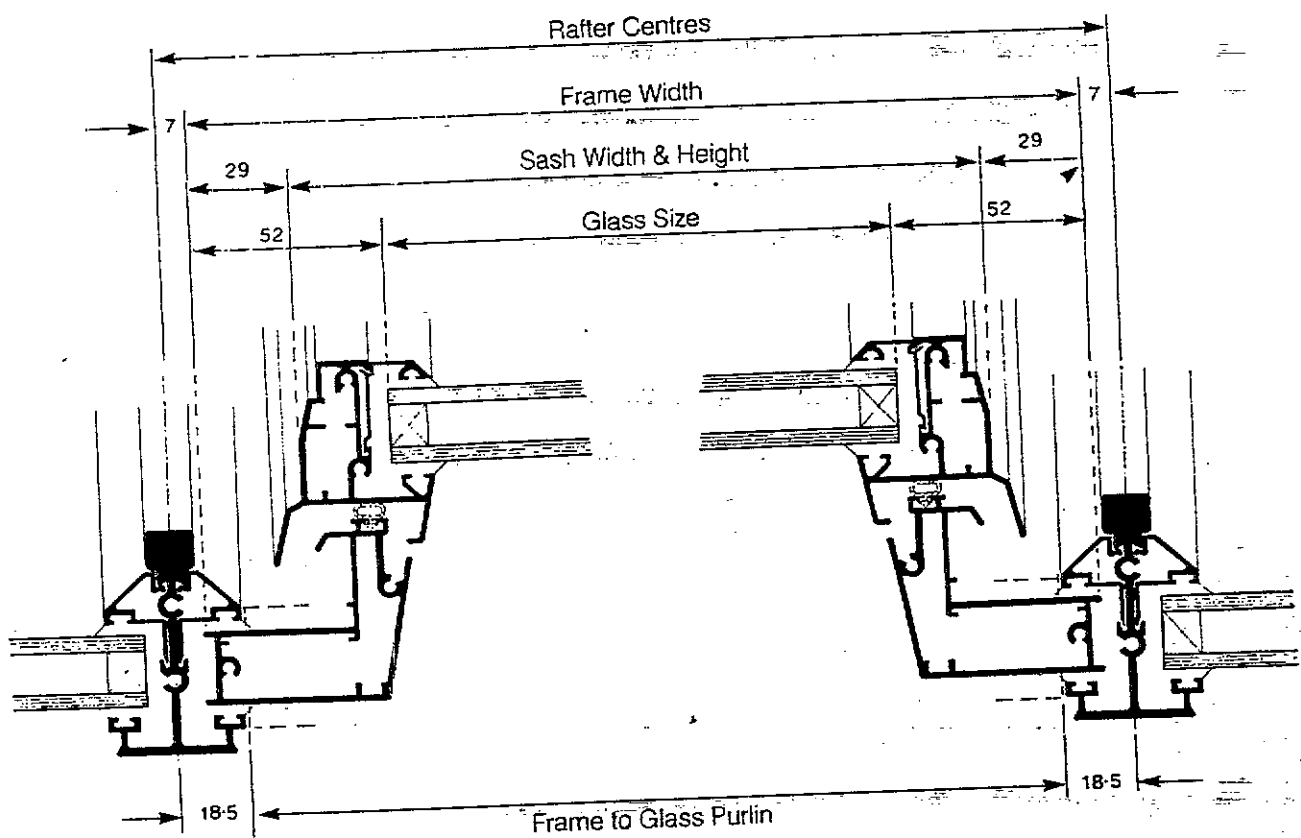


16 NON STANDARD CORNER MULLION (With end rafter adapter)



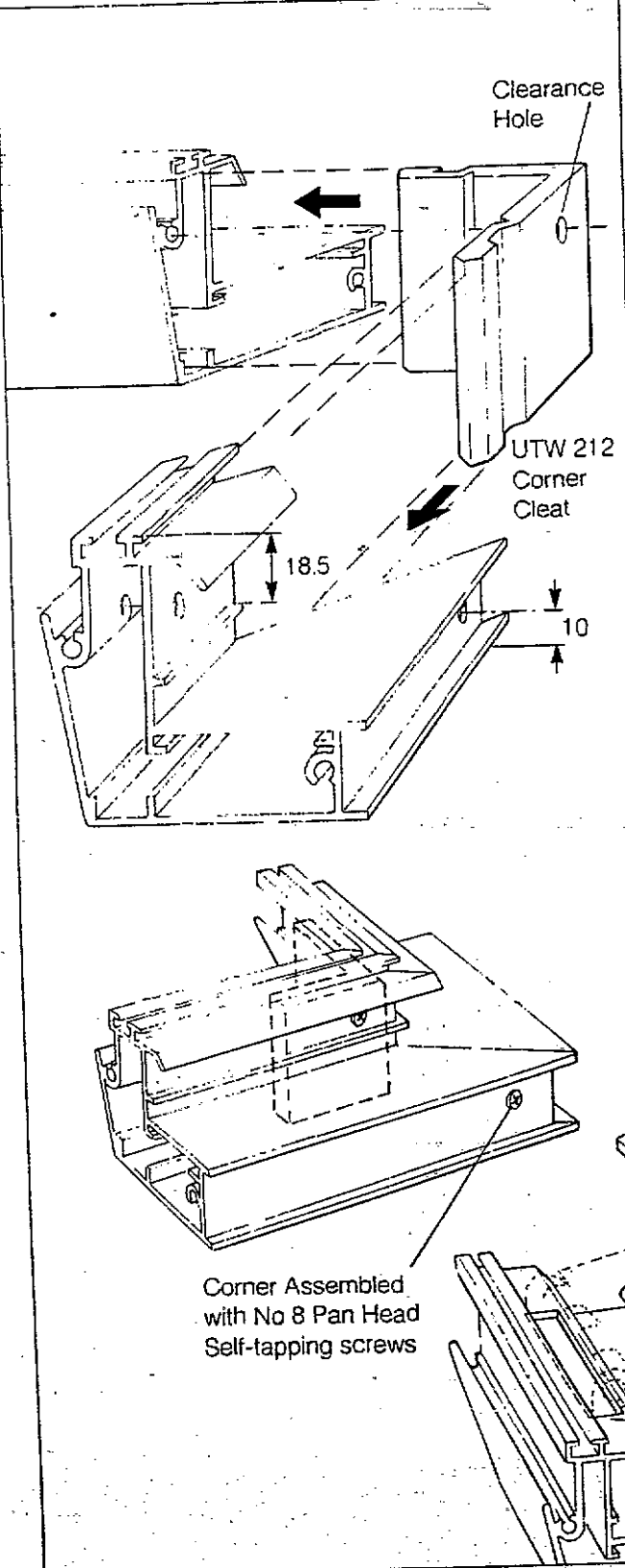
Universal Conservatory Construction & Assembly

CONSERVATORY ROOF WINDOW CUTTING FORMULA

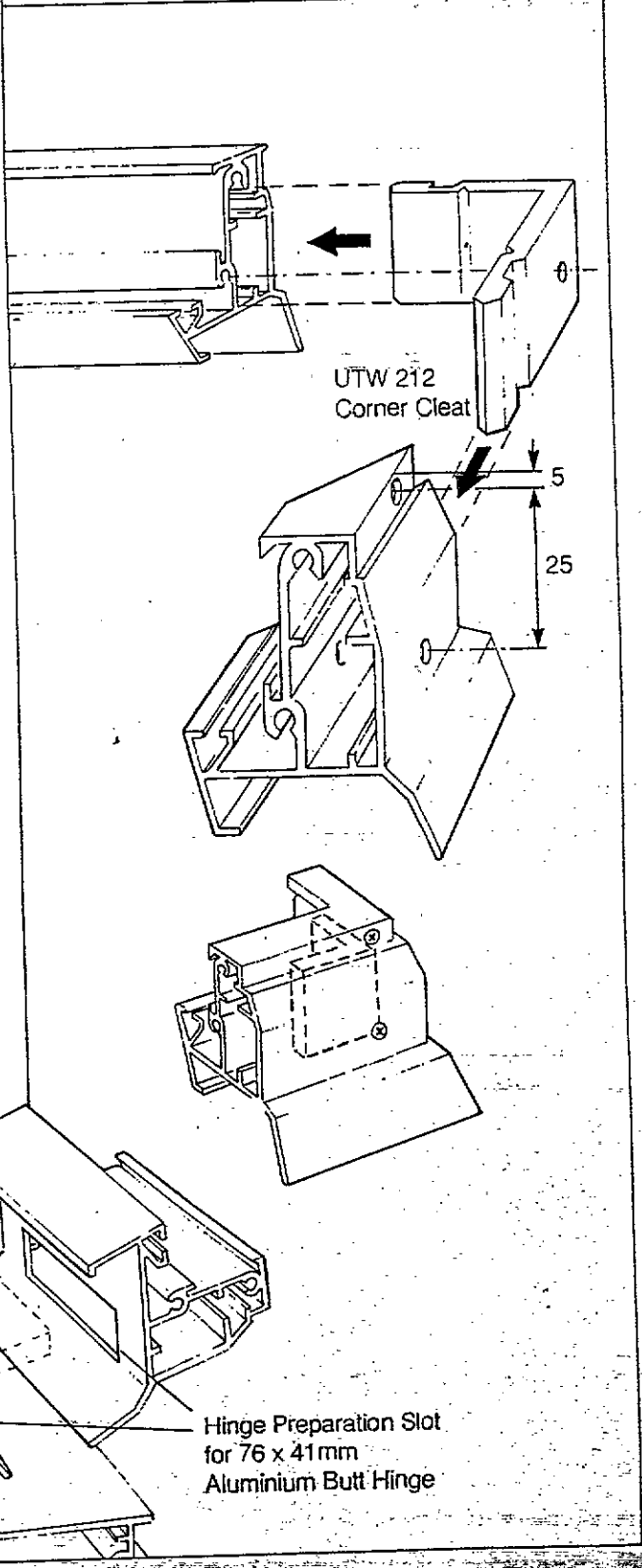


Aluminium and Glass Dimensions	
Frame width	= Rafter centres — 14mm
Frame height	= As required to maximum of 1200mm
Sash width and height	= Frame dimension — 58mm
Frame to glass purlin	= Rafter centres — 37mm
Glass size	= Frame dimension — 104mm

17 ROOF OPENING LIGHT
OUTER FRAME ASSEMBLY



18 ROOF OPENING LIGHT
SASH ASSEMBLY



All dimensions in millimetres

AN ROINN COMHSHAOIL

OUTLINE SPECIFICATION

DUBLIN COUNTY
Planning Dept. Regs
APPLICATION

10 JUN 1991

REG No. 91A/096 (1)

APPLICATION TYPE L

NO. C 3

CONTENTS

	Page
Excavations and Sub-structures	7
Blocklaying and Concreting	8
Carpentry and Joinery	11
Ironmongery and General	14
Roofing	15
Plastering	16
Plumbing	17
Drainage	18
Electrical Installation	20
Protective Painting	20
Glazing	20
Fire Precautions	21
Ventilation	21
Thermal Insulation	22

INTRODUCTION

This is an outline specification for the guidance of persons erecting a dwelling house, describing minimum requirements, and is not compiled for use as a contract document. Where a development contains more than one house a fully detailed specification may be required.

The work throughout shall be executed in a proper and workmanlike manner using the best available materials of their kind, and, as far as possible, manufactured or produced within the E.E.C. All materials and workmanship necessary for the proper completion of the work, or required by good building practice, are to be taken as being specified.

Where it is intended to use methods of construction or materials not described in this specification full details shall be submitted to the Department of the Environment.

The works shall also comply with:-

- (a) Relevant Irish Standard Specification (I.S.) or British Standard Specification where there is no Irish equivalent, or Provisional Specifications as above.
- (b) National Building Regulations (if any).
- (c) Local Authority Bye Laws, regulations or requirements.
- (d) The regulations and requirements of Public Utilities (e.g. E.S.B., Posts and Telegraphs, Gas undertakings).
- (e) Accepted Codes of Practice.
- (f) Requirements of the Department of the Environment.

Section 1 EXCAVATIONS AND SUB-STRUCTURES

- 1.1 Site**
The site shall be adequately drained and have no features likely to render the house unstable or uninhabitable.
- 1.2 Preparing Site**
Clear and grade site for new building and remove or divert existing drains as required. The entire site of buildings and paved areas shall be cleared of all vegetable soil to a depth of at least 150 mm. Where the bearing quality of the ground is suspect special care shall be taken in the design of the foundations.
- 1.3 Excavation**
- 1.3.1** The trenches shall be excavated to the depths and widths required to accommodate foundations or to such further depths or widths as may be necessary to ensure the stability of the structure. Trench bottoms and foundations shall be levelled off in horizontal benches. The bottom of trenches shall be not less than 450 mm below the finished ground level and kept clear of water before concreting.
- 1.3.2** Where other excavations close to or under the foundations are unavoidable care shall be taken to ensure the stability of the structure.
- 1.4 Foundations**
Shall be concrete mix A, to widths and depths indicated and reinforced as necessary. Where foundations are stepped they shall overlap at least 600 mm.
- 1.5 Floor Level**
The height of the finished floor over the highest point of the finished ground level shall be not less than 350 mm in the case of joisted floors and not less than 175 mm in the case of concrete floors. See also 2.24.
- 1.6 Rising Walls**
Rising walls shall be of solid blockwork bedded in cement mortar, or of mass concrete, mix A to widths and heights indicated. See also 2.4.
- 1.7 Cement and cement-based products**
Normal Portland cement used in concrete and other cement based products shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S.I.: 1963 "Portland cement", and shall bear the Irish Standard Mark.
- 1.8 Lime**
Hydrated lime to be to I.S.8.
- 1.9 Water**
Water shall be clean and free from harmful impurities.
- 1.10 Sand and Aggregates**
Fine aggregates shall be clean, sharp pit or river sand free from all impurities and in accordance with I.S. 5. Coarse aggregates shall be suitably graded hard clean pit gravel or crushed stone in accordance with I.S. 5 and to sizes set out below.
- 1.11 Concrete Mixes**

Concretes	Aggregates	Nominal Mix			28 day Strength (Newtons) Per mm ²
		Cement	Fine Aggregate	Graded Coarse Aggregate	
Mix	Maximum Size				
A	40 mm	1	3	6	14
B	20 mm	1	2	4	21
C	14 mm	1	3	6	—

The water-cement ratio shall be kept to the minimum needed to ensure reasonable workability, but should not exceed 35 litres per 50 Kg of cement.

- 1.12 Cement Mortar**
Shall be 1 part cement to 3 parts sand.
- 1.13 Lime Mortar**
Shall be 1 part hydrated lime to 6 parts sand.
- 1.14 Gauged Mortar**
Shall be 10 parts lime mortar mixed with 1 part cement just before use.
- 1.15 Strong Gauged Mortar**
Shall be 5 parts lime mortar mixed with 1 part cement immediately before use.
- 1.16 Additives**
Plasticisers, waterproofers, sealers and bonding agents if used, shall be used in accordance with manufacturer's instructions.

Section 2 BLOCKLAYING AND CONCRETING

- 2.1 Thermal Insulation**
Attention is drawn to the need to insulate walls, floors and roofs to meet the requirements set out in Section 14.
- 2.2 Mixes**
See Section 1 for concrete and mortar.
- 2.3 Blockwork**
Concrete blocks shall be in accordance with I.S. 20 and bricks, if clay, in accordance with I.S. 91. All blockwork and brickwork shall be properly coursed and bonded and bedded in gauged mortar. All walls shall be carried up regularly not leaving any part 1 m lower than another.
- 2.4 Cavity Walls**
Walls shall be formed of two solid 112 mm leaves of blocks or bricks with 50 mm cavity between. Outer and inner leaves to be tied together by accepted wall ties, not less than four per square metre with extra ties at opes. Care to be taken that mortar dropping into the cavity or lying on ties, is cleaned out, through openings left for the purpose, head of cavities to be closed in the solid. All window, door and other opes in cavities to be sealed and so arranged as to prevent the passage of moisture. The cavity is to extend at least 150 mm below the level of the D.P.C. and shall provide for drainage of moisture to the outside, at the base.
- 2.5 Hollow Block Walls**
225 mm hollow blocks shall be plastered externally. Bedding mortar shall be confined to abutting surfaces, and shall not enter the cavities of the block.
- 2.6 Solid Block Walls**
225 mm solid concrete blocks shall be plastered externally.
- 2.7 Solid Brick Walls**
Solid brick walls shall be 337 mm thick, and weather-pointed.
- 2.8 Masonry Walls**
Masonry walling, where used, must not be less than 500 mm thick.
- 2.9.1 Facings**
Where stone or other decorative external facing is used, care must be taken to ensure adequate structural stability, thermal insulation and absence of damp penetration.
- 2.9.2 Opes in External Walls**
Where any duct, pipe, etc., is required to penetrate through an external wall it shall be so arranged as to prevent the passage of moisture inwards.

- 2.10 Pointing**
All wall faces finished without plastering shall be pointed in the building mortar as the work proceeds, or the joints may be taken out 20 mm deep and pointed in cement mortar.
- 1.11 Party Walls**
All party walls shall be 225 mm solid blockwork of density not less than 1,500 kg/m³, plastered both sides and carried up in the solid to the plane of the upper surface of the rafters. See also 5.7.
- 2.12 Solid Partition**
Solid partitions shall be 112 mm thick brick or block work, laid to break joint, in gauged mortar, bonded 112 mm at junctions.
- 2.13 D.P.C.**
The damp-proof courses shall be polythene in accordance with B.S. 743 or bitumen sheeting on hessian or canvas base in accordance with I.S. 57 laid to prevent the passage of moisture and lapped adequately at joints, all as described below.
- 2.13.1** In all ground floor walls and breasts to full width and stepped as necessary, in cavity walls in both outer and inner leaves separately, and shall be laid not less than 150 mm over finished ground level or paved area or highest ground within one metre of house.
- 2.13.2** At sides of opes in cavity walls and over all opes 250 mm longer than opes and stepped down and outward all to prevent passage of moisture from outer to inner leaf.
- 2.13.3** Under the turned up at ends and back of all cills and external room ventilation grids and recessed edges of all concrete roof slabs.
- 2.13.4** In all chimney stacks immediately above the level of the flashing and under all cappings and copings.
- 2.13.5** Under lowest ground floor timbers and not lower than wall D.P.C.
- 2.13.6** Where the waterproofing membrane in a concrete floor is not level with the wall D.P.C. care shall be taken to ensure continuity of damp proofing by stepping, turning up and lapping as necessary.
- 2.14 Concrete Under Barges**
Concrete barges, if used, shall be under slates or tiles, full width of walls and at least 75 mm thick and projecting 100 mm beyond the face of the wall, throated on the underside, suitably reinforced and tied back as necessary. See also 5.7.
- 2.15 Concrete Copings**
Concrete copings in lengths of not more than 1 metre, shall be weathered and throated, bedded in gauged mortar on D.P.C. and pointed in cement mortar.
- 2.16 Lintels**
Concrete lintels mix B cast in situ shall be 225 mm deep with 225 mm bearing at each side of the ope, and shall be reinforced for full length with one 10 mm mild steel for every foot of span. Bars are to be placed 25 mm from bottom of lintel. Lintels for opes greater than 2.5 m shall be specially designed. precast concrete lintels to be as above and in addition to have 2 No. 10 mm mild steel bars at the top with 25 mm cover and to be clearly marked for correct placing. Accepted patent or proprietary lintels to B.S. 1239 to be used in accordance with manufacturer's instructions.
- 2.17 Window Cills**
Concrete window cills shall be to I.S. 89, 65 mm thick on front face, 120 mm thick at back, and 225 mm wider than ope; reinforced adequately, seated, rebated, weathered and throated and set in gauged mortar on D.P.C. as previously specified. Care to be taken that the throating is clear of the finished wall face.
- 2.18 Reinforced Concrete Annexe Roofs**
2.18.1 Concrete roofs, mix B shall be 40 mm thick for each metre of span, with minimum thickness of 100 mm, fine screeded and laid to falls. Where roof is recessed into a wall, form 150 mm upstand on D.P.C. properly flashed over. The roof shall be projected 150 mm and throated at verges, with a raised fillet as necessary to prevent overspill of surface water.

Insulate underside of roof. Waterproofing additives or sealants, if used, shall be applied in accordance with manufacturer's instructions.

2.18.2 Concrete roofs shall be reinforced adequately. For example, an area 5 m x 3 m should have 12 mm mild steel bars at 150 mm centres across the short span and 6 mm bars at 300 mm centres on the 5 m span. Steel to be placed 25 mm above underside of slab and carried over bearing walls to within 25 mm of edge of slab. Reinforcing bars should not normally be lapped, but where unavoidable, the lap shall be not less than 500 mm.

2.18.3 Proprietary steel reinforcing mesh may also be used, in accordance with manufacturer's instructions.

2.19 Chimney Breasts and Stacks

2.19.1 Chimney breasts shall be built of solid concrete blocks or decorative blocks or bricks or stone, all to a thickness of not less than 112 mm bedded in gauged mortar with splayed R.C. lintel over fire ope. Each fireplace recess shall have 200 mm solid incombustible material to sides and back excluding any fireback, carried up to full height of recess. Each fireplace shall have an independent flue, separated by not less than 100 mm of solid incombustible material (excluding the thickness of any flue liner) from any other flue. Each flue shall be lined with fireclay liners to I.S. 51 not less than 200 mm internal diameter, backed with weak mortar and carried 150 mm above capping. Splayed liners shall be used in forming bends to flues. Chimney stacks over roof shall be built of 112 mm solid concrete blocks bedded in gauged mortar and plastered or, where special precautions are taken, of decorative blocks, bricks or natural stone. Due to the exceptional exposure of stacks the use of decorative blocks, bricks or natural stone in stacks may cause dampness. Special care in construction and in the design and placing of the D.P.C. is necessary.

2.19.2 Capping to stack shall be of reinforced concrete, mix C, weathered and throated, not less than 75 mm thick at edge and flaunching up around pots. Top of stack, excluding chimney pots, to be 600 mm over ridge where stack is within 600 mm of the ridge.

2.19.3 Care should be taken that construction and height of stack is such as to ensure adequate structural stability and satisfactory drawing of smoke.

2.20 Fireplaces, Heating Units, Cookers

Fireplaces to have a fireclay back and incombustible surround and to be properly gathered into flue. Enclosed cookers and heating units to be fitted to manufacturer's instructions, with incombustible flue, ventilated as necessary and shall stand on a concrete hearth projecting 150 mm from face of appliance all round.

2.21 Hearths

First floor hearths shall be 125 mm thick reinforced concrete, mix B, finished fine carried on suitable formwork on 44 mm x 22 mm battens spiked to floor joists.
Ground floor hearths shall be 125 mm, finished fine, on hardcore as necessary.
All hearths to be 150 mm wider than fire ope on each side and to project 500 mm from face of breast.

2.22 Paved Yard

Provide 10 m² of impervious paved area laid to falls on suitably prepared base and adjacent to back door e.g. 100 mm concrete, 50 mm tarmacadam or 50 mm paving slabs.

2.23 Concrete Floors

All concrete ground floors shall be laid on a bed of clean hardcore not less than 150 mm thick and well consolidated. Soft material shall not be used in making up level under floors. Concrete ground floor shall be 150 mm thick mix B finished fine, laid on a continuous damp proof membrane on a layer of fine sand and turned up at edges of slab as necessary to meet and seal with wall D.P.C. Polythene sheeting where used shall be not less than 1000 gauge.

2.24 Sub Floors

Concrete sub-floors to joisted timber floors shall be laid on 100 mm of hardcore as described in 2.23. Concrete shall be mix A, 100 mm thick, and finished to a level not lower than the highest adjoining ground.

- 2.25 Dwarf Walls**
Dwarf walls 112 mm thick concrete block or brick, honeycombed for through ventilation shall be built on sub-floors, at centres not greater than 2 metres.
- 2.26 Suspended Concrete Floors**
Where concrete suspended floors or stair landings or balconies are used, they should be finished fine and capable of carrying a superimposed load of 1.44 KN/m². Exposed soffits shall be insulated where necessary.
- 2.27 Screen and Garden Walls**
Screen or garden walls shall not abut main walls of house.

Section 3 CARPENTRY AND JOINERY

- 3.1 Timber**
Timber shall be sound, free from disease and infestation and large loose knots or waney edges, with a moisture content within the limits set out in I.S. 96. Timber for carpentry to be white deal. Timber for joinery to be red deal, hard wood or other timber suitable for the purpose and free from all defects.
- 3.2 Preservative**
Soft wood used externally, to be pressure impregnated with coloured preservative. Softwoods in contact with concrete to be treated with coloured preservative. Frames, barge-boards, fascias to be primed before fixing.
- 3.3 Roof Timbers**
- 3.3.1** Wall plates 75 mm x 100 mm fully treated with preservative, halved and spiked at headings and angles, set level and bolted down at 1 m intervals.
- 3.3.2** Rafters 35 mm x 115 mm minimum at 400 mm centres, treated at feet with preservative, and cut to angles, checked and twice spiked to wall plates, properly aligned to back and spiked to ridge and purlin.
- 3.3.3** Trimming rafters 44 mm thick around roof light and dormer opes and around chimney shafts and 50 mm clear of shaft.
- 3.3.4** Hip and valley rafters 44 mm x 225 mm treated at feet with preservative and fixed as for rafters above.
- 3.3.5** Valley and gutter boards 22 mm x 225 mm wrot, to take gutter, treated with preservative and secured to rafters.
- 3.3.6** Ridge board 32 mm x 175 mm set level, kept 50 mm clear of chimney shaft.
- 3.3.7** Purlins 75 mm x 175 mm adequately supported at intervals of approximately 2 m. Joints, where necessary, shall be half lapped over a support.
- 3.3.8** Struts 75 mm x 100 mm properly supporting purlins from solid bearing, or from spreaders not more than 500 mm from load bearing partitions. Where such bearing support cannot be provided, suitably trussed rafters or purlins shall be used to ensure stability.
- 3.3.9** Spreaders and thrust pieces 44 mm x 115 mm under struts, spiked to ceiling joists to distribute load.
- 3.3.10** Collar ties 35 mm x 115 mm to every rafter. Where purlins are provided, fix collars to every fourth rafter. All collars to be twice spiked to rafters.
- 3.3.11** Hangers and runners 35 mm x 75 mm where necessary to support ceiling joists.

- 3.3.12** Soffit bearers 35 mm x 75 mm to every rafter, treated with preservative.
- 3.3.13** Soffit at least 200 mm wide 16 mm wrot softwood, pressure impregnated or other material suitable for external use and secured to bearers.
- 3.3.14** Fascia 32 mm x 175 mm wrot deal, well secured to roof timbers and pressure treated.
- 3.3.15** Ceiling joists 35 mm x 115 mm at 400 centres, cut to angles and twice spiked to rafters. Where not in one length, form 500 mm securely spiked lap over partition walls.
- 3.4** **Roof Trusses**
Roof trusses to I.S. 193 (P), adequately braced diagonally, may be used at centres not greater than 600 mm. See also 5.2.
- 3.5** **Floor Joists**
- 3.5.1** First floor joists 35 mm x 175 mm at 350 mm centres for spans up to 3 m, 35 mm x 225 mm at 350 mm centres for spans up to 5 m. All to have one row 35 mm x 44 mm herring-bone bridging or 35 mm x depth of joist solid bridging. Joist to be doubled where carrying partition.
- 3.5.2** Trimmers and trimming joists 75 mm thick x depth of joist to opes and chimney breasts and kept 50 mm clear of breasts. Trimming and trimmed joists to be supported by approved fittings or to be checked on to battens spiked to supporting joist.
- 3.5.3** Ground floor joists 35 mm x 115 mm at 350 mm centres, to be spiked to wall plates (tassels). Trimming timbers to be 44 mm thick x depth of joist.
- 3.5.4** Ground floor tassels 44 mm x 75 mm treated with preservative set level and bearing solidly on D.P.C.
- 3.6** **Ventilation**
Provide through ventilation under timber ground floors by means of 225 mm x 150 mm metal or concrete louvred ventilators in external walls. Sealed ducts to be formed through cavities in external walls. Openings to be left in tassel walls and in rising walls of partitions and piped ducts to be formed under intervening concrete floors to ensure through ventilation. Space from surface of sub-floor to underside of bottom of ground floor joists to be not less than 125 mm.
- 3.7** **Flooring**
- 3.7.1** Remove all debris from sub-floors before flooring. Flooring 22 mm T & G well cramped, twice nailed with 60 mm cut brads, in narrow widths to minimise the effects of cupping and shrinkage or 18 mm flooring grade chipboard, density 700 kg/m³ on joists at 400 mm centres with 44 mm x 44 mm noggins to support cross joints. Long joints shall be made along the centre of a joist. Adjacent sheets shall have an expansion gap of 3 mm between them, with 20 mm gap between edges of sheet and adjoining walls, the edges being treated with fungicide. Sheets should be fixed at 300 mm centres and not nearer than 12 mm to edge of sheet. Exposed chipboard floor surfaces to be sealed with resinous sealer.
- 3.7.2** Suspended floors. Where soffit of suspended floor is exposed externally insulate as necessary and sheet with material suitable for external use and having half hour minimum fire rating.
- 3.8** **Grounds**
Pretreated timber grounds shall be securely built in, to provide means of fixing frames and trimmings.
- 3.9** **Stud Partitions**
Studs, head and sole pieces, and bridging 35 mm x 75 mm. Studs at 350 mm to 400 mm centres. Sole piece to be well spiked to floor and if parallel to joists, shall be carried on doubled joist. Provide 2 No. rows of nogging. Where a partition is load bearing increase timber sections as required. For finish see 6.0.
- 3.10** **Proprietary Partitions**
Accepted proprietary partitions, erected to manufacturer's instructions, may be used.

3.11 Stairs

Stairs shall have 2 m headroom measured vertically from the pitch line and 1.5 m clearance measured at right angles to the pitch line; width 860 mm, going 220 mm minimum, rise 200 mm maximum.

3.12 Lighting to Stairs and Landings

3.12.1 Lighting to stairs, landings, halls and corridors shall be provided by a suitably placed window or roof-light or borrowed lighting from rooms.

Rest of Stairs

3.12.2 Stairs shall have 32 mm red deal round nosed treads and 22 mm risers all glued blocked and bracketed checked and wedged into 44 mm strings. Newel posts, balusters and hand rails to be standard machine prepared sections or suitable steel/timber combination. Open treads shall be not less than 44 mm hardwood, and may be used in accepted special construction with timber, steel or reinforced concrete.

3.12.3 Every flight shall be adequately protected on each side and have at least one handrail, secured at a height not less than 840 mm and not more than 1 m measured vertically from the pitch line. Closed string stairs shall be to I.S. 158.

3.13 Windows

Sliding, hung or pivoted timber sashes and frames to be made from standard machine-prepared sections pressure impregnated with preservative.

Wood casement windows shall be to I.S. 63.

Galvanised steel casement windows shall be to I.S. 60.

Aluminium or P.V.C. windows of accepted make may also be used, in accordance with manufacturer's instructions.

NOTE. Glazed area to be not less than 10% of floor area of room.

Opening area to be not less than 5% of floor area of the room.

Window boards shall be 32 mm wrot, moulded on edges and corners and secured to grounds.

3.14 External Door Frames

External door frames shall be machine prepared 75 mm x 115 mm in wrot deal, rebated in the solid, secured to grounds and dowelled at foot to heel blocks.

NOTE. Under no circumstances should feet of external door frames rest on, or be set into, concrete paving or step.

3.15 Internal Door Frames

Internal door frames shall be 35 mm thick wrot deal with 16 mm planted stops or 44 mm thick wrot deal rebated in the solid, secured to grounds.

3.16 External Door

External doors shall be to I.S. 48 or I.S. 52, hung on 1½ pair 100 mm steel butt hinges.

3.17 Internal Door

Internal doors to habitable rooms shall be to I.S. 48 or I.S. 52 hung on 1 pair 100 mm steel butt hinges. Sliding doors to be not less than 44 mm thick and hung on acceptable proprietary track.

3.18 Trap Door

Form trap door 500 mm square or half hour fire rating suitably located to give access to roof space.

3.19 Hot Press

Hot press to have not less than 2m² of spar shelving, 22mm x 44mm wrot, at 75mm centres supported on 22mm x 44mm battens. Where necessary, the cylinder shall be carried on 22mm T and G on 35mm x 75mm framed bearers. Hang suitable door, framed to prevent warping and fitted with suitable catch. Holes for pipes etc. to be neatly made good.

NOTE. Hot press doors are very liable to distort due to temperature difference. Consideration should be given to insulating the inner face of the door.

3.20 Fitments

All fitments and built-in units shall be of such design, material and workmanship so as to satisfy completely the demands of normal usage.

3.21 Trimmings

3.21.1 Skirtings 16mm x 100mm wrot deal to all floors well fixed to grounds. Plastic skirting may be used where appropriate.

3.21.2 Architraves may be 16mm x 75mm wrot deal or as necessary to form neat joint, mitred at angles and securely fixed to grounds.

3.21.3 Saddles shall be hardwood, cut of 22mm x 150mm splayed, scribed to door frames and secured to floor. For external doors accepted proprietary thresholds may be used.

Section 4 IRONMONGERY AND GENERAL

4.1 Eave Gutters and Rain Water Pipes

Eave gutters and rain water pipes shall be to relevant I.S.S. and may be:-

GUTTERS	I.S.	PIPES
125 mm	42	75 mm Cast Iron
125 mm	59	75 mm 14 SWG galvanised pressed steel
125 mm	71	75 mm Asbestos cement
125 mm		75 mm Aluminium
115 mm		65 mm P.V.C.

Metal and A.C. gutters to be supported on suitable brackets at not more than 2m centres, joisted with mastic compound (and gaskin washers in the case of asbestos cement) and bolted with galvanised gutter bolts and nuts. P.V.C. gutters to be supported on suitable brackets at not more than 1m centres and jointed in accordance with manufacturers instructions. Gutters to be set to falls. At least two stacks of rain water pipes shall be provided secured by holder brackets and kept clear of wall. Provide and fit all necessary matching stop ends, angles and drop nozzles, swannecks, hopper heads and toes. Rainwater pipes to discharge approximately 50mm above gully grid.

4.2 Windows

See 3.13.

4.3 Sash Fittings

All opening sashes shall be fitted with strong metal fasteners. Centre pivoted, top, side or bottom hung sashes to have suitable stay gear. Up and down sashes shall be hung on brass bushed and faced steel sash pulleys with suitable sash cords and weights or on accepted patent hanging gear.

4.4 Door Fittings

Internal doors shall be hung on one pair 100mm steel butt hinges and fitted with suitable mortice type lock or catch and complete with furniture. Provide bolt or locking device to bathroom and toilet doors.

External doors shall be hung on 1½ pair of 100mm steel butt hinges. Entrance door shall be fitted with cylinder night latch and external pull handle. Provide and fit letter place on or near door. Other external doors shall be fitted with bolt and rim or mortice lock suitable for external use. See 12.1.3.

4.5 Ventilation Grids

External openings to ventilators shall be fitted with galvanised cast iron, aluminium, concrete, or accepted P.V.C. louvred grids. See 2.13.3.

Section 5 ROOFING

5.1 Sarking Felt

Untearable sarking felt to I.S. 36 shall be laid under all slates and tiles, lapped horizontally not less than 75 mm for pitches greater than 25° and 150 mm for lesser pitches, carried down into eave gutters. Side lap shall not be less than 150 mm for pitches over 25° and 500 mm for lesser pitches. Felt to be carried fully over ridge board.

5.2 Laths or Battens

Laths or battens shall be 44 mm for rafter spacings not greater than 400 mm. For spacing up to 600 mm battens not less than 44 mm x 44 mm shall be used. Tilting fillet to be provided at eaves where necessary.

5.3 Quarry Slates

Quarry slates shall be laid to a minimum pitch of 30°, lap 100 mm fixed with 2 No. 10 gauge galvanised slating nails double course at eaves, and slate and a half at verges, with slate slip under.

5.4 Asbestos Cement Slates

Asbestos cement slates shall be to I.S.7. The normal pitch for asbestos cement slates shall be 30°, lap 100 mm. Each slate shall be fixed with 2 No. 10 gauge 35 mm galvanised nails and copper crampion at bottom. Provide double course at ridge and treble course at eaves.

Asbestos cement slates may be laid at a pitch lower than 30° in special circumstances.

5.5 Concrete Roofing Tiles (normal pitch — 30° and over)

Concrete roofing tiles (normal pitch) shall be to I.S.3 laid to a pitch of not less than 30°. Every tile in every alternative course to be fixed with 1 No. 50 mm 10 gauge galvanised nail. Lap 75 mm clear of nail hole. Pantiles shall be closed at eaves with a course of plain tiles or slate underclock and suitably coloured sand/cement pointing. Alternatively patent eave closer and filler clip may be used.

5.6 Concrete Tiles (low pitch — under 30°)

Low pitch concrete tiles shall be laid in accordance with manufacturers instructions and to the minimum pitches accepted by the Department which may not be as low as those recommended by the manufacturers.

5.7 General

Slates and tiles to be neatly trimmed where necessary. Part tiles and slates to be adequately secured.

Drip overhang to be provided at eave and valley gutters.

At verges slates or tiles shall oversail wall face or barge, by at least 25 mm in the case of slates and 50 mm in the case of tiles, and shall be neatly pointed in suitably coloured sand/cement mortar.

Ridge and hip tiles shall be bedded in gauged mortar and pointed with cement mortar, suitably coloured; bedding and pointing to be done in one operation.

Provide suitable hip hooks, screwed to end of hip rafters. In industrial atmospheres special nails may be necessary. Over party walls the space between battens shall be filled with mortar to complete fire stop.

5.8 Flashings

Valley gutters, cover flashings and flashings to chimneys shall be

- (1) No. 5 lead to B.S. 1178
- (2) 22/24 gauge medium hard copper
- (3) 20 gauge super-purity aluminium. (18 gauge to valleys and parapet gutters).
- (4) accepted proprietary systems.

To chimney, flashing shall consist of aprons, soakers and cover flashings. The latter shall be secured in a chase in concrete block chimneys, wedged and pointed in with cement fillet formed over. To brick chimneys cover flashings shall be stepped, wedged and pointed into brick joints. Saddle pieces shall be provided at all ridges and roof intersections. Valley gutters shall be laid on felt on 20mm x 225mm wrot boarding treated with wood preservative, and turned up at edges under roof felt tiles or slates.

5.9 Felted Flat Roofs

Wall plates 44mm x 75mm fixed as described. Joist sizes according to span, spaced to suit decking and pitched or firred to fall of 1 to 80. Roof to project 200mm beyond face of wall, or finish with a parapet with 150mm upstand, suitably capped and flashed. Fascias and soffits as previously described. Decking 22mm T & G laid as for floors, plywood, or chipboard not less than 600 kg/m³ of thickness.

12 mm for joists (rafters)	at 300 mm centres
15 mm for joists (rafters)	at 400 mm centres
18 mm for joists (rafters)	at 500 mm centres

or proprietary decking to manufacturers instructions. Angled wood fillets at upstands and verges out of 75 mm x 75 mm.

Plywood, chipboard or wood wool decking must be kept dry at all times and should be felted immediately after fixing. Any sheets which have been allowed to get wet must be replaced, as their strength has been seriously impaired.

First layer of felt 1 ply, close random nailed all over with galvanised clout nails. Second layer 2 ply stuck down all over with special mastic solution or hot bitumen.

Final layer as for second. Each layer in reverse directions, final layer parallel to eave carried over 22mm x 44mm batten (on fascia) at eaves and down into gutter. Felt at verges to be properly finished with welted apron dressed back over camphered verge fillet. Final layer shall be mineral surfaced, or alternatively covered with light coloured pebbles or chippings stuck on suitably, or as required by local authority. On pitched roof the final layer of felt shall be laid at right angles to eave and lapped away from the prevailing wind. The pitch shall not exceed 20° and the timbers shall be as described in 3.1 and 3.2. Insulate as necessary.

Section 6 PLASTERING

6.1 External Plastering

225mm hollow block, 225mm solid block and chimney stacks:-
scud walls in 3:1 sharp sand and cement. Apply 2 coats of plaster (1 cement: 1 lime: 6 sand). The total thickness of plaster shall be 20mm minimum. The second coat to be finished nap or smooth or combed for rough cast or pebbledash; or prepared for proprietary finish.

275mm cavity walling may be scud and one coat 1:1:6 plaster approximately 13mm thick and finished as above.

6.2 Rough Cast

Rough cast shall consist of 5-6 parts washed sand and pebbles: 1 part lime: 1 part cement.

6.3 Reveals

Plaster reveals to opes shall be 20mm thick and finished smooth with scored drip groove to soffit of head. All arrises shall be neatly finished.

6.4 Plinths

Plaster plinths to be finished smooth, and neatly cut off or weathered at top edge.

Plaster finish to extend below finished ground level.

6.5 Internal Plastering
Scud walls and plaster one coat 12mm thick, 1 cement: 1 lime: 6 sand. Finish with neat gypsum plaster skim, or a grey coat of gauged mortar applied with wood float. Alternatively proprietary finishes may be used to manufacturers instructions.

6.6 Stud Partitions and Ceilings

6.6.1 Stud partitions and ceilings to be covered with 10mm plaster boards or slabs with skimmed plaster finish or alternatively 12mm patent plaster sheets, all erected, jointed and finished to manufacturers instructions.

6.6.2 All wall plastering should be carried behind skirtings and architraves.
All internal wall and ceiling finishes, including decorative finishes, shall comply with the relevant local fire requirements.

6.7 General

Precautions shall be taken to protect floors and surrounding work during plastering. Make good neatly to holds for pipework etc.

Plasticisers, water proofers, sealers, and bonding agents shall be used in accordance with manufacturers instructions.

Section 7 PLUMBING

7.1 Service Pipe

Incoming service pipe to be 15mm diameter laid in trench 600mm deep, or otherwise suitably protected against frost, and connected to internal stopcock.

7.2 Cold Water Supply

From stopcock take 15mm cold supply direct to sink with branch to high pressure ball valve in service tank, capacity 225 litres, for 3 bedroom houses or 360 litres for 4 or more bedrooms or as required by local authority. Tank to be covered and adequately supported over a partition where possible and at such height as to ensure proper working of the system. Provide 22mm overflow from tank to discharge externally. Connect to service tank 50mm over bottom of tank and take 22mm feed to 150 litre hot water cylinder to IS 161 with 22mm branch over top of cylinder to bath and 15mm connections off wash hand basin and W.C.

7.3 Hot Water Supply

An adequate water heating apparatus must be provided and fitted in accordance with manufacturers instructions. Flow and return pipes, where appropriate, shall be as recommended by the manufacturer of the heating apparatus. A 22mm copper or stainless steel expansion pipe to be taken from top of cylinder to discharge over service tank, with a 22mm do. branch to bath and 15mm connections off for wash hand basin, sink etc.

7.4 General

7.4.1 Fit full way stopcock on cold feeds from service tank and fit draw off cock at lowest convenient point of system. On no account should a stop-cock be fitted on an expansion pipe.

7.4.2 Copper tubes shall be certified as complying with Irish Standard Specification I.S. 238 — 1980 in accordance with the Irish Standard Mark Licensing Scheme of the Institute for Industrial Research and Standards and shall bear the Irish Standard Mark.

- 7.4.3** Plastic pipes to I.S. 123, 134, or 135 where used shall be fixed at least 75mm clear of hot pipe runs. Pipes shall be fixed in straight lines as far as possible, properly jointed with patent fittings and adequately supported and secured with proper pipe clips.
- 7.4.4** Storage tanks and pipes to be insulated against frost where necessary.
- 7.4.5** Where other domestic water heating systems are used they shall be competently designed and installed.
- 7.4.6** **Compression tube fittings of copper alloy**
Compression tube fittings of copper and copper alloy shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S. 239:1980 "Compression tube fittings of copper and copper alloy", and shall bear the Irish Standard Mark.
- 7.5** **Sink**
Provide and fit in kitchen or scullery stainless steel sink and drainer to I.S. 132 suitably supported, or alternatively white glazed fireclay sink 600mm x 400mm x 250mm supported on 2 No. iron or steel brackets and fitted with suitable drainer. Sink to be provided with adequate overflow. Top of sink to be not less than 850mm over floor level. Form enclosed press, with raised floor and recessed plinth under sink and drainer.
- 7.6** **Bath and Wash Hand Basin**
Fit where indicated a bath in vitreous enamelled cast iron or other accepted material, minimum length 1700mm nominal and panelled as necessary and vitreous china wash hand basin 550mm x 400mm suitably supported and secured with not less than 150mm clearance to sides. Both to be provided with adequate overflow.
- 7.7** **Plugs, Traps, Wastes and Taps**
15mm hot and cold chrome plated brass taps to be fitted to sink and wash hand basin, and 22mm do. to bath. Provide 42mm waste fitting to bath and sink and 35mm to wash hand basin. All complete with plug and chain. Fit S or P trap, complete with cleaning eye and copper, lead or acceptable plastic waste pipe adequately secured and fitted with cleaning eyes as necessary and discharging approximately 50mm over gully trap.
- 7.8** **W.C. Suite**
Provide and fit where indicated W.C. suite, with cistern, to I.S.70, all fully supported and secured. Connect to soil pipe with proprietary flexible coupling or other acceptable joint. Cistern to be provided with adequate overflow.
- 7.9** Pipes shall not be jointed within the thickness of a wall.

Section 8 DRAINAGE

- 8.1** **Trenches**
Trenches shall be excavated to the necessary depths, widths and falls to allow the drains to be properly laid. The water service shall be in a separate trench from the drain. See also 1.3.2.
- 8.2** **Drain**
The main and branch drains shall be 100mm diameter laid to continuous falls of not less than 1 in 60 or not more than 1 in 30, with bends and junctions, splayed in the direction of flow, where required, and laid in straight lines from manhole to manhole. The drain shall be P.V.C., cast iron, impermeable glazed ware with flexible joints or concrete with flexible joints, all laid, jointed and back filled to manufacturers instructions or shall be socketed impermeable glazed ware or concrete supported on continuous concrete bed mix B 100mm thick x 300mm wide for full length of each pipe and haunched half way up the pipe after testing and shall be jointed in cement mortar, well worked in against 2 rings of tarred gaskin and finished with a neatly worked fillet. Clean pipe internally as necessary after each joint is made.

- 8.3 Back Filling**
Immediately over pipes back fill in fine material and fill remainder of trench in selected excavated material, well rammed and remove surplus spoil.
- 8.4 Drains under Roads and Buildings**
Where drains pass under roadways or are likely to be subjected to heavy traffic, they should be fully encased in 150mm concrete, mix B. Drains shall not be taken under any buildings unnecessarily, but where this is unavoidable pipes shall be cast iron, or encased in 150mm of concrete mix B or otherwise to local authority requirements and laid in straight lines. Form ducts through rising walls or foundations as necessary to avoid damage to drains.
- 8.5 A.J.s, Manholes, Drop-Manholes**
Armstrong junctions or manholes as suitable shall be provided at each change in direction or gradient of drain and at septic tank and of such dimensions and spacing as to permit easy cleaning of the system. Manholes shall be built in 225mm concrete walls on 150mm thick concrete floor mix B, with glazed channels, bends and branches, suitably benched. Benching and internal walls to be finished smooth in cement mortar. Fit cast iron, reinforced concrete, or hot dipped galvanised steel frame and cover. Covers to have provision for lifting. Where required by local authority, outfall manholes shall be formed, with interceptor trap, stoppered cleaning eye and air inlet.
- 8.6 Gullies and A.J.s**
Gullies and Armstrong junctions to be set level, supported on 150mm concrete bed, mix B, and connected to drain as previously specified. Armstrong junctions shall have frame and cover of cast iron, aluminium or galvanised steel.
- 8.7 Gully Traps**
Gully traps shall be set in dished concrete surround, to take wasies from bath, sink and wash hand basin and discharge from rain water pipes, and shall be fitted with cast iron, aluminium, or other suitable grid.
- 8.8 Soak Pits**
Where sewage disposal is to be a septic tank, rain water shall be piped to a separate soak pit, not less than 6m from the house or to a suitable watercourse.
- 8.9 Septic Tank**
Septic tank, where provided, shall be located so as not to endanger any well or other source of water supply and shall be in accordance with S.R.6 1975.
Septic tanks to accepted prefabricated systems may also be used.
- 8.10 Vent Shaft**
At head of drain, carry up 50mm minimum diameter vent pipe over eave level or to 1m over head of highest window within 4m of vent, secured with proper brackets and fitted with cowl or cage.
- 8.11 Single Stack Drainage**
Single stack drainage, where provided, must be in accordance with British Standard Code of Practice No. 304 (1968).
- 8.12 Testing**
Test plumbing and drainage on completion to ensure watertightness and efficient working of the system, and as may be required by the local authority. See also 8.2.

Section 9 ELECTRICAL INSTALLATION

9.1 Installation

Electrical installation shall be in accordance with the "National Rules for Electrical Installations" obtainable from the Electro-Technical Council of Ireland and shall have, in suitable locations, at least:-

Lighting Outlets	Socket Outlets
One in every room, landing/stairway, hall and corridor.	One in every bedroom. Three singles in one living-room. Two singles in kitchen excluding any cooker point. One in each other habitable room, entrance hall or landing.

Conduit shall be used where cable is buried in plaster. Joists shall not be notched: where necessary the cable shall be taken through holes bored in centres of joists.

Section 10 PROTECTIVE PAINTING

10.1 Preparation

All surfaces to be painted or otherwise protectively coated shall be cleaned down and prepared by wire brushing, sanding, planing or as necessary to obtain the best possible finish. Timber preservatives should be applied where already specified in 3.2 et seq.

10.2 Paints

Thinners, sealers, primers, colour washes, paints, varnishes or other brush, roller or spray applied finishes shall be of suitable manufacture for the surface and material to be covered and shall be applied strictly in accordance with the manufacturer's instructions.

10.3 Woodwork

All woodwork usually painted shall be knotted, stopped, primed and painted with two undercoats and one finishing coat. Alternatively, may be stained or dyed and knotted, primed and finished with two coats varnish.

Decorative hardwoods may be treated traditionally internally and shall be oiled or treated with suitable preservatives externally, or may be painted or varnished, as previously specified.

10.4 Metal Work

All metalwork, ironmongery, rainwater goods, shall be cleaned down, suitably primed, twice, undercoated and one coat finished.

Section 11 GLAZING

11.1 Glass

All window panes up to 0.5m² shall be glazed in 3mm glass
All window panes up to 1.5m² shall be glazed in 4mm glass
All window panes over 1.5m² shall be glazed in 5mm or 6mm glass

All panes less than 600mm over floors shall be 6mm glass.

11.2 Fixing

Bathroom W.C. or other closet windows may be glazed in obscured glass to standard as above. Before glazing, timber rebates shall be painted and back puttied. Glass shall be sprigged and puttied with linseed oil putty to I.S.28 or other acceptable non-hardening compound and neatly struck off. 5mm glass and over shall be fixed with a suitable glazing slip, pinned and bedded in mastic. Galvanised steel windows shall be back puttied and finished with metal sash putty or other suitable mastic.

11.3 General

House to be thoroughly cleaned and all rubbish removed, on completion.

Section 12 FIRE PRECAUTIONS

12.1 Garage

12.1.1 Garage under first floor rooms: — the ceiling in the garage shall be 10mm plaster slab with skim coat finish or 10mm soft asbestos sheets with joints thoroughly sealed.

12.1.2 Garage directly under roof of house: — separating wall to be taken to plane of roof and treated as for party wall to complete fire stop. See 2.11 and 5.7.

12.1.3 Any door between garage and dwelling shall be self closing and door and frame shall have half hour fire rating. Garage floor shall be 100mm under floor level of house.

12.2 Central Heating

A central heating unit shall not be located in a garage.

Section 13 VENTILATION

13.1 Rooms

Every habitable room, kitchen, and scullery shall have an opening window area of not less than one twentieth of the room area, ventilated directly to open air.

13.2 Bathrooms

Bathroom and W.C. apartment shall be ventilated as above subject to a minimum of 0.1m².

13.3 Lobby

A ventilated lobby shall be provided between any W.C. apartment and a living room, kitchen or scullery.

13.4 Presses

All built in cupboards, presses, closets and wardrobes to be adequately through ventilated.

13.5 Under Floor

Under floor ventilation shall be as previously specified under 2.25 and 3.6.

13.6 Garage

Garage must have permanent ventilation.

Section 14 THERMAL INSULATION

14.1 Insulation must be in accordance with the maximum U-Value laid down by the Department viz., a general whole building standard not exceeding $0.85 \text{ W/m}^2\text{C}$ and elemental values as follows:

External Walls	0.60 watts per square metre per degree celsius.
Roofs	0.40 watts per square metre per degree celsius.
Ground Floors	0.60 watts per square metre per degree celsius.
External parts of intermediate floors	0.60 watts per square metre per degree celsius.

U-values will be required to be calculated in accordance with the method for calculating standard U-values set out in Section A 3 of the C.I.B.S. Guide Book A 1980 published by the Chartered Institution of Building Services.

14.2 Mineral fibre mats for thermal insulation of buildings

Mineral fibre mats for thermal insulation of buildings shall be certified by the Institute for Industrial Research and Standards under the Irish Standard Mark Licensing Scheme as complying with I.S.260: 1984 "Mineral fibre mats for thermal insulation of buildings", and shall bear the Irish Standard Mark.

METRIC CONVERSION

25mm	=	1 inch(es) approx.
50mm	=	2 inch(es) approx.
100m	=	4 inch(es) approx.
300mm	=	12 inch(es) approx.
600mm	=	24 inch(es) approx.
1.00m	=	39.37 inches approx.
1 litre	=	0.22 gallons
1 Kilogram	=	2.20 lbs.