



## **Terms and Conditions of Use of Digitised Theses from Trinity College Library Dublin**

### **Copyright statement**

All material supplied by Trinity College Library is protected by copyright (under the Copyright and Related Rights Act, 2000 as amended) and other relevant Intellectual Property Rights. By accessing and using a Digitised Thesis from Trinity College Library you acknowledge that all Intellectual Property Rights in any Works supplied are the sole and exclusive property of the copyright and/or other IPR holder. Specific copyright holders may not be explicitly identified. Use of materials from other sources within a thesis should not be construed as a claim over them.

A non-exclusive, non-transferable licence is hereby granted to those using or reproducing, in whole or in part, the material for valid purposes, providing the copyright owners are acknowledged using the normal conventions. Where specific permission to use material is required, this is identified and such permission must be sought from the copyright holder or agency cited.

### **Liability statement**

By using a Digitised Thesis, I accept that Trinity College Dublin bears no legal responsibility for the accuracy, legality or comprehensiveness of materials contained within the thesis, and that Trinity College Dublin accepts no liability for indirect, consequential, or incidental, damages or losses arising from use of the thesis for whatever reason. Information located in a thesis may be subject to specific use constraints, details of which may not be explicitly described. It is the responsibility of potential and actual users to be aware of such constraints and to abide by them. By making use of material from a digitised thesis, you accept these copyright and disclaimer provisions. Where it is brought to the attention of Trinity College Library that there may be a breach of copyright or other restraint, it is the policy to withdraw or take down access to a thesis while the issue is being resolved.

### **Access Agreement**

By using a Digitised Thesis from Trinity College Library you are bound by the following Terms & Conditions. Please read them carefully.

I have read and I understand the following statement: All material supplied via a Digitised Thesis from Trinity College Library is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of a thesis is not permitted, except that material may be duplicated by you for your research use or for educational purposes in electronic or print form providing the copyright owners are acknowledged using the normal conventions. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone. This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

**Metrology and proportion in the window tracery of  
medieval Ireland:**

**An empirical study of Ormond and Connaught**

In 3 Volumes

Volume 3: Appendices

A Thesis submitted to Trinity College Dublin for the degree of PhD

Avril Behan

TRIARC, The Department of the History of Art and Architecture, Trinity College Dublin  
January 2012





*Thesis 9580.3*

<b>Appendix 1: Medieval Units .....</b>	<b>1</b>
<b>Appendix 2: Legal References.....</b>	<b>2</b>
<b>Appendix 3: Medieval Foot Values.....</b>	<b>7</b>
<b>Appendix 4: Visual Basic Macros .....</b>	<b>9</b>
<b>Metrological Analysis .....</b>	<b>9</b>
<b>Proportional Analysis.....</b>	<b>25</b>
<b>Appendix 5: Geological Interpretation for Chapter 3.....</b>	<b>28</b>
<b>Appendix 6: Regional Results .....</b>	<b>29</b>
<b>Comparison of Proportions .....</b>	<b>30</b>
<b>Comparison of Units.....</b>	<b>31</b>
<b>Appendix 7: Registration Reports for Case Study TLS.....</b>	<b>32</b>
<b>St. Mary's collegiate church, Gowran .....</b>	<b>32</b>
<b>Athenry Dominican friary .....</b>	<b>34</b>
<b>Appendix 8: Site Catalogue .....</b>	<b>37</b>

## Appendix 1: Medieval Units

Unit Name	Metric Length	Unit Name	Metric Length	Unit Name	Metric Length
alen	0.5939	Foot Northern	0.3340	Perch Roman	0.2466
aln	0.6279	Foot Rhineland	0.3139	Pole English	
Arish Persian	0.9762	Foot Roman	0.2963	Pole Irish	
Cable length British	0.0000	Foot Scots	0.3064	Rod British	5.0292
Canne	2.0126	Foot Sumerian	0.3302	Rod Celtic	5.0292
Cloth Ell	1.1440	Foot Welsh	1 Eng ft	Rod North German	5.0292
Cloth-elne Celtic	1.3411	Furlong English		Rode Danish	3.1394
Cloth-elne North German	1.3411	Furlong Irish		Rode Norwegian	2.9688
Cubit Assyrian (Oppert)	0.5486	Gujah Indian	0.9779	Roman foot (Brit Museum 1)	0.2921
Cubit Assyrian (Petrie)	0.5428	Gunter's chain English		Roman foot (Brit Museum 2)	0.2946
Cubit Celtic	0.6706	Gunter's chain Irish		Schoenus Roman	5920.4352
Cubit English		Gunter's link English		Short Cubit Egyptian	0.4491
Cubit Greek	0.4629	Gunter's link Irish		Span Egyptian	
Cubit Irish		Hand Egyptian	0.0749	Span English	
Cubit Jewish	0.4470	Inch English		Span Irish	1 English span
Cubit North German	0.6706	Inch Scots	0.0255	Stade Greek	
Cubit Northern	0.6756	Inch Welsh	0.0254	Stade Roman	184.9831
Cubit Roman	0.4440	League British		Stang	2.9657
Cubit Royal Egyptian	0.5240	League Roman	2219.8584	Susi Assyrian	
Cubit Sumerian	0.4958	Linie Danish	0.0022	Thumb Celtic	0.0279
Digit Egyptian (Dble Remen)	0.0185	Linie Norwegian	0.0021	Thumb North German	0.0279
Digit Egyptian (hand)	0.0187	Linie Swedish	0.0030	Toise	3.5997
Digit Greek	0.0193	Mile English		Tomme	0.0262
Digit Roman		Mile Greek		Tum Norwegian	0.0246
Double Cubit Sumerian	0.9901	Mile Irish	2048.2560	Tum Swedish	0.0297
Ell	0.9449	Mile Roman	1480.1088	Yard English	
Fall		Mile Scots	5952 Eng ft	Yard Irish	1 English yard
Famn	1.7816	Mile Welsh	5280 Eng ft		
Fathom English		Nautical mile British			
Fathom Irish		Northern Foot Indian	0.3424		
Foot Assyrian		Pace English			
Foot Celtic	0.3353	Pace Irish			
Foot English	0.3048	Pace Roman	0.1234		
Foot English (Medieval)	0.3167	Palm Assyrian			
Foot Etrurian	0.3162	Palm Celtic	0.0838		
Foot French		Palm English	0.0762		
Foot Greek	0.3150	Palm Irish			
Foot Greek	0.3160	Palm North German	0.0838		
Foot Greek	0.3086	Palm Roman	0.0739		
Foot Greek (Common)	0.3162	Pan	0.2516		
Foot Irish	0.3048	Perch Charlemagne			
Foot Natural	0.2489	Perch English			
Foot North German	0.3353	Perch Irish			

## Appendix 2: Legal References

References to units of measurement in administrative or legal documents from 1100 to 1640.



Year	King	Document Type	English Title	Key Contents
1100	Henry 1		Henry's Iron Ell	The measure of his own arm was applied to correct the false ell of the traders, and enjoined on all throughout England
1171	Henry 2	Close Rolls	29	2000 ells of burel; 25 ells of red scarlet for the King's use
1188	Richard 1	Assize	Proclamation	All just trade and selling throughout the kingdom shall be founded in one weight and measure
1189	Richard 1	Assize	Assize of building	Safe building
1197	Richard 1	Assize	Assize of measurement	
1211	John 1	Close Rolls	425	14 ells of cloth of Ireland to be dyed in the grain
1211	John 1	Pipe Rolls	22	to William Yngeleis, carpenter, going into ireland after the king
1215	John 1	Charter Roll	Magna Carta	One weight & measure
1216	John 1	Charter Roll	Magna Carta Hibernia	
1223	Henry 3	Letters Patent	p. 3 m. 9	Grant to the citizens of Waterford of customs for murage
1225	Henry 3	Statute Rolls	Magna Carta	One weight & measure
1225	Henry 3	Close Rolls	p. 1 m. 13	to cause 200 ashen oars to be made, 12, 13, and 14 ells in length, and sent to Winchelsea
1234	Henry 3	Close Rolls	2133	Grant to the citizens of Waterford of customs for defence
1243	Henry 3	Close Rolls	p. 1, m. 9	120 feet by 80 feet with glazed windows after the manner of the hall of Canterbury
1244	Henry 3	Close Rolls	m. 8	One weight & measure in Ireland
1246	Henry 3	Patent Roll	m. i.	English laws to be observed in Ireland
1250	Henry 3	Close Rolls	m. 4	Grant to the citizens of Waterford of customs for fortify and inclose
1251	Henry 3	Close Rolls	3201	Expensed incurred in the Mint, Ireland
1253	Henry 3	Close Rolls	m. 7	non standard measure
1269	Henry 3	Plea Rolls		imposition of the standard of london and authorisation by justiciar and council
1272	Henry 3	Statutes of the Realm	Statute concerning Bakers	One weight & measure
1272-1303	Henry 3 or Edward 1		Composition of Yards and Perches	First time to include length and area in governmental regulation
1272	Edward 1			
1277	Edward 1			Proposed extension of english laws to the native Irish
1277	Edward 1	Patent Roll	m. 5	non standard measure
1277	Edward 1	Irish Exchequer	Expenditure of the King's Treasurer at the Exchequer of Dublin	to John, the mason, for works at the Exchequer

Year	King	Document Type	English Title	Key Contents
1277	Edward 1	Irish Exchequer	Expenditure of the King's Treasurer at the Exchequer of Dublin	for timber, glass windows, and works at the Exchequer at that time
1282	Edward 1	Parliament Rolls	Appendix	Forest perch
1284	Edward 1	Irish Exchequer	Roll of payment of the term of the Nativity of St. John the Baptist	to 12 masons for their expenses towards connaught
1285	Edward 1	Irish Exchequer	Roll of receipt of the term of Michaelmas	Drogheda towards Uriel, from the commantly of, for not presenting a standard of measures, ells, and weights
1285	Edward 1	Irish Exchequer	Roll of receipt of the term of Hilary	Alice of Ulster, for false measures; Roger le Palmer, for the same; Simon Leynath, for the same
1288	Edward 1	Irish Exchequer	Roll of receipt of the term of Easter	From the vill of Youghal, because it had not standard measures
1292	Edward 1	Irish Exchequer	Roll of receipt of the term of Michaelmas	Limerick, vill of. Amerciaments of measures, by Willm. De Vescy, chief justiciary
1293	Edward 1	Parliament Rolls	ix-38 & ix-39	Complaint
1293	Edward 1	Parliament Rolls	ix-43 & ix-44	Complaint
1294	Edward 1	Patent Roll	m. 4	non standard measure
1296	Edward 1	Patent Roll	m. 8	Grant to the citizens of Drogheda of customs for inclosing their vill
1302	Edward 1	Statutes of the Realm	The Assise of Weights and Measures	Relationships between groups of measures
1303	Edward 1	Treatise on Weights and Measures	Treatise on Weights and Measures	
1304	Edward 1	Statutes of the Realm	Statute for the Measuring of Land	Land measurement
1304	Edward 1	Irish Exchequer	Roll of receipt of the term of Trinity	wall thickness for strengthening the castle
1308	Edward 1	Statutes of the Realm	The Articles of the Eyre	Pleas re standards of measurement
1320	Edward 2	Calendar of Close Rolls	Volume 3	Standard of London - corn measure only
1321	Edward 2	Calendar of Close Rolls	Volume 3	King's standard measure



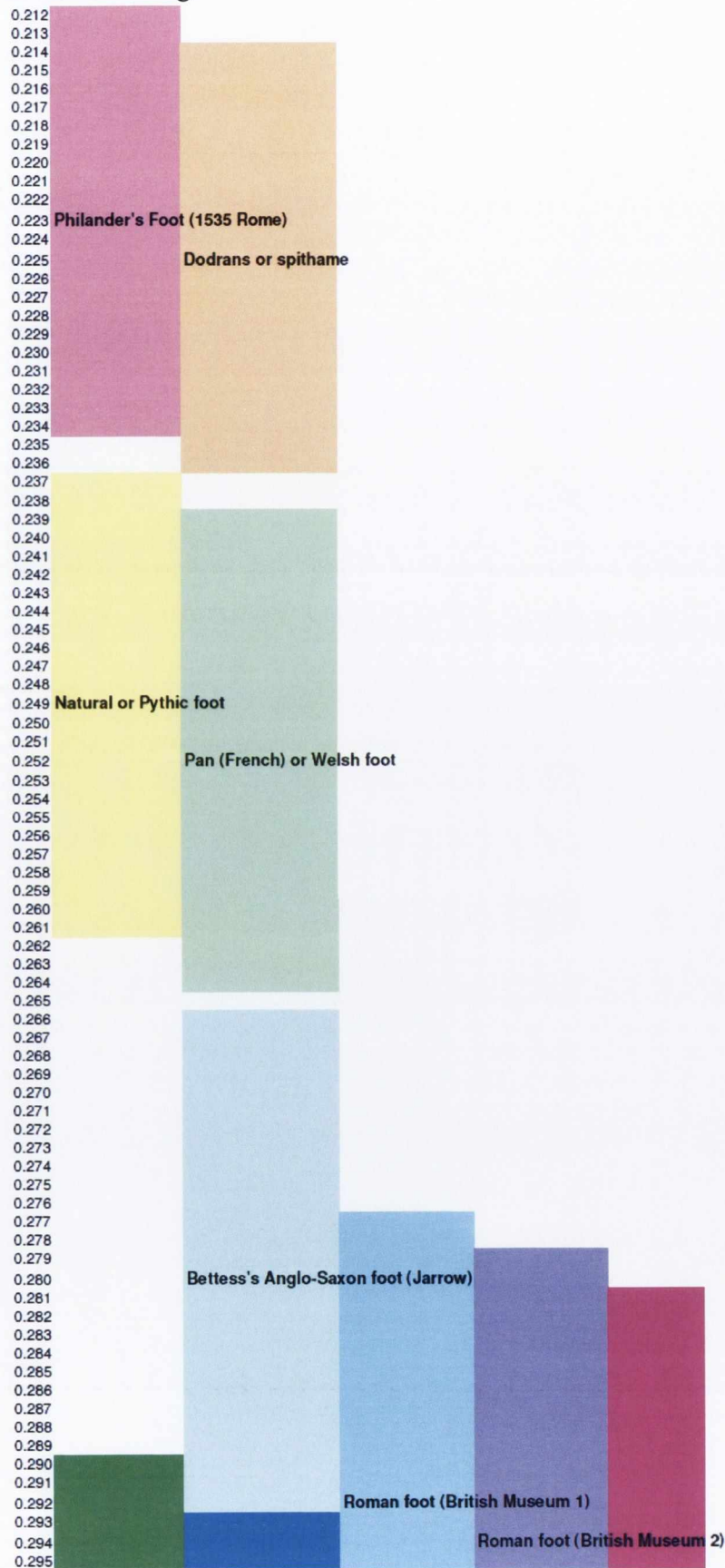
Year	King	Document Type	English Title	Key Contents
1326	Edward 2	Calendar of Close Rolls	Volume 4	Complaint
1331	Edward 3	Patent Roll	Part 1, Membrane 40	Customs
1340	Edward 3	Statutes of the Realm	Stat. 1. c.12	King's standard measure
1344	Edward 3	Statutes of the Realm	Stat. 2. c.4	Commissions to assay Weights and Measures repealed
1350	Edward 3	Statutes of the Realm	Stat. 3. c. 1	Repeats of cloth measurement issues
1350	Edward 3	Statutes of the Realm	Cap X.	Repeats of cloth measurement issues
1351	Edward 3	Statutes of the Realm	Stat. 5. c. 10	Repeats of cloth measurement issues
1351	Edward 3	Parliament Rolls	Item 38	One weight & measure
1352	Edward 3	Parliament Rolls	Item 19	One weight & measure
1353	Edward 3	Statutes of the Realm	Stat. 2. c. 10	Repeats of cloth measurement issues
1360	Edward 3	Statutes of the Realm	c. 5	Justicars of the Peace now in charge of Weights & Measures
1373	Edward 3	Statutes of the Realm	c. 1	Repeats of cloth measurement issues
1376	Edward 3	Parliament Rolls		reconfirmation of 1360 ruling
1388	Richard 2	Statutes of the Realm	Cap 14	Repeats of cloth measurement issues
1388	Richard 2	Statute		Payment for masons
1389	Richard 2	Statutes of the Realm	Cap. 9	One measure of wool
1390	Edward 3	Parliament Rolls	Item 42	One weight & measure
1392	Richard 2	Statutes of the Realm	Cap 3	King's standard measure
1393	Richard 2	Statutes of the Realm	Cap. 2	Cloth of any length and breadth
1393	Richard 2	Statutes of the Realm	Cap. 5	Estate of Aulneger not for life

Year	King	Document Type	English Title	Key Contents
1410	Edward 3	Parliament Rolls	Item 69	Cloth measurement
1429	Henry 6	Parliament Rolls		request for standard measures
1433	Henry 6	Statutes of the Realm	A confirmation of all Statutes made touching Weights and Measures	Corn
1433	Henry 6	Statutes of the Realm	Of what Length and Breadth Cloths called Streits shall be	Cloth measurement
1437	Henry 6	Records in the Lord Treasurer's Remembrancer's Office		Exchequer notes
1439	Henry 6	Parliament Rolls	Item 55	Cloth measurement
1442	Henry 6	Parliament Rolls		measure of st. Pauls
1442	Henry 6	Parliament Rolls	Eton College	Three roods of land measured by the perch of barons
1455	Henry 6	Great Council of Ireland		Portrieve as Clerk of the Market
1463	Edward 4	Parliament Rolls		Cloth measurement
1478	Edward 4	Parliament Rolls		Plain, roof and ridge tiles
1484	Edward 4	Parliament Rolls		Cloth measurement
1491	Edward 4	Parliament Rolls	An Act for Weights and Measures	One weight & measure
1491	Henry 6	Parliament Rolls		Each perch being of 18 feet
1494	Henry 6	Statutes of the Realm		King's standard measure
1494	Henry 6	Parliament Rolls	List of towns sent standards	Dublin not listed
1496	Henry 6	Statutes of the Realm		King's standard measure
1508	Henry 7	Charter Roll	Charter for the Guild of Carpenters, Millers, Masons & Helliers	Foundation royal charter
1546	Edward 4/Henry 8	Charter Roll	Murage, Keyage, and Pavage	Customs
1640	Charles 1	Statutes of the Realm	an Act for the better Ordering and Regulating of the Office of the Market	King's standard measure

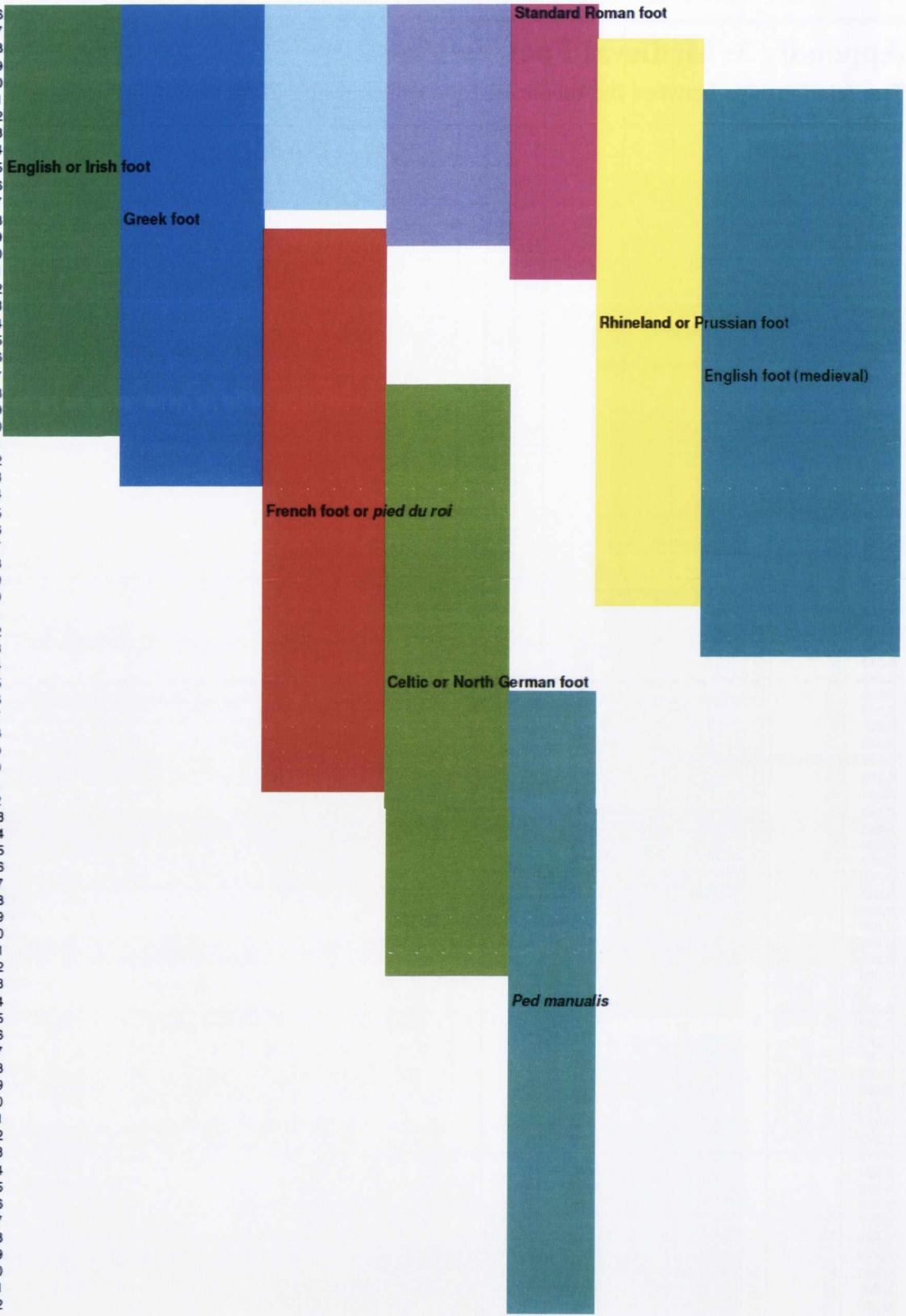


### Appendix 3: Medieval Foot Values

The relationships between the medieval foot values tested in this study are demonstrated in the following.



0.296  
0.297  
0.298  
0.299  
0.300  
0.301  
0.302  
0.303  
0.304  
0.305  
0.306  
0.307  
0.308  
0.309  
0.310  
0.311  
0.312  
0.313  
0.314  
0.315  
0.316  
0.317  
0.318  
0.319  
0.320  
0.321  
0.322  
0.323  
0.324  
0.325  
0.326  
0.327  
0.328  
0.329  
0.330  
0.331  
0.332  
0.333  
0.334  
0.335  
0.336  
0.337  
0.338  
0.339  
0.340  
0.341  
0.342  
0.343  
0.344  
0.345  
0.346  
0.347  
0.348  
0.349  
0.350  
0.351  
0.352  
0.353  
0.354  
0.355  
0.356  
0.357  
0.358  
0.359  
0.360  
0.361  
0.362  
0.363  
0.364  
0.365  
0.366  
0.367  
0.368  
0.369  
0.370  
0.371  
0.372



## Appendix 4: Visual Basic Macros

The following sequence of macros was run in Microsoft Excel 2003 to extract and format the most probable units for a given set of input measurements.

### Metrological Analysis

The input values for these routines were the original measurements extracted photogrammetrically and as given for each window on the relevant page of the catalogue. All windows from within each site were analysed together but could still be reviewed individually.

#### 1. CreateBaseData

The function of this routine was to set up the correct amount of space in the field to handle varied amount so data depending on the number of windows and the number of lights per window at each site.

'Fill 1's for the number of objects (windows) by the number of measurements per window for each measurement within a specified range and step

```
Sub CreateBaseData()
```

```
' CreateBaseData Program
```

```
' Program written 18/07/2008 by Avril Behan
```

```
' Modified 25/07/2007 by Avril Behan to handle single columns of data
```

```
' Declare variables
```

```
Dim SLowRng As Single
```

```
Dim SUpRng As Single
```

```
Dim SStepSize As Single
```

```
Dim INumberOfCopies As Integer
```

```
Dim INumberofItems As Integer
```

```
Dim INumberofMeasurements As Integer
```

```
Dim ICount As Integer
```

```
Dim IRow As Integer
```



Dim I As Integer

Dim Starter As Integer

Starter = 1

ICount = 0

I = 0

' Receive project parameters

LLowRng = InputBox("For what range of values would you like to test? Enter lower band:", "Lower Band", , 10, 10)

LUpRng = InputBox("Enter upper band:", "Upper Band", , 10, 10)

LStepSize = InputBox("What step size would you like to use:", "Step Size", , 10, 10)

INumberOfCopies = CInt((LUpRng - LLowRng) / LStepSize)

MsgBox ("You entered a lower band of" & " " & LLowRng & vbNewLine & \_

"An upper band of:" & " " & LUpRng & vbNewLine & \_

"A step size of:" & " " & LStepSize & vbNewLine & \_

"Number of unit values to be tested is" & " " & INumberOfCopies)

' Find the column number of the last column to contain values

Range("c5").Select

If ActiveCell.Offset(0, 1).Value <> Empty Then

INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count

StrLastColumn = ActiveCell.Offset(0, INumberofItems).Column

StrFirstColumn = ActiveCell.Column

MsgBox ("The number of items to be tested is:" & " " & INumberofItems)

ElseIf ActiveCell.Offset(0, 1).Value = Empty Then

INumberofItems = 1

StrLastColumn = ActiveCell.Offset(0, INumberofItems).Column

StrFirstColumn = ActiveCell.Column

MsgBox ("Only 1 column of data exists. The number of items to be tested is:" & " " & INumberofItems)

End If

INumberofMeasurements = Range(ActiveCell, ActiveCell.End(xlDown)).Count

MsgBox ("The measurements to be tested per item is:" & " " & INumberofMeasurements)

ActiveCell.Offset((INumberofMeasurements + 5), -2).Select

ActiveCell.Value = "Unit Value"



```

' Move to starter position
ActiveCell.Offset(0, 1).Select
' Identify row number
IRow = ActiveCell.Row
' Loop through all test unit values
For ICount = 0 To (INumberOfCopies - 1)
' Set position and place relevant unit value
Range("B" & IRow + ICount & "").Select
Range("B" & IRow + (ICount * (INumberofMeasurements + 1)) & "").Value =
LLowRng + (ICount * LStepSize)

' Select range for the number of measurements from x number of windows/locations
& set value at Starter value
Range("C" & IRow + (ICount * (INumberofMeasurements + 1)) & "").Value =
Starter
Range("C" & IRow + (ICount * (INumberofMeasurements + 1)) & ":C" & _
IRow + (ICount * (INumberofMeasurements + 1)) + (INumberofMeasurements
- 1) & "").Select

' Fill all empty spaces
Selection.FillDown

' For Each Cell In Selection
' Check whether there is only 1 column of data; if not then fill right, if yes move to
next unit value
If INumberofItems <> 1 Then
ActiveCell.Offset(I, 0).Value = Starter
Range(ActiveCell.Offset(I, 0), ActiveCell.Offset(I, (INumberofItems -
1))).Select
Selection.FillRight
Range("C" & IRow + (ICount * (INumberofMeasurements + 1)) & ":C" &
IRow + (ICount * (INumberofMeasurements + 1)) +
(INumberofMeasurements - 1) & "").Select
I = I + 1
End If
If I = INumberofMeasurements Then I = 0
Next Cell
Next ICount
End Sub

```

## 2. RunTestUnits

The function of this routine was to carry out 161 repetitions of the TestUnits routine.

```
Sub RunTestUnits()  
,  
' RunTestUnits Macro  
' Macro written 01/08/2008 by Avril Behan  
' Carries out 161 repetitions of the TestUnits program - from 0.212 to 0.372  
,  
    For I = 0 To 160  
        Application.Run "PERSONAL.XLS!TestUnits.TestUnits"  
        Selection.End(xlDown).Select  
  
' needed when only one column of data exists  
'     ActiveCell.Offset(2, 0).Select  
    Next I  
End Sub
```

## 3. TestUnits

The function of this routine was to divide all of the measurements for each window on a given site by a specific unit value between 0.212m and 0.372m.

' Tests each measurement against a specified unit given in column b

```
Sub TestUnits()  
,  
' TestUnits Program  
' Written 07/06/2008 by Avril Behan  
' Modified 25/07/2008 by AB to account for single column data  
,  
  
    Dim Cell As Range, Group As Range  
    Dim LRowNumber As Long  
    Dim Vari As Long  
    Dim Counter As Long  
    Dim Value As Long  
    Dim LRunningRow As Long  
    Dim NumberOfMeasurements As Integer  
    Counter = 5
```

```

LRowNumber = ActiveCell.Row
'MsgBox ("The row to be tested is: " & " " & LRowNumber)
NumberOfMeasurements = Range(ActiveCell, ActiveCell.End(xlDown)).Count

' Divide the active cell by the chosen unit of measurement
For I = 0 To (NumberOfMeasurements - 1)
    If I = 0 Then
        '
        MsgBox ("The unit value to be tested is: " & " " & ActiveCell.Offset(i, -
1).Value)
        End If
        LRunningRow = LRowNumber + I - (LRowNumber - 5)
        ActiveCell.Offset(I, 0).Formula = "=R" & LRunningRow & "C / R" & LRowNumber
& "C2"
        Counter = Counter + 1
    Next I

' Select the column and fill down for all measurements on that window
    Range(ActiveCell, ActiveCell.End(xlDown)).Select

' Check whether there is more than one column of data
    If ActiveCell.Offset(0, 1) <> Empty Then

' Select all columns for which measurements are available and fill the formula to the
right
        For Each Cell In Selection
            Range(Cell, Cell.End(xlToRight)).Select
            Selection.FillRight
        Next Cell
    End If
End Sub

```

#### 4. RunVarianceUnits

The function of this routine was to carry out 161 repetitions of the VarianceUnits routine.

```

Sub RunVarianceTests()
'
' RunTestUnits Macro
' Macro written 01/08/2008 by Avril Behan

```



```
' Carries out 161 repetitions of the VarianceTest program - from 0.212 to 0.372
```

```
'  
For I = 0 To 160  
    Application.Run "PERSONAL.XLS!VarianceTest.VarianceTest"  
    Selection.End(xlDown).Select  
    ActiveCell.Offset(2, 0).Select  
Next I  
End Sub
```

## 5. VarianceUnits

The function of this routine was to remove the whole units from the results of the division functions carried out in the previous routine, to compare that remainder against the numeric equivalents of the fractions  $\frac{1}{1}$ ,  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{3}$  and  $\frac{3}{4}$ , and to find the minimum in each case.

```
' Calculates the minimum difference between the selected unit, or proportions of that  
unit, for all measurements on a particular object or set of objects
```

```
Sub VarianceTest()  
,
```

```
' VarianceTest Sub
```

```
' 14/06/2008 by Avril Behan  
,
```

```
    Dim IRowNumber As Integer, IColumnNumber As Integer, INumberofItems As  
Integer, INumberofMeasurements As Integer
```

```
    Dim I As Integer, J As Integer, Counter As Integer, ILoop1 As Integer
```

```
    I = 0
```

```
    J = 0
```

```
    Counter = 0
```

```
    Dim DOne As Double;    DOne = 1
```

```
    Dim DZero As Double;   DZero = 0
```

```
    Dim DPoint25 As Double; DPoint25 = 0.25
```

```
    Dim DPoint33 As Double; DPoint33 = 0.33
```

```
    Dim DPoint5 As Double;  DPoint5 = 0.5
```

```
    Dim DPoint66 As Double; DPoint66 = 0.66
```

```
    Dim DPoint75 As Double; DPoint75 = 0.75
```

```
Dim DValue As Double;    DValue = 0
```

```
IRowNumber = ActiveCell.Row
```

```
IColumnNumber = ActiveCell.Column
```

```
ActiveCell.Offset(0, -(IColumnNumber - 3)).Select
```

```
' Count & select the number of items to be tested
```

```
' Also check whether one or more columns of data exist
```

```
If ActiveCell.Offset(0, 1).Value <> Empty Then
```

```
    INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count
```

```
    Range(ActiveCell, ActiveCell.End(xlToRight)).Select
```

```
ElseIf ActiveCell.Offset(0, 1).Value = Empty Then
```

```
    INumberofItems = 1
```

```
End If
```

```
' Count & select the number of measurements to be tested
```

```
Range(ActiveCell, ActiveCell.End(xlDown)).Select
```

```
INumberofMeasurements = Range(ActiveCell, ActiveCell.End(xlDown)).Count
```

```
ActiveCell.Offset(0, (IColumnNumber - 3)).Select
```

```
' Divide the active cell by the chosen unit of measurement
```

```
For I = 0 To (INumberofMeasurements - 1)
```

```
' Loop through all values
```

```
For J = 0 To (INumberofItems - 1)
```

```
    ActiveCell.Offset(I, Counter).Formula = ActiveCell.Offset(I, -(IColumnNumber -  
3 - J)).Formula
```

```
    ActiveCell.Offset(I, Counter + 1).Value = CInt(ActiveCell.Offset(I,  
Counter).Value)
```

```
    If ActiveCell.Offset(I, Counter + 1).Value < ActiveCell.Offset(I, Counter).Value
```

```
Then ActiveCell.Offset(I, Counter + 1).Value = ActiveCell.Offset(I, Counter + 1).Value
```

```
    If ActiveCell.Offset(I, Counter + 1).Value >= ActiveCell.Offset(I, Counter).Value
```

```
Then _
```

```
    ActiveCell.Offset(I, Counter + 1).Value = ActiveCell.Offset(I, Counter + 1).Value
```

```
- 1
```

```
    ActiveCell.Offset(I, Counter + 2).Value = _
```

```
    Abs(ActiveCell.Offset(I, Counter).Value - ActiveCell.Offset(I, Counter +  
1).Value)
```

```
    DValue = ActiveCell.Offset(I, Counter + 2).Value
```

```
If DValue <= DPoint25 Then
  If (DValue - DPoint25) > (Abs(DValue - DZero)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint25)
  Else
    ActiveCell.Offset(I, Counter + 3).Value = DValue
  End If
```

```
ElseIf DValue > DPoint25 And DValue <= DPoint33 Then
  If (Abs(DValue - DPoint25)) > (Abs(DValue - DPoint33)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint33)
  Else
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint25)
  End If
```

```
ElseIf DValue > DPoint33 And DValue <= DPoint5 Then
  If (Abs(DValue - DPoint33)) > (Abs(DValue - DPoint5)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint5)
  Else
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint33)
  End If
```

```
ElseIf DValue > DPoint5 And DValue <= DPoint66 Then
  If (Abs(DValue - DPoint5)) > (Abs(DValue - DPoint66)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint66)
  Else
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint5)
  End If
```

```
ElseIf DValue > DPoint66 And DValue <= DPoint75 Then
  If (Abs(DValue - DPoint66)) > (Abs(DValue - DPoint75)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint75)
  Else
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint66)
  End If
```

```
Else
  If (Abs(DValue - DPoint75)) > (Abs(DOne - DValue)) Then
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DOne)
```



```

Else
    ActiveCell.Offset(I, Counter + 3).Value = Abs(DValue - DPoint75)
End If
End If

Counter = Counter + 5
Range("a1").Select

ActiveCell.Offset((IRowNumber - 1), (IColumnNumber - 1)).Select

Next J
J = 0
Counter = 0
Next I
End Sub

```

## 6. Group Data

The VarianceUnits routine created a column of data for each window. These were manually moved to an empty column in the spreadsheet so that the columns for each window were positioned side-by-side and aligned with the correct units (i.e. the value that was being tested).

## 7. RunRemoveZeros

On sites with more than one window frequently the number of lights was different between the full set of windows. This meant that the number of measurements taken at each window was different and where gaps appeared in the measurements this resulted in zero values for the results of the variance test. Since the next stage involved the derivation of averages from these data sets, the presence of unnecessary zero values would have created errors in the results. Therefore, the function of this routine was to remove any zero values from the data.

```

Sub RunRemoveZeros()
'
' RunRemoveZeros Program
' Written 18/07/2008 by Avril Behan
'

```

```

Dim INumberofMeasurements As Integer, INumberofItems As Integer
Dim I As Integer, J As Integer, k As Integer
For k = 0 To 160
    INumberofMeasurements = Range(ActiveCell, ActiveCell.End(xlDown)).Count
    INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count

' Divide the active cell by the chosen unit of measurement
    For I = 0 To (INumberofMeasurements - 1)
        For J = 0 To (INumberofItems - 1)
            If ActiveCell.Offset(I, J).Value = 0 Then
                ActiveCell.Offset(I, J).Clear
            End If
        Next J
    Next I
ActiveCell.Offset(INumberofMeasurements + 1, 0).Select
Next k
End Sub

```

## 8. Average Extraction

Since the VarianceUnits tests had extracted the smallest difference between each measurement and a given test unit, and this was done for each test unit, an average variance for each window, for each unit was extracted and the data copied to a new worksheet in the same excel file.

## 9. RemoveEmptyLines

When the averages data was copied into the new worksheet, the data for each unit was separated by a blank row. This routine removed the blank rows in preparation for the next function.

```

Sub RemoveEmptyLines()
'
' EmptyLines Macro
' Macro recorded 25/07/2008 by Avril Behan
'
Dim INumberofMeasurements As Integer
Dim INumberofLines As Integer
Dim INumberofColumns As Integer

```

```
Dim I As Integer
```

```
Dim IReptitions As Integer
```

```
Range("A4").Select
```

```
INumberofColumns = Range(Selection, Selection.End(xlToRight)).Count
```

```
' subtract 2 for the header lines
```

```
INumberofLines = ActiveCell.SpecialCells(xlLastCell).Row - 3
```

```
Range("A4").Select
```

```
'Range(Selection, Selection.End(xlDown)).Select
```

```
INumberofMeasurements = Range(Selection, Selection.End(xlDown)).Count - 2
```

```
ActiveCell.Offset(1, 0).Select
```

```
' plus 1 for the gap line
```

```
IRepetitions = CInt(INumberofLines / (INumberofMeasurements + 1))
```

```
For I = 1 To IRepetitions
```

```
    Range(ActiveCell, ActiveCell.Offset(INumberofMeasurements - 1,  
    INumberofColumns - 1)).Select
```

```
    Selection.Delete Shift:=xlUp
```

```
    ActiveCell.Offset(1, 0).Select
```

```
Next I
```

```
End Sub
```

## 10. Calculate minimum

A column of average minimum values for each window, for each unit now existed. The minimum of each column was manually extracted and written at the end of each column, as well as the calculated minimum plus 10%, minimum plus 20% values. The latter two values were included in order to allow for errors in the measurement process as described in the full text.

## 11. AutoFormat

For each column, this routine compared the calculated minimum, minimum plus 10% and minimum plus 20% values against all values and coloured them red, sky blue and light turquoise, respectively. The colours were unimportant but this facilitated easier visualisation and assisted in the next routine.



Sub AutoFormat()

' Routine written by Avril Behan on 25/07/2008

' Module to automatically highlight the minimum value and values within 10% and 20% of that minimum

Dim IMin As Single, IMinTen As Single, IMinTwenty As Single

Dim MinRow As Integer, MinCol As Integer

Dim INumberofItems As Integer

Dim I As Integer

Dim Offset1 As Single, Offset2 As Single, SMinPlus As Single

' Clear all existing formatting

Application.FindFormat.Clear

Range("b5").Select

If ActiveCell.Offset(0, 1).Value <> Empty Then

INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count

ElseIf ActiveCell.Offset(0, 1).Value = Empty Then

INumberofItems = 1

End If

For I = 0 To INumberofItems - 1

' Find and select the term Minimum in the spreadsheet

Cells.Find(What:="Minimum", After:=ActiveCell, LookIn:=xlFormulas, \_

LookAt:=xlPart, SearchOrder:=xlByRows, SearchDirection:=xlNext, \_

MatchCase:=False, SearchFormat:=False).Select

' Copy & paste minimum value

ActiveCell.Offset(0, 1 + I).Select

Selection.Copy

Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks

:=False, Transpose:=False

' Copy & paste minimum plus 10 value

ActiveCell.Offset(1, 1 + I).Select

Selection.Copy

```

Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks
:=False, Transpose:=False

' Copy & paste minimum plus 20 value
ActiveCell.Offset(1, 1 + I).Select
Selection.Copy
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks
:=False, Transpose:=False

' Return to original search start position
Cells.Find(What:="Minimum", After:=ActiveCell, LookIn:=xlFormulas, _
LookAt:=xlPart, SearchOrder:=xlByRows, SearchDirection:=xlNext, _
MatchCase:=False, SearchFormat:=False).Select

ActiveCell.Offset(0, 1 + I).Select

' Assign values to single types
IMin = ActiveCell.Offset(0, 0).Value
IMinTen = ActiveCell.Offset(1, 0).Value
IMinTwenty = ActiveCell.Offset(2, 0).Value

Range(ActiveCell.Offset(-2, 0), ActiveCell.Offset(-2, 0).End(xlUp)).Select
' MsgBox ("2 Active cell address is:" & " " & ActiveCell.Address)
INumberofRows = Range(ActiveCell, ActiveCell.End(xlDown)).Count
' MsgBox ("Number of Rows is:" & " " & INumberofRows)

Offset1 = ActiveCell.Offset(INumberofRows + 3, 0).Value
Offset2 = ActiveCell.Offset(INumberofRows + 2, 0).Value
SMinPlus = IMin + 0.0000001
' MsgBox ("Offset1 & 2 and SMinPlus are:" & " " & Offset1 & " " & Offset2 & " " &
SMinPlus)

Selection.FormatConditions.Delete
Selection.FormatConditions.Add Type:=xlCellValue, Operator:=xlLessEqual, _
Formula1:=SMinPlus
Selection.FormatConditions(1).Interior.ColorIndex = 3
Selection.FormatConditions.Add Type:=xlCellValue, Operator:=xlLessEqual, _
Formula1:=Offset2
Selection.FormatConditions(2).Interior.ColorIndex = 33

```

```
Selection.FormatConditions.Add Type:=xlCellValue, Operator:=xlLessEqual, _  
    Formula1:=Offset1  
Selection.FormatConditions(3).Interior.ColorIndex = 34
```

```
Next I
```

```
End Sub
```

## 12. ExtractProbableUnits

This routine searched the columns for highlighted values and extracted them to be positioned at the end of the file in sequence depending on whether they represented the minimum or were within 10% or 20% of that minimum.

```
Sub ExtractProbableUnits()
```

```
' Routine written by Avril Behan on 25/07/2008
```

```
' Module to automatically extract the most probable units based on the highlighted _  
    minimum value and values within 10% and 20% of that minimum
```

```
Dim IMin As Single, IMinTen As Single, IMinTwenty As Single
```

```
Dim I As Integer, J As Integer, k As Integer, m As Integer
```

```
Dim INumberofItems As Integer
```

```
I = 0
```

```
m = 0
```

```
' Clear all existing formatting
```

```
Application.FindFormat.Clear
```

```
Range("b5").Select
```

```
    If ActiveCell.Offset(0, 1).Value <> Empty Then
```

```
        INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count
```

```
    ElseIf ActiveCell.Offset(0, 1).Value = Empty Then
```

```
        INumberofItems = 1
```

```
    End If
```

```
' Find and select the term Minimum in the spreadsheet
```

```
    For m = 0 To INumberofItems - 1
```

```
        J = 0
```

```
        k = 0
```



```
Cells.Find(What:="Minimum", After:=ActiveCell, LookIn:=xlFormulas, _
    LookAt:=xlPart, SearchOrder:=xlByRows, SearchDirection:=xlNext, _
    MatchCase:=False, SearchFormat:=False).Select
```

```
ActiveCell.Offset((m * 4) + 4, 0).Value = "Minimum location is:"
```

```
ActiveCell.Offset((m * 4) + 5, 0).Value = "Below 10% locations are:"
```

```
ActiveCell.Offset((m * 4) + 6, 0).Value = "Below 20% locations are:"
```

```
ActiveCell.Offset(0, 1 + m).Select
```

```
IMin = ActiveCell.Offset(0, 0).Value
```

```
IMinTen = ActiveCell.Offset(1, 0).Value
```

```
IMinTwenty = ActiveCell.Offset(2, 0).Value
```

```
Range(ActiveCell.Offset(-2, 0), ActiveCell.Offset(-2, 0).End(xlUp)).Select
```

```
INumberofRows = Range(ActiveCell, ActiveCell.End(xlDown)).Count
```

```
For I = 0 To INumberofRows - 1
```

```
    If ActiveCell.Offset(I, 0).Value = IMin Then
```

```
        ActiveCell.Offset(INumberofRows + 5 + (m * 4), -m).Value =
ActiveCell.Offset(I, -1 - m).Value
```

```
    ElseIf ActiveCell.Offset(I, 0).Value < IMinTen Then
```

```
        ActiveCell.Offset(INumberofRows + 6 + (m * 4), -m + J).Value =
ActiveCell.Offset(I, -1 - m).Value
```

```
        J = J + 1
```

```
    ElseIf ActiveCell.Offset(I, 0).Value < IMinTwenty Then
```

```
        ActiveCell.Offset(INumberofRows + 7 + (m * 4), -m + k).Value =
ActiveCell.Offset(I, -1 - m).Value
```

```
        k = k + 1
```

```
    End If;    Next I;    Next m; End Sub
```

### 13. UnitsCount

This routine prepared the data for entry into the regional spreadsheet of results from the metrological processing by assigning a weight of 1 to the minimum value and 0.9 and 0.5 to values within 10% or 20% of the minimum, respectively. The new columns of data created by this routine could then be directly entered into the regional results spreadsheet: **units\_proportions\_results\_region.xls** on the included DVD.

```
Sub UnitCount()
```

```
' Routine written by Avril Behan on 07/08/2008
```

' Find the min, min+10 and min+20 values and convert to 1,0.9 & 0.5 values for use in the units\_proportions\_results.xls

```
Dim IMin As Single, IMinTen As Single, IMinTwenty As Single
Dim I As Integer, J As Integer, k As Integer, m As Integer
Dim INumberofItems As Integer
```

```
I = 0
m = 0
```

' Clear all existing formatting  
Application.FindFormat.Clear

```
Range("b5").Select
If ActiveCell.Offset(0, 1).Value <> Empty Then
    INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count
    ActiveCell.Offset(-1, INumberofItems + 2).Value = "Weighting"
ElseIf ActiveCell.Offset(0, 1).Value = Empty Then
    INumberofItems = 1
    ActiveCell.Offset(-1, 2).Value = "Weighting"
End If
```

' Find and select the term Minimum in the spreadsheet

```
For m = 0 To INumberofItems - 1
    J = 0
    k = 0
```

```
Cells.Find(What:="Minimum", After:=ActiveCell, LookIn:=xlFormulas, _
    LookAt:=xlPart, SearchOrder:=xlByRows, SearchDirection:=xlNext, _
    MatchCase:=False, SearchFormat:=False).Select
```

```
'ActiveCell.Offset((m * 4) + 4, 0).Value = "Minimum location is:"
'ActiveCell.Offset((m * 4) + 5, 0).Value = "Below 10% locations are:"
'ActiveCell.Offset((m * 4) + 6, 0).Value = "Below 20% locations are:"
ActiveCell.Offset(0, 1 + m).Select
```

```
IMin = ActiveCell.Offset(0, 0).Value
IMinTen = ActiveCell.Offset(1, 0).Value
IMinTwenty = ActiveCell.Offset(2, 0).Value
```

```

Range(ActiveCell.Offset(-2, 0), ActiveCell.Offset(-2, 0).End(xlUp)).Select
INumberofRows = Range(ActiveCell, ActiveCell.End(xlDown)).Count
Range("b5").Select
ActiveCell.Offset(0, m).Select

For I = 0 To INumberofRows - 1
  If ActiveCell.Offset(I, 0).Value = IMin Then
    ActiveCell.Offset(I, INumberofItems + 1).Value = 1
  ElseIf ActiveCell.Offset(I, 0).Value < IMinTen Then
    ActiveCell.Offset(I, INumberofItems + 1).Value = 0.9
  ElseIf ActiveCell.Offset(I, 0).Value < IMinTwenty Then
    ActiveCell.Offset(I, INumberofItems + 1).Value = 0.5
  End If
Next I
Next m
End Sub

```

## Proportional Analysis

The input values for these routines were the proportions calculated from the original measurements extracted photogrammetrically for each window. Both the original measurements and the associated proportions are shown for each window on the relevant page of the catalogue. All windows from within each site were analysed together but could still be reviewed individually.

### 1. FormatandCountNo5

This routine compared the proportions extracted for each of the windows against the numeric values of the important ratios 1:1 1, 1:2 0.500, 1:3 0.333, 1:4 0.250, 2:3 0.667, 2:5 0.400, 3:4 0.750, 3:5 0.600, 4:5 0.800, 5:6 0.833, 13:23 0.565, 377:610 0.618,  $1:\sqrt{2}$  0.500,  $1:\sqrt{3}$  0.577,  $1:\sqrt{5}$  0.447. A count was made of each occurrence of a proportion, or a value within 2% of that proportion, and added to new columns. The new columns of data created by this routine could then be directly entered into the regional results spreadsheet: **units\_proportions\_results\_region.xls** on the included DVD. When a proportion was aligned with a particular ratio it was also assigned a particular colour, making interpretation easier and facilitating comparison between sites.



Sub FormatandCountNo5()

' written by Avril Behan 06/01/2011

' routine to take a set of proportion data, test it against values within 1% & 2% of known proportions and count & format the data according to the results

Dim I As Integer, J As Integer, k As Integer, l As Integer

Dim INumberofItems As Integer, INumberofMeasurements As Integer,  
INumberofProportions As Integer

Dim STestValue As Single

' Find the column number of the last column to contain values

Range("b5").Select

If ActiveCell.Offset(0, 1).Value <> Empty Then

INumberofItems = Range(ActiveCell, ActiveCell.End(xlToRight)).Count

StrLastColumn = ActiveCell.Offset(0, INumberofItems).Column

StrFirstColumn = ActiveCell.Column

MsgBox ("The number of items to be tested is:" & " " & INumberofItems)

ElseIf ActiveCell.Offset(0, 1).Value = Empty Then

INumberofItems = 1

StrLastColumn = ActiveCell.Offset(0, INumberofItems).Column

StrFirstColumn = ActiveCell.Column

MsgBox ("Only 1 column of data exists. The number of items to be tested is:" &  
" " & INumberofItems)

End If

INumberofMeasurements = Range(ActiveCell, ActiveCell.End(xlDown)).Count

MsgBox ("The measurements to be tested per item is:" & " " &  
INumberofMeasurements)

' Count the number of proportions to be tested

ActiveCell.Offset(I, INumberofItems + 2).Select

MsgBox ("ActiveCell address is:" & " " & ActiveCell.Address)

INumberofProportions = Range(ActiveCell, ActiveCell.End(xlDown)).Count

MsgBox ("The proportions to be tested per item is:" & " " & INumberofProportions)

Range("b5").Select

```

' loop through the columns of data
  For J = 0 To INumberOfItems - 1      ' starting with zero because of column offset

' loop through rows of data
  For I = 0 To INumberOfMeasurements - 1

' check each row entry against the possible proportional ranges for 2% and then 1%
  STestValue = ActiveCell.Offset(I, J).Value
  If STestValue <> Empty Then
' When I = 0, 2% test and when I = 1, 1% test
    For l = 0 To 1
      For k = 0 To INumberOfProportions - 1
        & " " & "to" & " " & ActiveCell.Offset(k, INumberOfItems + 7 - (l * 2)).Value)
          If STestValue >= ActiveCell.Offset(k, INumberOfItems + 7 - (l *
2)).Value And _
            STestValue <= ActiveCell.Offset(k, INumberOfItems + 6 - (l *
2)).Value Then
              ActiveCell.Offset(k, INumberOfItems + 7 - (l *
2)).Interior.ColorIndex = k + 2 + (l * INumberOfProportions)
              ActiveCell.Offset(k, INumberOfItems + 6 - (l *
2)).Interior.ColorIndex = k + 2 + (l * INumberOfProportions)
              ActiveCell.Offset(I, J).Interior.ColorIndex = k + 2 + (l *
INumberofProportions)
              ActiveCell.Offset(k, INumberOfItems + 9 - l).Value = _
                ActiveCell.Offset(k, INumberOfItems + 9 - l).Value + 1
            End If
          Next k
        Next l
      End If
    Next I
  Next J

End Sub

```



## Appendix 5: Geological Interpretation for Chapter 3

### Bedrock 500k Solid Geology

	1, Meta-dolerite, meta-gabbro		43, Shallow marine (Dunquin Group, Dingle), Siltstone, sandstone, tuff, limestone
	2, Serpentinite, Neoproterozoic (NE Ox Mts) & Lower Ordovician (Clew Bay, Carnew)		44, Rhyolitic tuff, basalt & andesite (in Dunquin Group)
	3, Orthogneiss suite, mainly quartz diorite (Connemara)		45, Shallow marine (Croagh Patrick Succession), Sandstone, siltstone, conglomerate
	4, Granodiorite, tonalite, dacite, granite		46, Quartzite (in Croagh Patrick Succession)
	5, Gabbro, dolerite & diorite		47, Alluvial - plays (Louisburgh - Clare Island Succession), Sandstone, siltstone, conglomerate
	6, Microgranite & porphyry		48, Transgression - regression sequence (Killary Hbr - Joyce's Country Succ.), Sandstone, conglomerate, greywacke, mudstone, tuff
	7, Appinite Suite		49, Deep marine turbidite sequence, Mudstone, greywacke & conglomerate
	8, Granite, granodiorite		50, Basalt, andesite, basaltic & andesitic tuff
	9, Granite, granophyre		51, Rhyolite & rhyolitic tuff
	10, Rhyolite		52, Continental redbed facies, Sandstone, siltstone & mudstone (base of Dingle Group is in the Upper Silurian)
	11, Dolerite & gabbro		53, Continental redbed facies, Sandstone, siltstone & mudstone
	12, Rhinns Complex (Inishtrahull), Syenitic orthogneiss, minor metagabbro		54, Continental redbed facies, Sandstone, conglomerate & siltstone (in places extends into the Carboniferous)
	13, Mullet Gneiss, Granitic orthogneiss		55, Shallow marine, (Cork Group, Old Head Sandstone Fm), Sandstone & mudstone
	14, Cross Point Gneiss, Granitic orthogneiss		56, Basalt, trachyte, syenite & tuff
	15, Doolough Gneiss & Granite, Granitic orthogneiss & granite		57, Marine (Cork Group) (extends into the Viséan), Mudstone, sandstone & thin limestone
	16, Kilmore Quay Group, Paragneiss, schist		58, Shallow marine ("Lower Limestone Shale"), Shale, sandstone & thin limestone
	17, Greenore Point Group, Schistose amphibolite		59, Shallow marine & coastal plain (basal clastics), Sandstone, mudstone & conglomerate
	18, Tyrone Central Inlier, Quartzo-feldspathic paragneiss & schist		60, Shallow & marginal marine (Navan Group), Dark-grey limestone, mudstone, sandstone, minor evaporite
	19, Sliswood Division, Quartzo-feldspathic paragneiss		61, Marine shelf & ramp facies, Argillaceous dark-grey bioclastic limestone, subsidiary shale
	20, Inishkea Division (possibly Dalradian), Psammitic & pelitic schist		62, Waulsortian mudbank, Pale-grey massive limestone
	21, Grampian Group, Psammitic & pelitic schist		63, Shallow marine & coastal plain (Basal Clastics), Sandstone, mudstone & conglomerate
	22, Appin Group, Quartzite		64, Marine shelf facies, Limestone & calcareous shale
	23, Appin Group, Psammitic & pelitic schist & marble		65, Marine basinal facies (Tobercolleen & Lucan Fms - "Calp"), Dark-grey argillaceous & cherty limestone & shale
	24, Argyll Group, Paragneiss & migmatite		66, Marginal marine (Mullaghmore, Downpatrick & Clogher Valley Fms), Sandstone, mudstone & evaporite
	25, Argyll Group, Amphibolite & amphibolitic schist		67, Shallow water marine (Armagh Group), Limestone, limestone conglomerate, palaeokarst with red palaeosols
	26, Argyll Group, Quartzite		68, Marginal marine (Meenymore Formation), Mudstone, sandstone & evaporite
	27, Argyll Group, Psammitic & pelitic schist, marble, amphibolite, diamictite		69, Fluvio-deltaic & minor marine (late Viséan to Namurian; Ballycastle), Sandstone, mudstone, thin limestone & coal
	28, Southern Highland Group, (Epidote-amphibolitic schist & tuff		70, Continental redbed facies (late Viséan to early Westphalian), Sandstone, conglomerate & mudstone
	29, Southern Highland Group, Pelitic & psammitic schist, phyllite & marble		71, Fluvio-deltaic & basinal marine (Turbiditic), Shale, sandstone, siltstone & coal
	30, Marine, Quartzite & minor slate		72, Fluvio-deltaic & shallow marine, Shale, sandstone & siltstone with coal
	31, Marine, Slate		73, Continental redbed facies & shallow marine, Sandstone, conglomerate, magnesian limestone, marl, evaporite
	32, Marine, Greywacke & shale		74, Continental redbed facies (Permo-Triassic, Wexford), Sandstone, conglomerate & siltstone
	33, Basalt - andesite, tuff & shale		75, Continental redbed facies, lagoonal & shallow marine, Sandstone & mudstone with evaporite
	34, Rhyolite and rhyolitic tuff		76, Shallow marine (Lias), Mudstone & limestone
	35, Deep marine, Slate, schist & minor greywacke		77, Shallow marine (Upper Cretaceous), Chalk, flint, glauconitic sandstone & chalk breccia
	36, Deep marine, Greywacke, shale, sandstone & conglomerate		78, Undifferentiated minor volcanic rocks
	37, Basalt - andesite, tuff, slate & mudstone		79, Lower Basalt Formation, Olivine basalt lava
	38, Rhyolite, rhyolitic tuff & slate		80, Interbasaltic Formation, Laterite, bauxite & lithomarge
	39, Deep marine, Slate, shale, minor sandstone & siltstone		81, Causeway Tholeiite Member, Columnar tholeiitic basalt lava
	40, Marine to fluvial, Greywacke, shale, sandstone & conglomerate		82, Upper Basalt Formation, Olivine basalt lava
	41, Melange (Ordovician or Silurian), Greywacke, sandstone & conglomerate		83, Lacustrine, Clay, sand & lignite
	42, "Moffat shale" facies (Ordovician - Silurian), Shale & greywacke		

<sup>1</sup> Geological Survey of Ireland, "GSI Datasets Public Viewer". Dublin, 2009. Government of Ireland. September 2009. <[http://spatial.dcenr.gov.ie/imf/imf.jsp?site=GSI\\_Simple](http://spatial.dcenr.gov.ie/imf/imf.jsp?site=GSI_Simple)>.



## **Appendix 6: Regional Results**

Comparison of normalised regional results for proportion and metrology.

## Comparison of Proportions

Connaught: 242 lights, 82 windows					Ormond: 161 lights, 58 windows					Desmond: 151 lights, 49 windows				
Ratio	Numeric	All	1%	2%	Ratio	Numeric	All	1%	2%	Ratio	Numeric	All	1%	2%
1 :2	0.500	8.6	4.6	4.0	1 :2	0.500	10.4	6.6	3.9	1 :4	0.250	6.9	3.4	3.5
1 :4	0.250	7.4	3.6	3.8	1 :3	0.333	7.1	3.9	3.3	1 :3	0.333	5.9	2.9	3.0
1 :3	0.333	7.2	4.4	2.8	4 :5	0.800	5.6	3.5	2.1	1 :2	0.500	5.6	3.0	2.6
4 :5	0.800	6.8	2.6	4.2	1 :1	1.000	5.6	2.8	2.8	1 :root 2	0.707	5.4	0.9	4.5
3 :4	0.750	5.3	3.1	2.2	5 :6	0.833	5.4	2.6	2.8	1 :1	1.000	4.8	1.7	3.1
13 :23	0.565	4.5	1.9	2.6	1 :4	0.250	3.7	1.4	2.3	1 :root 3	0.577	4.2	2.2	2.0
1 :1	1.000	4.3	2.1	2.1	2 :3	0.667	3.7	1.8	2.0	4 :5	0.800	4.2	2.8	1.4
377 :610	0.618	3.6	1.3	2.2	3 :4	0.750	3.7	2.0	1.8	5 :6	0.833	4.2	1.8	2.4
1 :root 5	0.447	3.4	1.8	1.6	1 :root 3	0.577	3.2	1.9	1.3	2 :3	0.667	3.9	3.0	0.9
1 :root 2	0.707	3.4	1.7	1.7	13 :23	0.565	2.8	1.3	1.5	1 :root 5	0.447	3.4	2.2	1.2
5 :6	0.833	3.4	1.3	2.1	2 :5	0.400	2.5	0.9	1.5	377 :610	0.618	3.0	1.7	1.3
1 :root 3	0.577	3.3	1.9	1.4	1 :root 2	0.707	2.3	1.4	0.9	2 :5	0.400	2.9	1.4	1.4
2 :3	0.667	3.2	1.7	1.6	377 :610	0.618	2.1	0.7	1.4	3 :4	0.750	2.6	0.7	2.0
3 :5	0.600	1.8	1.8	0.0	1 :root 5	0.447	0.9	0.4	0.6	13 :23	0.565	2.2	1.0	1.2
2 :5	0.400	1.5	1.0	0.6	3 :5	0.600	0.9	1.2	0.0	3 :5	0.600	1.6	1.6	0.0

**Connaught**  
Maximum 8.6

75% 6.5  
50% 4.3

**Ormond**  
Maximum 10.4

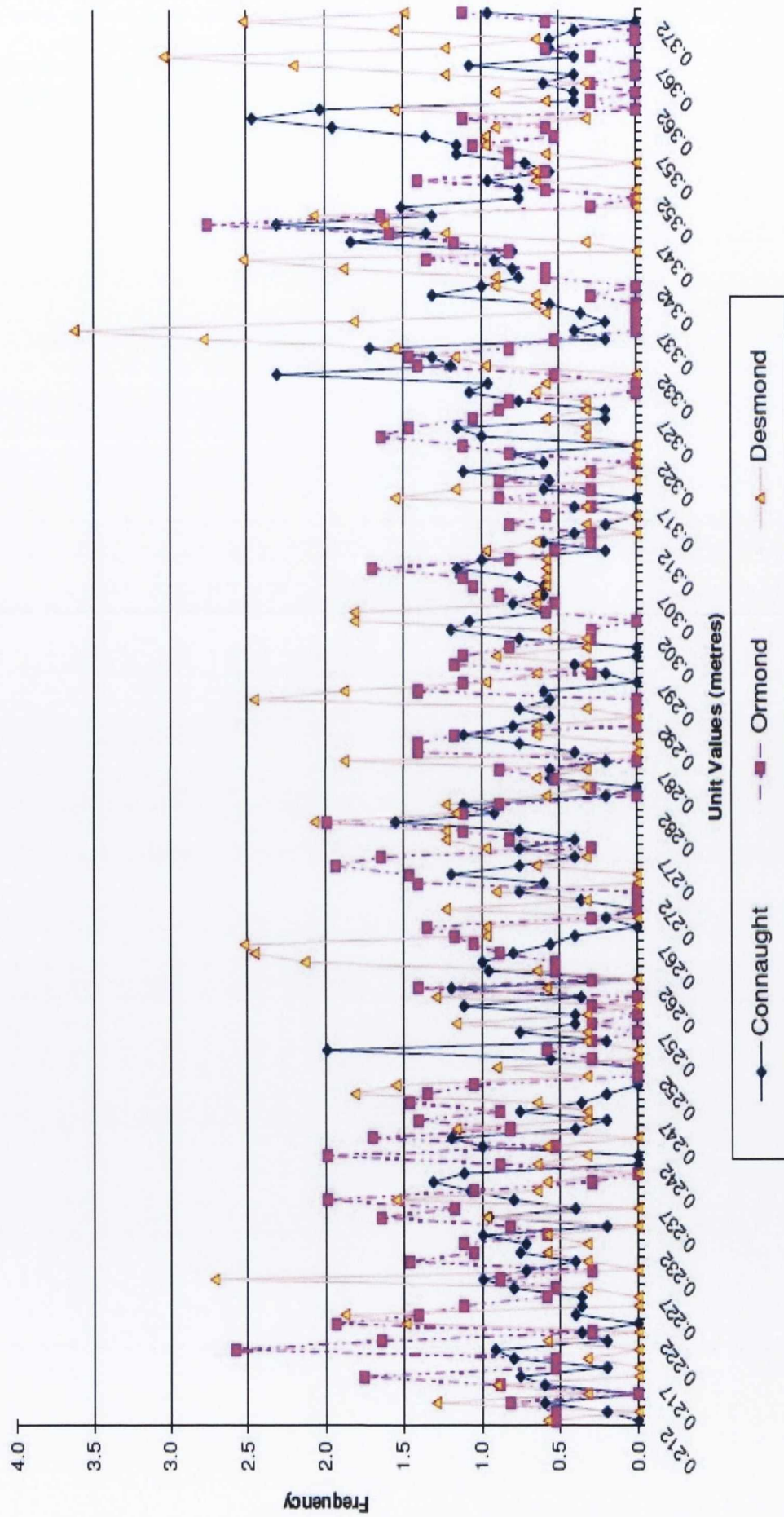
75% 7.8  
50% 5.2

**Desmond**  
Maximum 6.9

75% 5.2  
50% 3.5

# Comparison of Units

Probable Units by Frequency (Normalised)





# Appendix 7: Registration Reports for Case Study TLS

## St. Mary's collegiate church, Gowran

### Report by targets

User Name: avril.behan

Date: Fri Jul 24 16:05:21 2009

Project Name: Interior\_Registered2

Linear Measurement Units: Millimeter

Coordinates System: X, Y, Z

---

2 STATION(S) - Mean Distance: 9.61 Max Distance: 9.61

4 TARGET(S) - Mean Distance: 9.61 Max Distance: 12.57

#### mTARGET1

7554452 Scanned Objects

Mean Distance: 12.53

Mean Position: X=3996.64 Y=-2450.74 Z=-1212.88

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
5	Station_1	12.53	-11.94	3.58	-1.32	1.70
5	Station_2	12.53	11.94	-3.58	1.32	1.33

#### mTARGET3

7554452 Scanned Objects

Mean Distance: 9.48

Mean Position: X=18391.50 Y=1127.26 Z=566.02

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
14	Station_1	9.48	2.93	-7.70	4.70	0.59
14	Station_2	9.48	-2.93	7.70	-4.70	1.08

### mTARGET4

7554452 Scanned Objects

Mean Distance: 3.86

Mean Position: X=16638.01 Y=7930.95 Z=-973.62

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
7	Station_1	3.86	-2.90	0.19	-2.55	1.35
7	Station_2	3.86	2.90	-0.19	2.55	1.71

### mTARGET5

7554452 Scanned Objects

Mean Distance: 12.57

Mean Position: X=8750.84 Y=-8347.50 Z=1045.69

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
13	Station_1	12.57	-11.91	-3.93	0.83	0.76
13	Station_2	12.57	11.91	3.93	-0.83	0.96

# Athenry Dominican friary

## Report by targets

User Name: avril.behan

Date: Thu Jun 11 09:26:30 2009

Project Name: FullAthenry

Linear Measurement Units: Millimeter

Coordinates System: X, Y, Z

4 STATION(S) - Mean Distance: 4.13 Max Distance: 8.89  
8 TARGET(S) - Mean Distance: 5.18 Max Distance: 12.89

### mTARGET1

7554452 Scanned Objects

Mean Distance: 5.18

Mean Position: X=-4579.24 Y=5452.83 Z=812.49

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
5	Mid_First	5.18	0.87	5.10	0.28	1.05
5	Aisle_fourth	5.18	-0.87	-5.10	-0.28	0.77

### mTARGET2

7554452 Scanned Objects

Mean Distance: 11.76

Mean Position: X=-12674.01 Y=-3902.82 Z=-358.42

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
7	Mid_First	11.76	-7.66	8.79	1.52	0.87
7	Aisle_fourth	11.76	7.66	-8.79	-1.52	0.80



### mTARGET3

7554452 Scanned Objects

Mean Distance: 12.89

Mean Position: X=-4739.39 Y=-13791.67 Z=-1513.48

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
10	Mid_First	12.89	9.13	-9.09	0.34	0.75
10	Aisle_fourth	12.89	-9.13	9.09	-0.34	1.09

### mTARGET4

7554452 Scanned Objects

Mean Distance: 5.76

Mean Position: X=-7174.93 Y=-14564.63 Z=-1515.63

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
9	Mid_First	5.76	-2.34	-4.80	-2.14	1.10
9	Aisle_fourth	5.76	2.34	4.80	2.14	0.79

### mTARGET5

7554452 Scanned Objects

Mean Distance: 1.15

Mean Position: X=5527.21 Y=15191.39 Z=720.86

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
2	Mid_First	1.61	0.58	-1.46	-0.34	0.71
2	Aisle_third	1.09	-0.73	0.82	0.01	1.23
2	East_Second	0.74	0.15	0.64	0.34	1.27

### mTARGET6

7554452 Scanned Objects

Mean Distance: 0.84

Mean Position: X=4599.29 Y=14059.82 Z=-849.75

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
3	Mid_First	1.21	0.95	-0.65	0.40	0.78
3	Aisle_third	0.85	-0.69	0.50	-0.04	0.97
3	East_Second	0.46	-0.26	0.14	-0.35	1.05

### mTARGET7

7554452 Scanned Objects

Mean Distance: 2.15

Mean Position: X=6121.30 Y=7424.68 Z=71.34

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
1	Mid_First	3.06	-2.57	1.66	-0.09	1.10
1	Aisle_third	2.61	2.46	-0.87	0.07	0.78
1	East_Second	0.79	0.12	-0.79	0.01	0.82

### mTARGET8

7554452 Scanned Objects

Mean Distance: 1.70

Mean Position: X=168.49 Y=-3708.56 Z=-23.46

Object	Station	Residual Error (mm)	Delta X (mm)	Delta Y (mm)	Delta Z (mm)	Fitting Error (mm)
11	Mid_First	1.70	1.57	0.67	0.05	0.96
11	Aisle_third	1.70	-1.57	-0.67	-0.05	0.71

## Appendix 8: Site Catalogue

Table App 8.1 Colour-scheme for examined ratios

Ratio	Numeric Value	1%		2%	
1 : 4	0.250	0.253	0.248	0.255	0.245
1 : 3	0.333	0.337	0.330	0.340	0.327
2 : 5	0.400	0.404	0.396	0.408	0.392
1 : root 5	0.447	0.452	0.443	0.456	0.438
1 : 2	0.500	0.505	0.495	0.510	0.490
13 : 23	0.565	0.571	0.560	0.577	0.554
1 : root 3	0.577	0.583	0.572	0.589	0.566
3 : 5	0.600	0.606	0.594		
377 : 610	0.618	0.624	0.612	0.630	0.606
2 : 3	0.667	0.673	0.660	0.680	0.653
1 : root 2	0.707	0.714	0.700	0.721	0.693
3 : 4	0.750	0.758	0.743	0.765	0.735
4 : 5	0.800	0.808	0.792	0.816	0.784
5 : 6	0.833	0.842	0.825	0.850	0.817
1 : 1	1.000	1.010	0.990	1.020	0.980

Table App 8.2 Abbreviations for proportional results tables

Abbreviation	Meaning
TFH	Tracery Field Height
AS	Arch Span
OWW	Overall Window Width
OWH	Overall Window Height
WHS	Window Height at Springing Point
LW	Light Width
LHSP	Light Height at Springing Point
LHAP	Light Height at Arch Peak
MW	Mullion Width



## Abbeydorney Cistercian abbey: Chancel east Co. Kerry, Desmond



### Measurements

Light1		Light2	
width	0.370	width	0.390
overall height	2.523	overall height	2.521
height to spring	2.410	height to spring	2.393
Light3		Window	
width	0.373	overall width	1.132
overall height	2.521	overall height	3.923
height to spring	2.389	height to spring	2.839
Arch		Mullion 1	
span	1.259	width	0.162
height from spring	1.084		
		Mullion 2	
		width	0.160

### Units

<b>Most likely:</b> 0.224m
<b>Within 10%:</b> 0.252
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.450	0.453	0.454
TFH/LHAP		0.430	0.430	0.430
TFH/OWH	0.276			
OWW/OWH	0.289			
OWW/WHS	0.399			
OWH/AS	0.899			
LW/LHSP		0.153	0.163	0.156
LW/LHAP		0.147	0.155	0.148
LW/OWW		0.327	0.344	0.329
LW/OWH		0.094	0.099	0.095
LW/AS		0.294	0.310	0.296
OWW/LHSP		0.470	0.473	0.474
OWW/LHAP		0.449	0.449	0.449
MW/OWW		0.143	0.142	
MW/LW		0.438	0.415	0.434
MW/LW		0.434	0.411	0.430

## Abbeydorney Cistercian abbey: Nave west Co. Kerry, Desmond



### Measurements

Light 1	m
width	0.368
overall height	2.007
height to spring	1.860
Light2	
width	0.368
overall height	2.004
height to spring	1.867
Window	
overall width	0.734
overall height	2.589
height to spring	1.870
Arch	
span	0.787
height from spring	0.718
Mullion 1	
width	0.132

### Units (m)

<b>Most likely:</b> 0.241
<b>Within 10%:</b> 0.287
<b>Within 20%:</b> 0.267

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.386	0.385
TFH/LHAP		0.358	0.359
TFH/OWH	0.278		
OWW/OWH	0.284		
OWW/WHS	0.393		
OWH/AS	0.932		
LW/LHSP		0.198	0.197
LW/LHAP		0.183	0.184
LW/OWW		0.501	0.501
LW/OWH		0.142	0.142
LW/AS		0.467	0.467
OWW/LHSP		0.395	0.393
OWW/LHAP		0.366	0.366
MW/OWW		0.180	
MW/LW		0.359	0.358



## Adare Augustinian priory: Chancel east Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.828	width	0.841
overall height	4.682	overall height	4.652
height to spring	3.200	height to spring	3.210
Light3		Light4	
width	0.827	width	0.846
overall height	4.658	overall height	4.642
height to spring	3.174	height to spring	3.192
Light5		Window	
width	0.832	overall width	4.172
overall height	4.679	overall height	7.134
height to spring	3.209	height to spring	3.202
Arch		Mullion 2	
span	4.628	width	0.260
height from spring	3.939		
		Mullion 3	
Mullion 1		width	0.260
width	0.253		
		Mullion 4	
		width	0.268

### Units

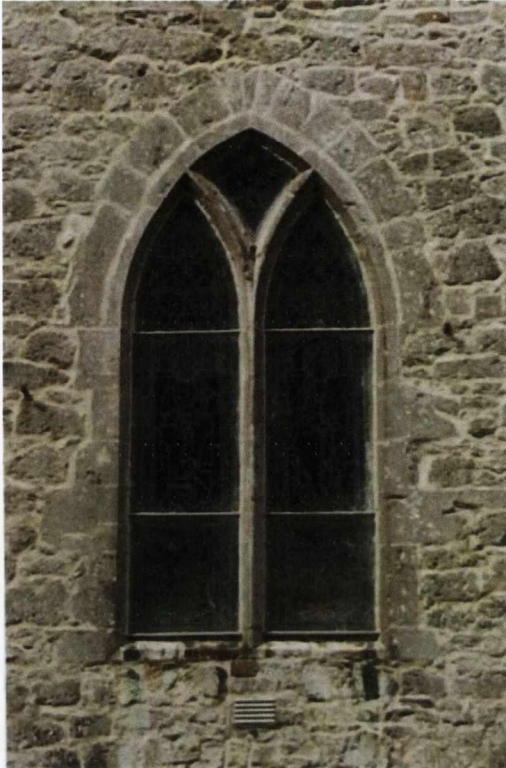
<b>Most likely:</b> 0.366m
<b>Within 10%:</b> 0.367
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP	0.000	0.812	0.815	0.806	0.810	0.815
TFH/LHAP	0.000	0.841	0.847	0.846	0.849	0.842
TFH/OWH	0.552					
OWW/OWH	0.585					
OWW/WHS	0.449					
OWH/AS	0.902					
LW/LHSP	0.000	0.259	0.262	0.260	0.265	0.259
LW/LHAP	0.000	0.177	0.181	0.177	0.182	0.178
LW/OWW	0.000	0.198	0.202	0.198	0.203	0.199
LW/OWH	0.000	0.116	0.118	0.116	0.119	0.117
LW/AS	0.000	0.179	0.182	0.179	0.183	0.180
OWW/LHSP	0.000	0.767	0.769	0.761	0.765	0.769
OWW/LHAP	0.000	0.891	0.897	0.896	0.899	0.892
MW/OWW	0.000	0.061	0.062	0.062	0.064	
MW/LW	0.000	0.306	0.301	0.309	0.314	
MW/LW	0.000	0.314	0.307	0.317	0.322	



**Adare Augustinian priory: Nave south, eastern  
Co. Limerick, Desmond**



**Measurements**

Light1	m
width	0.674
overall height	3.340
height to spring	2.193
Light2	
width	0.687
overall height	3.349
height to spring	2.219
Window	
overall width	1.361
overall height	3.752
height to spring	2.212
Arch	
span	1.624
height from spring	1.550
Mullion 1	
width	0.125

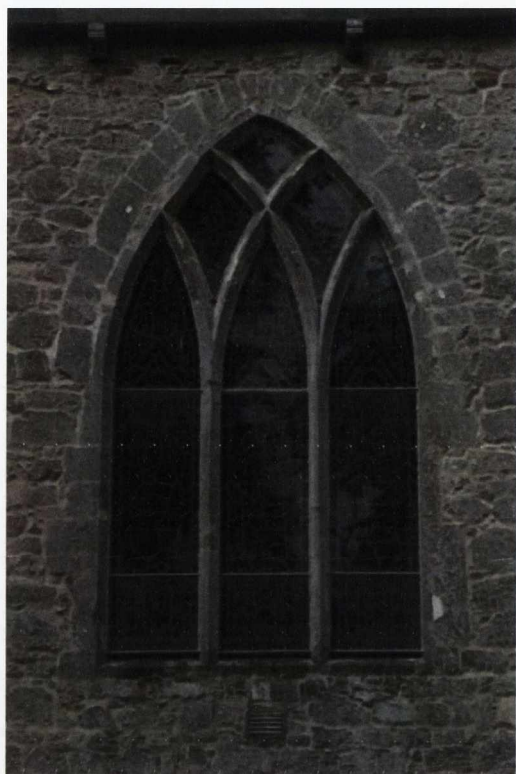
**Units**

<b>Most likely:</b> 0.295m
<b>Within 10%:</b> 0.245 0.257 0.341 0.342
<b>Within 20%:</b> 0.256 0.258 0.343

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP	0.000	0.707	0.698
TFH/LHAP		0.464	0.463
TFH/OWH	0.413		
OWW/OWH	0.363		
OWW/WHS	0.615		
OWH/AS	0.838		
LW/LHSP		0.307	0.309
LW/LHAP		0.202	0.205
LW/OWW		0.495	0.505
LW/OWH		0.180	0.180
LW/AS		0.415	0.423
OWW/LHSP		0.621	0.613
OWW/LHAP		0.407	0.406
MW/OWW		0.092	
MW/LW		0.185	0.182

## Adare Augustinian priory: Nave south, mid eastern Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.747	width	0.743
overall height	3.038	overall height	3.045
height to spring	1.901	height to spring	1.898
Light3		Window	
width	0.728	overall width	2.217
overall height	3.032	overall height	3.848
height to spring	1.886	height to spring	1.893
Mullion 1		Arch	
width	0.136	span	2.245
		height from spring	1.957
Mullion 2			
width	0.134		

### Units

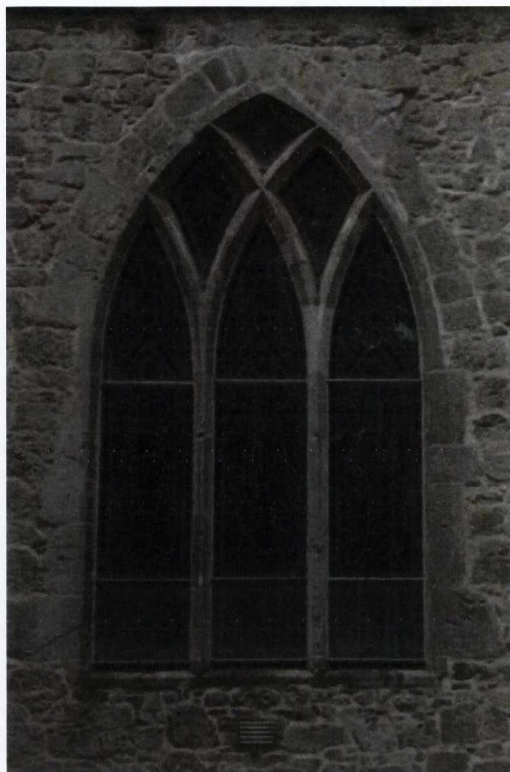
<b>Most likely:</b> 0.290m
<b>Within 10%:</b> 0.246 0.268 0.282
<b>Within 20%:</b> 0.223

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP	0.000	0.972	0.970	0.963
TFH/LHAP		0.644	0.643	0.646
TFH/OWH	0.509			
OWW/OWH	0.576			
OWW/WHS	0.854			
OWH/AS	0.987			
LW/LHSP		0.393	0.392	0.386
LW/LHAP		0.246	0.244	0.240
LW/OWW		0.337	0.335	0.329
LW/OWH		0.194	0.193	0.189
LW/AS		0.333	0.331	0.324
OWW/LHSP		0.858	0.856	0.851
OWW/LHAP		0.730	0.728	0.731
MW/OWW		0.061	0.061	
MW/LW		0.182	0.183	0.186
MW/LW		0.180	0.181	0.184



## Adare Augustinian priory: Nave south, mid western Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.720	width	0.726
overall height	3.107	overall height	3.136
height to spring	1.963	height to spring	1.958
Light3		Window	
width	0.722	overall width	2.167
overall height	3.155	overall height	3.967
height to spring	1.846	height to spring	1.980
Mullion 1		Arch	
width	0.132	span	2.230
		height from spring	1.993
Mullion 2			
width	0.130		

### Units

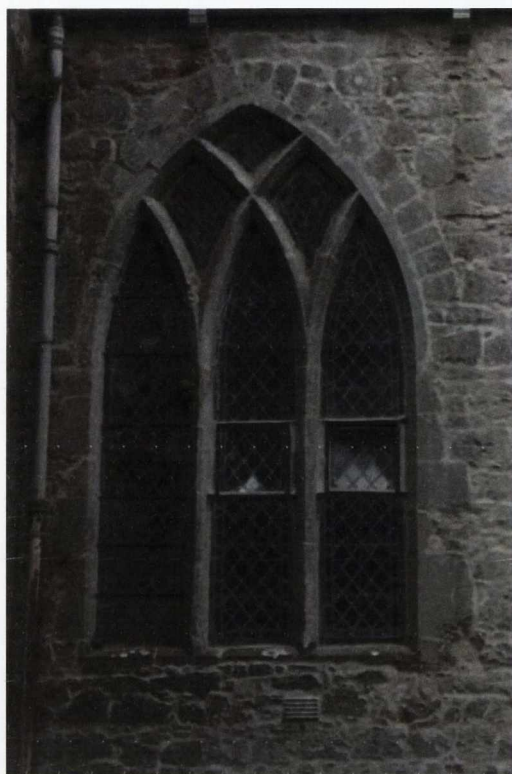
<b>Most likely:</b> 0.270m
<b>Within 10%:</b> 0.294
<b>Within 20%:</b> 0.260 0.268 0.291 0.361

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP	0.000	0.985	0.982	0.977
TFH/LHAP		0.641	0.636	0.632
TFH/OWH	0.502			
OWW/OWH	0.546			
OWW/WHS	0.913			
OWH/AS	0.972			
LW/LHSP		0.367	0.371	0.371
LW/LHAP		0.232	0.232	0.229
LW/OWW		0.332	0.335	0.333
LW/OWH		0.181	0.183	0.182
LW/AS		0.323	0.326	0.324
OWW/LHSP		0.906	0.903	0.898
OWW/LHAP		0.698	0.691	0.687
MW/OWW		0.061	0.060	
MW/LW		0.183	0.182	0.183
MW/LW		0.180	0.179	0.180



## Adare Augustinian priory: Nave south, western Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.785	width	0.591
overall height	1.613	overall height	1.614
height to spring	1.411	height to spring	1.048
Light3		Window	
width	0.770	overall width	2.033
overall height	1.627	overall height	3.369
height to spring	1.409	height to spring	1.603
Mullion 1		Arch	
width	0.138	span	2.067
		height from spring	1.767
Mullion 2			
width	0.141		

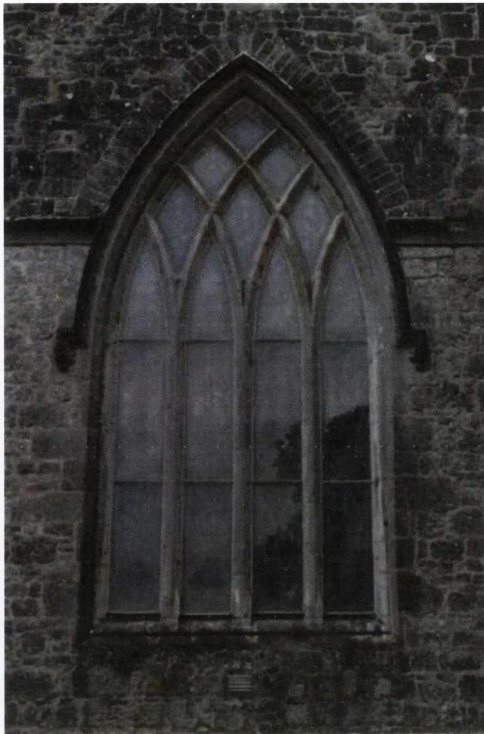
### Units

<b>Most likely:</b> 0.214m
<b>Within 10%:</b> 0.212 0.280 0.294
<b>Within 20%:</b> 0.282 0.293 0.295 0.296 0.305

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP	0.000	0.798	0.797	0.797
TFH/LHAP		0.913	0.913	0.921
TFH/OWH	0.525			
OWW/OWH	0.603			
OWW/WHS	0.788			
OWH/AS	0.984			
LW/LHSP		0.556	0.420	0.547
LW/LHAP		0.487	0.367	0.473
LW/OWW		0.386	0.291	0.379
LW/OWH		0.233	0.176	0.229
LW/AS		0.380	0.286	0.373
OWW/LHSP		0.694	0.693	0.693
OWW/LHAP		0.793	0.794	0.800
MW/OWW		0.068	0.069	
MW/LW		0.176	0.233	0.179
MW/LW		0.180	0.238	0.183

**Adare Augustinian priory: South transept east**  
Co. Limerick, Desmond



**Measurements**

Light1		Light2	
width	0.649	width	0.674
overall height	3.876	overall height	3.881
height to spring	2.592	height to spring	2.953
Light3		Light4	
width	0.665	width	0.658
overall height	3.897	overall height	3.900
height to spring	2.569	height to spring	2.590
Window		Arch	
overall width	2.645	span	3.100
overall height	5.670	height from spring	3.072
height to spring	2.601		
Mullion 1		Mullion 3	
width	0.188	width	0.200
Mullion 2			
width	0.195		

**Units**

<b>Most likely:</b> 0.266m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP	0.000	0.844	0.844	0.836	0.843
TFH/LHAP		0.792	0.791	0.788	0.787
TFH/OWH	0.542				
OWW/OWH	0.466				
OWW/WHS	0.983				
OWH/AS	0.853				
LW/LHSP		0.250	0.260	0.259	0.254
LW/LHAP		0.168	0.174	0.171	0.169
LW/OWW		0.246	0.255	0.251	0.249
LW/OWH		0.115	0.119	0.117	0.116
LW/AS		0.209	0.217	0.214	0.212
OWW/LHSP		0.980	0.980	0.971	0.979
OWW/LHAP		0.682	0.682	0.679	0.678
MW/OWW		0.071	0.074	0.076	
MW/LW		0.289	0.279	0.290	
MW/LW		0.294	0.301	0.304	



## Adare Augustinian priory: South transept south, eastern Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.627	width	0.660
overall height	2.755	overall height	2.748
height to spring	1.820	height to spring	1.825
Light3		Window	
width	0.637	overall width	1.924
overall height	2.764	overall height	3.490
height to spring	1.814	height to spring	1.822
Arch		Mullion 1	
span	1.933	width	0.185
height from spring	1.667		
		Mullion 2	
		width	0.194

### Units

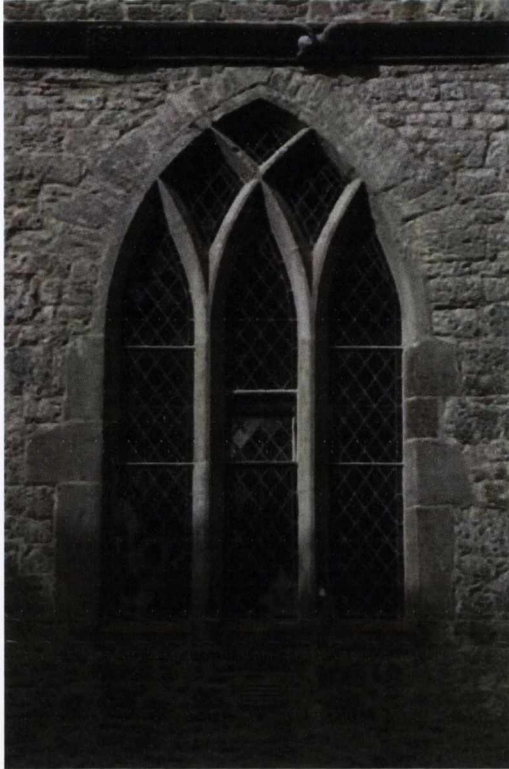
<b>Most likely:</b> 0.250m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.249 0.361 0.366

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP	0.000	0.916	0.914	0.919
TFH/LHAP		0.605	0.607	0.603
TFH/OWH	0.478			
OWW/OWH	0.551			
OWW/WHS	0.947			
OWH/AS	0.995			
LW/LHSP		0.345	0.362	0.351
LW/LHAP		0.228	0.240	0.230
LW/OWW		0.326	0.343	0.331
LW/OWH		0.180	0.189	0.182
LW/AS		0.324	0.341	0.329
OWW/LHSP		0.946	0.949	0.943
OWW/LHAP		0.698	0.700	0.696
MW/OWW		0.096	0.101	
MW/LW		0.296	0.281	0.291
MW/LW		0.309	0.293	0.304



## Adare Augustinian priory: South transept south, western Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.641	width	0.667
overall height	2.808	overall height	2.790
height to spring	1.851	height to spring	1.872
Light3		Window	
width	0.641	overall width	1.948
overall height	2.806	overall height	3.473
height to spring	1.854	height to spring	1.832
Arch		Mullion 1	
span	1.971	width	1.181
height from spring	1.641		
		Mullion 2	
		width	0.190

### Units

<b>Most likely:</b> 0.366m
<b>Within 10%:</b> 0.243 0.367 0.371
<b>Within 20%:</b> 0.242 0.255 0.324 0.368 0.370

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP	0.000	0.887	0.877	0.885
TFH/LHAP		0.584	0.588	0.585
TFH/OWH	0.473			
OWW/OWH	0.561			
OWW/WHS	0.940			
OWH/AS	0.989			
LW/LHSP		0.347	0.356	0.346
LW/LHAP		0.228	0.239	0.228
LW/OWW		0.329	0.342	0.329
LW/OWH		0.185	0.192	0.184
LW/AS		0.325	0.338	0.325
OWW/LHSP		0.950	0.961	0.952
OWW/LHAP		0.694	0.698	0.694
MW/OWW		0.093	0.098	
MW/LW		0.282	0.271	0.282
MW/LW		0.297	0.285	0.297

## Adare Augustinian priory: South transept west Co. Limerick, Desmond



### Measurements

Light1	m
width	0.892
overall height	2.355
height to spring	1.996
Light2	
width	0.786
overall height	2.355
height to spring	2.027
Window	
overall width	1.228
overall height	3.712
height to spring	2.003
Arch	
span	1.416
height from spring	1.708
Mullion 1	
width	0.153

### Units

<b>Most likely:</b> 0.214m
<b>Within 10%:</b> 0.223 0.224
<b>Within 20%:</b> 0.285 0.297 0.301 0.349

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP	0.000	0.856	0.843
TFH/LHAP		0.725	0.725
TFH/OWH	0.460		
OWW/OWH	0.331		
OWW/WHS	0.613		
OWH/AS	0.867		
LW/LHSP		0.447	0.388
LW/LHAP		0.379	0.334
LW/OWW		0.727	0.640
LW/OWH		0.240	0.240
LW/AS		0.630	0.555
OWW/LHSP		0.615	0.606
OWW/LHAP		0.521	0.521
MW/OWW		0.125	
MW/LW		0.171	0.195



## Adare Augustinian priory: West Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.735	width	0.754
overall height	3.563	overall height	3.575
height to spring	2.404	height to spring	2.428
Light3		Window	
width	0.759	overall width	2.248
overall height	3.610	overall height	4.380
height to spring	2.427	height to spring	2.315
Arch		Mullion 1	
span	2.296	width	0.128
height from spring	2.065		
		Mullion 2	
		width	0.129

### Units

<b>Most likely:</b> 0.248m
<b>Within 10%:</b> 0.250 0.278
<b>Within 20%:</b> 0.249 0.268

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP	0.000	0.859	0.851	0.851
TFH/LHAP		0.580	0.578	0.572
TFH/OWH	0.472			
OWW/OWH	0.513			
OWW/WHS	0.971			
OWH/AS	0.979			
LW/LHSP		0.306	0.310	0.313
LW/LHAP		0.206	0.211	0.210
LW/OWW		0.327	0.335	0.338
LW/OWH		0.168	0.172	0.173
LW/AS		0.320	0.328	0.331
OWW/LHSP		0.935	0.926	0.926
OWW/LHAP		0.631	0.629	0.623
MW/OWW		0.057	0.057	
MW/LW		0.174	0.170	0.169
MW/LW		0.175	0.171	0.170



## Adare Franciscan Friary: Chancel east Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.669	width	0.662
overall height	3.563	overall height	3.535
height to spring	2.499	height to spring	2.468
Light3		Light4	
width	0.664	width	0.617
overall height	3.549	overall height	3.580
height to spring	2.480	height to spring	2.502
Window		Arch	
overall width	2.612	span	3.456
overall height	4.977	height from spring	2.577
height to spring	2.453		
Mullion 1		Mullion 3	
width	0.175	width	0.158
Mullion 2			
width	0.169		

### Units

<b>Most likely:</b> 0.337m
<b>Within 10%:</b> 0.265 0.333 0.334 0.335
<b>Within 20%:</b> 0.332 0.334 0.335 0.369 0.370 0.371

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.970	0.958	0.963	0.971
TFH/LHAP		0.723	0.729	0.726	0.720
TFH/OWH	0.518				
OWW/OWH	0.525				
OWW/WHS	0.939				
OWH/AS	0.756				
LW/LHSP		0.268	0.268	0.268	0.247
LW/LHAP		0.188	0.187	0.187	0.172
LW/OWW		0.256	0.254	0.254	0.236
LW/OWH		0.134	0.133	0.133	0.124
LW/AS		0.193	0.192	0.192	0.179
OWW/LHSP		0.957	0.957	0.950	0.958
OWW/LHAP		0.733	0.739	0.736	0.729
MW/OWW		0.067	0.065	0.061	
MW/LW		0.262	0.264	0.255	
MW/LW		0.254	0.238	0.256	

## Adare Franciscan Friary: South transept south Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.534	width	0.591
overall height	3.435	overall height	3.462
height to spring	2.298	height to spring	2.280
Light3		Light4	
width	0.582	width	0.602
overall height	3.448	overall height	3.440
height to spring	2.281	height to spring	2.328
Window		Arch	
overall width	2.297	span	2.497
overall height	4.934	height from spring	2.248
height to spring	2.743		
Mullion 1		Mullion 3	
width	0.149	width	0.152
Mullion 2			
width	0.141		

### Units

<b>Most likely:</b> 0.294m
<b>Within 10%:</b> 0.295 0.344
<b>Within 20%:</b> 0.219 0.235 0.296 0.299 0.300 0.344

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP	0.000	0.978	0.986	0.986	0.966
TFH/LHAP		0.654	0.649	0.652	0.653
TFH/OWH	0.456				
OWW/OWH	0.466				
OWW/WHS	0.877				
OWH/AS	0.920				
LW/LHSP		0.232	0.259	0.255	0.259
LW/LHAP		0.155	0.171	0.169	0.175
LW/OWW		0.232	0.257	<b>0.254</b>	0.262
LW/OWH		0.108	0.120	0.118	0.122
LW/AS		0.214	0.237	0.233	0.241
OWW/LHSP		0.999	0.999	0.993	0.987
OWW/LHAP		0.669	0.663	0.666	0.668
MW/OWW		0.065	0.062	0.066	
MW/LW		0.279	0.252	0.239	
MW/LW		0.243	0.261	0.252	



## Adare Franciscan Friary: South transept west, northern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.468
overall height	2.100
height to spring	1.615
Light2	
width	0.466
overall height	2.112
height to spring	1.617
Window	
overall width	0.934
overall height	2.491
height to spring	1.684
Arch	
span	2.137
height from spring	0.836
Mullion 1	
width	0.140

### Units

<b>Most likely:</b> 0.371m
<b>Within 10%:</b> 0.280 0.281
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP	0.000	0.518	0.517
TFH/LHAP		0.398	0.396
TFH/OWH	0.336		
OWW/OWH	0.375		
OWW/WHS	0.554		
OWH/AS	0.437		
LW/LHSP		0.290	0.288
LW/LHAP		0.223	0.221
LW/OWW		0.501	0.499
LW/OWH		0.188	0.188
LW/AS		0.219	0.218
OWW/LHSP		0.578	0.577
OWW/LHAP		0.445	0.442
MW/OWW		0.150	
MW/LW		0.300	0.301



## Adare Franciscan Friary: South transept west, southern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.408
overall height	1.831
height to spring	1.357
Light2	
width	0.418
overall height	1.850
height to spring	1.343
Window	
overall width	0.826
overall height	2.303
height to spring	2.015
Arch	
span	2.054
height from spring	0.299
Mullion 1	
width	0.146

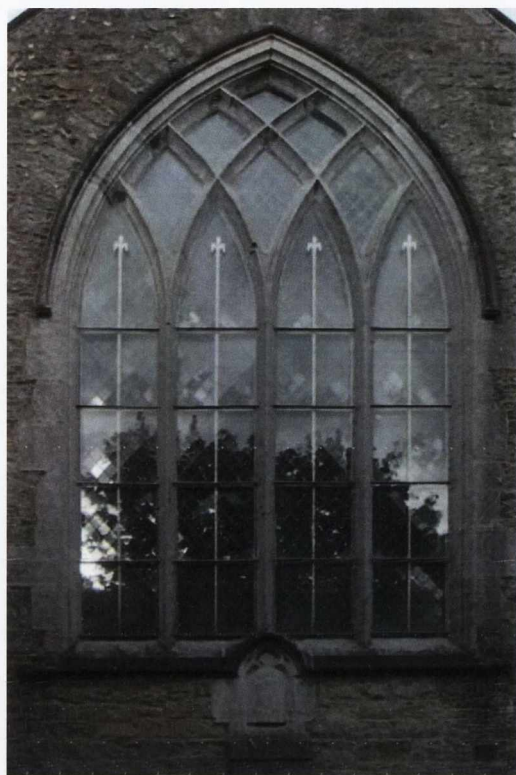
### Units

<b>Most likely:</b> 0.237m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.238

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP	0.000	0.220	0.222
TFH/LHAP		0.163	0.161
TFH/OWH	0.130		
OWW/OWH	0.358		
OWW/WHS	0.410		
OWH/AS	0.402		
LW/LHSP		0.301	0.311
LW/LHAP		0.223	0.226
LW/OWW		0.494	0.506
LW/OWH		0.177	0.177
LW/AS		0.198	0.203
OWW/LHSP		0.608	0.615
OWW/LHAP		0.451	0.446
MW/OWW		0.177	
MW/LW		0.358	0.349

## Adare Trinitarian: Chancel east Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.828	width	0.825
overall height	4.136	overall height	4.090
height to spring	2.954	height to spring	2.943
Light3		Light4	
width	0.818	width	0.830
overall height	4.091	overall height	4.068
height to spring	2.911	height to spring	2.912
Window		Arch	
overall width	3.295	span	3.258
overall height	5.332	height from spring	2.432
height to spring	2.901		
Mullion 1		Mullion 3	
width	0.174	width	0.169
Mullion 2			
width	0.167		

### Units

<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.349
<b>Within 20%:</b> 0.250 0.306 0.332

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.823	0.826	0.836	0.835
TFH/LHAP		0.588	0.595	0.595	0.598
TFH/OWH	0.456				
OWW/OWH	0.618				
OWW/WHS	0.881				
OWH/AS	0.989				
LW/LHSP		0.280	0.280	0.281	0.285
LW/LHAP		0.200	0.202	0.200	0.204
LW/OWW		0.251	0.250	0.248	0.252
LW/OWH		0.155	0.155	0.153	0.156
LW/AS		0.254	0.253	0.251	0.255
OWW/LHSP		0.897	0.897	0.883	0.884
OWW/LHAP		0.797	0.806	0.805	0.810
MW/OWW		0.053	0.051	0.051	
MW/LW		0.210	0.211	0.203	
MW/LW		0.205	0.206	0.204	



**Adare Trinitarian: Nave south, eastern**  
Co. Limerick, Desmond



**Measurements**

Light 1	m
width	0.527
overall height	2.635
height to spring	2.042
Light 2	
width	0.530
overall height	2.641
height to spring	2.049
Window	
overall width	1.057
overall height	3.178
height to spring	2.080
Arch	
span	1.447
height from spring	1.109
Mullion 1	
width	0.182

**Units**

<b>Most likely:</b> 0.303m
<b>Within 10%:</b> 0.302 0.304 0.361 0.362 0.363
<b>Within 20%:</b> 0.317

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
	<b>Single</b>		
TFH/LHSP		0.543	0.541
TFH/LHAP		0.421	0.420
TFH/OWH	0.349		
OWW/OWH	0.333		
OWW/WHS	0.508		
OWH/AS	0.730		
LW/LHSP		0.258	0.259
LW/LHAP		0.200	0.201
LW/OWW		0.499	0.502
LW/OWH		0.166	0.166
LW/AS		0.364	0.366
OWW/LHSP		0.518	0.516
OWW/LHAP		0.401	0.400
MW/OWW		0.172	
MW/LW		0.345	0.343



**Adare Trinitarian: Nave south, mid**  
**Co. Limerick, Desmond**



**Measurements**

Light1	m
width	0.512
overall height	2.687
height to spring	2.128
Light2	
width	0.501
overall height	2.690
height to spring	2.126
Window	
overall width	1.013
overall height	3.222
height to spring	2.137
Arch	
span	1.460
height from spring	1.095
Mullion 1	
width	0.186

**Units**

<b>Most likely:</b> 0.336m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.514	0.515
TFH/LHAP		0.407	0.407
TFH/OWH	0.340		
OWW/OWH	0.314		
OWW/WHS	0.474		
OWH/AS	0.694		
LW/LHSP		0.241	0.236
LW/LHAP		0.191	0.186
LW/OWW		0.506	0.495
LW/OWH		0.159	0.159
LW/AS		0.351	0.343
OWW/LHSP		0.476	0.477
OWW/LHAP		0.377	0.377
MW/OWW		0.184	
MW/LW		0.364	0.372

## Adare Trinitarian: Nave south, western Co. Limerick, Desmond



### Measurements

Light1	m
width	0.364
overall height	3.125
height to spring	2.381
Light2	
width	0.410
overall height	
height to spring	
Window	
overall width	0.961
Arch	
span	1.272
height from spring	1.190
Mullion 1	
width	0.157

### Units

<b>Most likely:</b> 0.275m
<b>Within 10%:</b> 0.272
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP	0.500		
TFH/LHAP	0.381		
TFH/OWH			
OWW/OWH			
OWW/WHS			
OWH/AS			
LW/LHSP	0.153		
LW/LHAP	0.117		
LW/OWW			
LW/OWH			
LW/AS	0.286	0.322	
OWW/LHSP			
OWW/LHAP			
MW/OWW			
MW/LW	0.432	0.384	

## Aghaboe Dominican friary: Chancel east Co. Laois, Ormond borders



### Measurements

Light1		Light2	
width	0.604	width	0.613
overall height	2.262	overall height	2.391
height to spring	1.970	height to spring	1.976
Light3		Window	
width	0.610	overall width	1.827
overall height	2.246	overall height	3.783
height to spring	1.974	height to spring	2.156
Arch		Mullion 1	
span	2.687	width	0.156
height from spring	1.695		
		Mullion 2	
		width	0.154

### Units

<b>Most likely:</b> 0.307m
<b>Within 10%:</b> 0.219 0.231 0.232 0.308 0.359
<b>Within 20%:</b> 0.228 0.306 0.343 0.344 0.358

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.860	0.858	0.859
TFH/LHAP		0.749	0.709	0.754
TFH/OWH	0.448			
OWW/OWH	0.483			
OWW/WHS	0.847			
OWH/AS	0.680			
LW/LHSP		0.307	0.310	0.309
LW/LHAP		0.267	0.256	0.272
LW/OWW		0.331	0.336	0.334
LW/OWH		0.160	0.162	0.161
LW/AS		0.225	0.228	0.227
OWW/LHSP		0.928	0.925	0.926
OWW/LHAP		0.808	0.764	0.814
MW/OWW		0.085	0.085	
MW/LW		0.258	0.254	0.256
MW/LW		0.256	0.252	0.253



## Aghagower church: Chancel east Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.374	width	0.421
overall height	1.942	overall height	1.953
height to spring	1.782	height to spring	1.766
Light3		Window	
width	0.395	overall width	1.173
overall height	1.934	overall height	2.871
height to spring	1.774	height to spring	1.790
Arch		Mullion 1	
span	1.399	width	0.130
height from spring	1.081		
		Mullion 2	
		width	0.131

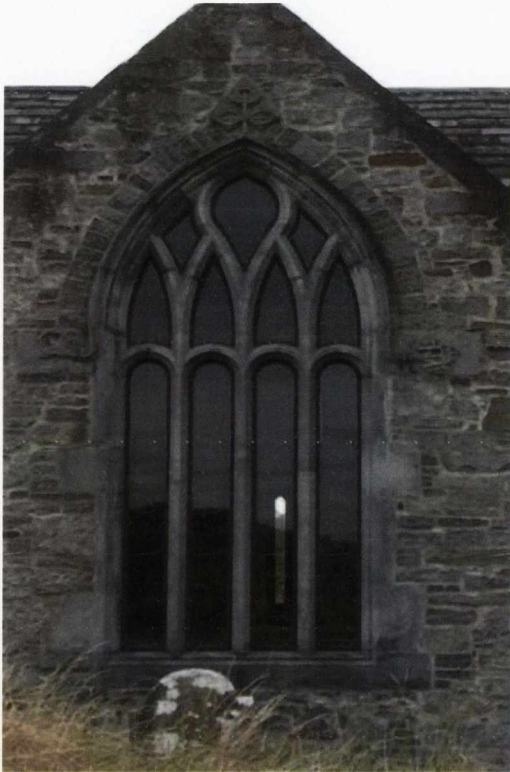
### Units

<b>Most likely:</b> 0.254m
<b>Within 10%:</b> 0.253
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.607	0.612	0.610
TFH/LHAP		0.557	0.554	0.559
TFH/OWH	0.377			
OWW/OWH	0.409			
OWW/WHS	0.655			
OWH/AS	0.839			
LW/LHSP		0.210	0.238	0.223
LW/LHAP		0.193	0.216	0.204
LW/OWW		0.319	0.359	0.336
LW/OWH		0.130	0.147	0.137
LW/AS		0.268	0.301	0.282
OWW/LHSP		0.658	0.664	0.661
OWW/LHAP		0.604	0.601	0.607
MW/OWW		0.111	0.112	
MW/LW		0.347	0.309	0.329
MW/LW		0.351	0.312	0.333

## Ardfert cathedral: South transept east Co. Kerry, Desmond



### Measurements

Light1		Light2	
width	0.458	width	0.411
overall height	2.420	overall height	2.422
height to spring	2.269	height to spring	2.254
Light3		Light4	
width	0.421	width	0.461
overall height	2.429	overall height	2.432
height to spring	2.268	height to spring	2.270
Window		Arch	
overall width	1.735	span	1.812
overall height	4.177	height from spring	1.552
height to spring	2.625		
Mullion 1		Mullion 3	
width	0.127	width	0.126
Mullion 2			
width	0.125		

### Units

<b>Most likely:</b> 0.260m
<b>Within 10%:</b> 0.261
<b>Within 20%:</b> 0.232

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.684	0.688	0.684	0.684
TFH/LHAP		0.641	0.641	0.639	0.638
TFH/OWH	0.372				
OWW/OWH	0.415				
OWW/WHS	0.661				
OWH/AS	0.957				
LW/LHSP		0.202	0.183	0.186	0.203
LW/LHAP		0.189	0.170	0.173	0.189
LW/OWW		0.264	0.237	0.243	0.266
LW/OWH		0.110	0.098	0.101	0.110
LW/AS		0.252	0.227	0.232	0.254
OWW/LHSP		0.765	0.765	0.765	0.764
OWW/LHAP		0.717	0.716	0.714	0.713
MW/OWW		0.073	0.072	0.072	
MW/LW		0.277	0.308	0.303	
MW/LW		0.296	0.298	0.273	



## Ardfert Franciscan friary: South transept east Co. Kerry, Desmond



### Measurements

Light 1	m
width	0.374
overall height	1.667
height to spring	1.524
Light 2	
width	0.401
overall height	1.664
height to spring	1.507
Window	
overall width	0.775
overall height	2.396
height to spring	1.519
Arch	
span	0.870
height from spring	0.877
Mullion 1	
width	0.126

### Units

<b>Most likely:</b> 0.266m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.238 0.265

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.575	0.582
TFH/LHAP		0.526	0.527
TFH/OWH	0.366		
OWW/OWH	0.324		
OWW/WHS	0.510		
OWH/AS	0.891		
LW/LHSP		0.246	0.266
LW/LHAP		0.225	0.241
LW/OWW		0.483	0.517
LW/OWH		0.156	0.156
LW/AS		0.430	0.461
OWW/LHSP		0.508	0.514
OWW/LHAP		0.465	0.466
MW/OWW		0.163	
MW/LW		0.337	0.315



## Ardfert Franciscan friary: South transept south Co. Kerry, Desmond



### Measurements

Light1		Light2	
width	0.469	width	0.432
overall height	2.444	overall height	2.455
height to spring	2.300	height to spring	2.286
Light3		Light4	
width	0.432	width	0.462
overall height	2.458	overall height	2.464
height to spring	2.291	height to spring	2.295
Window		Arch	
overall width	1.781	span	1.829
overall height	4.224	height from spring	1.562
height to spring	2.662		
Mullion 1		Mullion 3	
width	0.125	width	0.123
Mullion 2			
width	0.123		

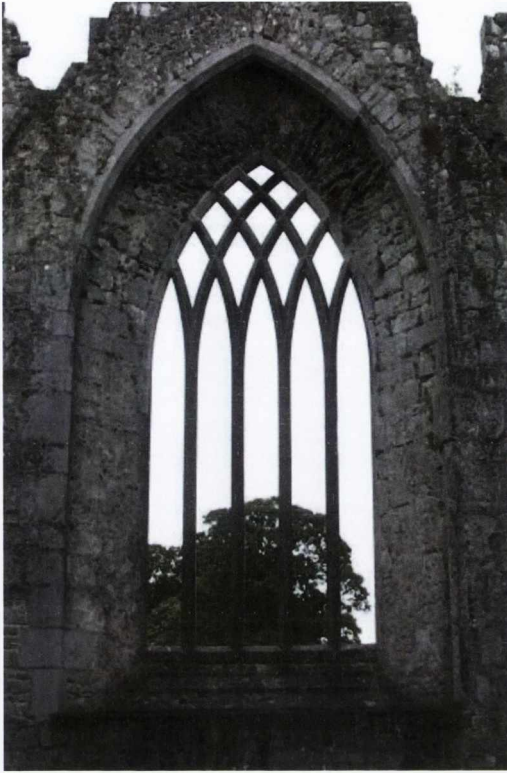
### Units

<b>Most likely:</b> 0.264m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.263

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.679	0.683	0.682	0.681
TFH/LHAP		0.639	0.636	0.636	0.634
TFH/OWH	0.370				
OWW/OWH	0.422				
OWW/WHS	0.669				
OWH/AS	0.974				
LW/LHSP		0.204	0.189	0.188	0.201
LW/LHAP		0.192	0.176	0.176	0.187
LW/OWW		0.264	0.242	0.242	0.259
LW/OWH		0.111	0.102	0.102	0.109
LW/AS		0.257	0.236	0.236	0.252
OWW/LHSP		0.774	0.774	0.777	0.776
OWW/LHAP		0.729	0.725	0.724	0.723
MW/OWW		0.067	0.069	0.069	
MW/LW		0.253	0.276	0.285	
MW/LW		0.286	0.285	0.266	

## Askeaton Franciscan friary: Chancel east Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.561	width	0.612
overall height	4.279	overall height	4.279
height to spring	3.102	height to spring	3.123
Light3		Light4	
width	0.613	width	0.605
overall height	4.287	overall height	4.282
height to spring	3.113	height to spring	3.135
Light5		Window	
width	0.572	overall width	2.959
overall height	4.268	overall height	6.599
height to spring	3.115	height to spring	3.340
Arch			
span	4.458		
height from spring	3.344		
Mullion 1		Mullion 3	
width	0.163	width	0.169
Mullion 2		Mullion 4	
width	0.173	width	0.162

### Units

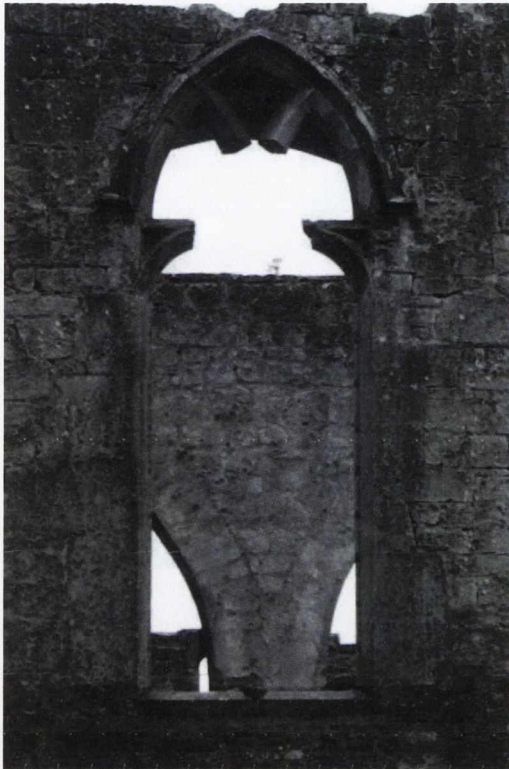
<b>Most likely:</b> 0.347m
<b>Within 10%:</b> 0.228
<b>Within 20%:</b> 0.247

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.928	0.934	0.931	0.938	0.932
TFH/LHAP		0.781	0.781	0.780	0.781	0.783
TFH/OWH	0.507					
OWW/OWH	0.448					
OWW/WHS	0.506					
OWH/AS	0.664					
LW/LHSP		0.181	0.196	0.197	0.193	0.184
LW/LHAP		0.131	0.143	0.143	0.141	0.134
LW/OWW		0.190	0.207	0.207	0.205	0.193
LW/OWH		0.085	0.093	0.093	0.092	0.087
LW/AS		0.126	0.137	0.138	0.136	0.128
OWW/LHSP		0.954	0.947	0.951	0.944	0.950
OWW/LHAP		0.691	0.691	0.690	0.691	0.693
MW/OWW		0.055	0.058	0.057	0.055	
MW/LW		0.290	0.266	0.283	0.282	
MW/LW		0.275	0.279	0.267	0.283	



## Askeaton Franciscan friary: North transept east, northern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.600
overall height	2.554
height to spring	2.263
Light2	
width	0.584
overall height	2.554
height to spring	2.234
Window	
overall width	1.183
overall height	3.663
height to spring	3.027
Arch	
span	2.596
height from spring	0.644
Mullion 1	
width	0.175

### Units

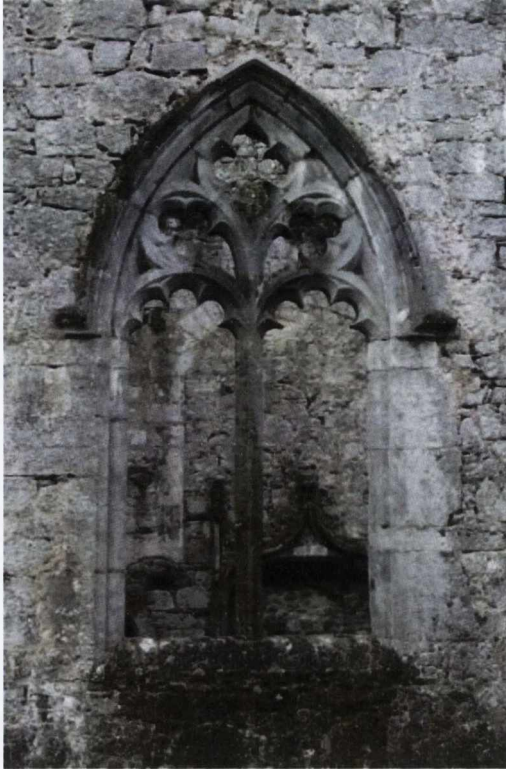
<b>Most likely:</b> 0.335m
<b>Within 10%:</b> 0.239 0.334 0.349
<b>Within 20%:</b> 0.216 0.237 0.340 0.348

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.285	0.288
TFH/LHAP		0.252	0.252
TFH/OWH	0.176		
OWW/OWH	0.323		
OWW/WHS	0.391		
OWH/AS	0.456		
LW/LHSP		0.265	0.261
LW/LHAP		0.235	0.228
LW/OWW		0.507	0.493
LW/OWH		0.164	0.164
LW/AS		0.231	0.225
OWW/LHSP		0.523	0.530
OWW/LHAP		0.463	0.463
MW/OWW		0.148	
MW/LW		0.291	0.299



**Askeaton Franciscan friary: Nave north, eastern  
Co. Limerick, Desmond**



**Measurements**

Light1	m
width	0.794
overall height	2.062
height to spring	1.720
Light2	
width	0.779
overall height	2.062
height to spring	1.737
Window	
overall width	1.572
overall height	3.378
height to spring	2.152
Arch	
span	2.161
height from spring	1.304
Mullion 1	
width	0.153

**Units**

<b>Most likely:</b> 0.344m
<b>Within 10%:</b> 0.216 0.237 0.326
<b>Within 20%:</b> 0.260 0.294 0.317 0.325 0.327

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
	<b>Single</b>		
TFH/LHSP		0.758	0.751
TFH/LHAP		0.632	0.632
TFH/OWH	0.386		
OWW/OWH	0.465		
OWW/WHS	0.730		
OWH/AS	0.727		
LW/LHSP		0.461	0.448
LW/LHAP		0.385	0.378
LW/OWW		0.505	0.495
LW/OWH		0.235	0.235
LW/AS		0.367	0.360
OWW/LHSP		0.914	0.905
OWW/LHAP		0.763	0.762
MW/OWW		0.097	
MW/LW		0.193	0.197

## Askeaton Franciscan friary: Nave north, western Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.512	width	0.543
overall height	2.735	overall height	2.753
height to spring	1.888	height to spring	1.885
Light3		Window	
width	0.533	overall width	1.583
overall height	2.743	overall height	3.611
height to spring	1.897	height to spring	2.092
Arch		Mullion 1	
span	2.858	width	0.133
height from spring	1.645		
		Mullion 2	
		width	0.130

### Units

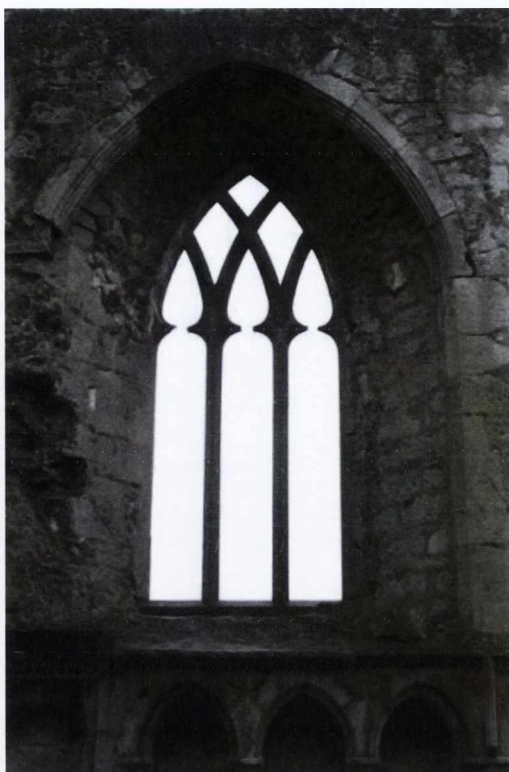
<b>Most likely:</b> 0.329m
<b>Within 10%:</b> 0.330
<b>Within 20%:</b> 0.215 0.328 0.343 0.344

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.871	0.872	0.867
TFH/LHAP		0.601	0.597	0.600
TFH/OWH	0.455			
OWW/OWH	0.438			
OWW/WHS	0.757			
OWH/AS	0.554			
LW/LHSP		0.271	0.288	0.281
LW/LHAP		0.187	0.197	0.194
LW/OWW		0.323	0.343	0.336
LW/OWH		0.142	0.150	0.148
LW/AS		0.179	0.190	0.186
OWW/LHSP		0.839	0.840	0.835
OWW/LHAP		0.579	0.575	0.577
MW/OWW		0.084	0.082	
MW/LW		0.260	0.246	0.250
MW/LW		0.254	0.240	0.244



## Askeaton Franciscan friary: Nave south, eastern Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.523	width	0.526
overall height	2.666	overall height	2.669
height to spring	1.832	height to spring	1.834
Light3		Window	
width	0.512	overall width	1.560
overall height	2.674	overall height	3.604
height to spring	1.826	height to spring	2.329
Arch		Mullion 1	
span	2.742	width	0.123
height from spring	1.359		
		Mullion 2	
		width	0.121

### Units

<b>Most likely:</b> 0.344m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.343

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.742	0.741	0.744
TFH/LHAP		0.510	0.509	0.508
TFH/OWH	0.377			
OWW/OWH	0.433			
OWW/WHS	0.670			
OWH/AS	0.569			
LW/LHSP		0.286	0.287	0.280
LW/LHAP		0.196	0.197	0.191
LW/OWW		0.335	0.337	0.328
LW/OWH		0.145	0.146	0.142
LW/AS		0.191	0.192	0.187
OWW/LHSP		0.852	0.851	0.855
OWW/LHAP		0.585	0.585	0.584
MW/OWW		0.079	0.077	
MW/LW		0.235	0.233	0.240
MW/LW		0.231	0.230	0.236



**Askeaton Franciscan friary: Nave south, mid**  
Co. Limerick, Desmond



**Measurements**

Light1		Light2	
width	0.435	width	0.471
overall height	2.370	overall height	2.371
height to spring	1.767	height to spring	1.769
Light3		Window	
width	0.446	overall width	1.349
overall height	2.384	overall height	3.377
height to spring	1.772	height to spring	2.016
Arch		Mullion 1	
span	2.508	width	0.133
height from spring	1.416		
		Mullion 2	
		width	0.130

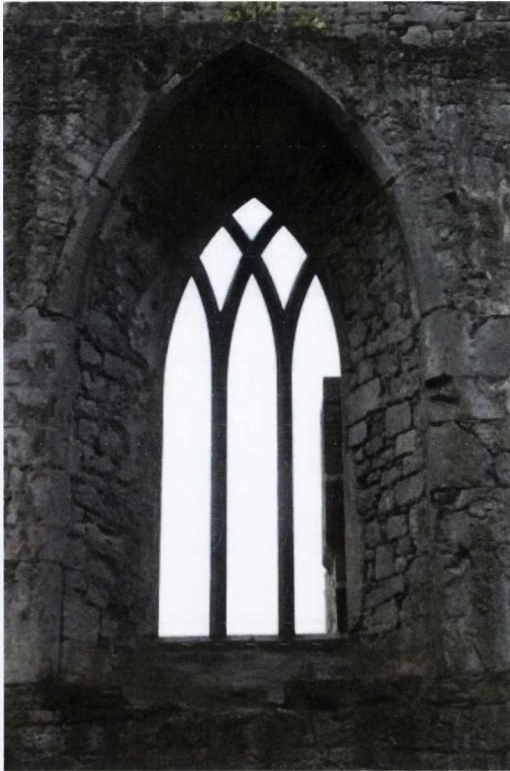
**Units**

<b>Most likely:</b> 0.265m
<b>Within 10%:</b> 0.264
<b>Within 20%:</b>

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.802	0.800	0.799
TFH/LHAP		0.597	0.597	0.594
TFH/OWH	0.419			
OWW/OWH	0.399			
OWW/WHS	0.669			
OWH/AS	0.538			
LW/LHSP		0.246	0.266	0.252
LW/LHAP		0.183	0.199	0.187
LW/OWW		0.322	0.349	0.330
LW/OWH		0.129	0.139	0.132
LW/AS		0.173	0.188	0.178
OWW/LHSP		0.764	0.763	0.762
OWW/LHAP		0.569	0.569	0.566
MW/OWW		0.098	0.097	
MW/LW		0.305	0.282	0.298
MW/LW		0.300	0.277	0.293

## Askeaton Franciscan friary: Nave south, western Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.507	width	0.525
overall height	2.685	overall height	2.697
height to spring	1.855	height to spring	1.841
Light3		Window	
width	0.526	overall width	1.556
overall height	2.689	overall height	3.857
height to spring	1.847	height to spring	2.092
Arch		Mullion 1	
span	2.530	width	0.124
height from spring	1.871		
		Mullion 2	
		width	0.126

### Units

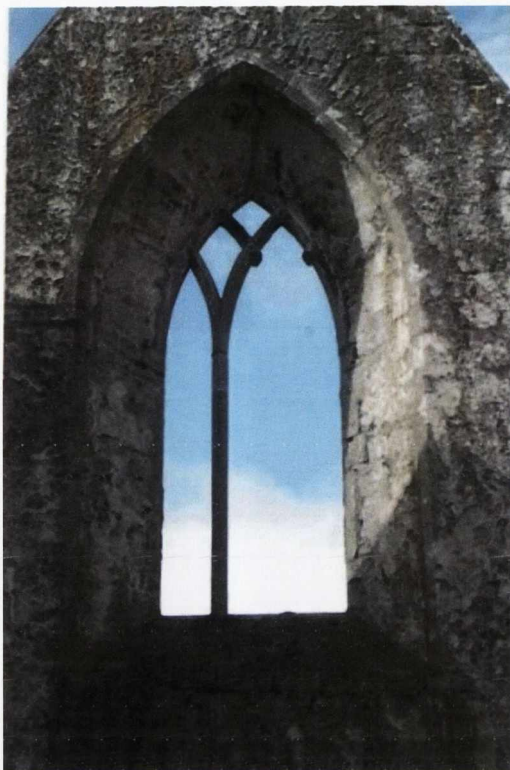
<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.347
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.992	0.984	0.987
TFH/LHAP		0.697	0.694	0.696
TFH/OWH	0.485			
OWW/OWH	0.404			
OWW/WHS	0.744			
OWH/AS	0.615			
LW/LHSP		0.273	0.285	0.285
LW/LHAP		0.189	0.195	0.195
LW/OWW		0.326	0.337	0.338
LW/OWH		0.131	0.136	0.136
LW/AS		0.200	0.208	0.208
OWW/LHSP		0.839	0.845	0.843
OWW/LHAP		0.580	0.577	0.579
MW/OWW		0.080	0.081	
MW/LW		0.246	0.237	0.237
MW/LW		0.248	0.239	0.239



## Askeaton Franciscan friary: Nave west Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.535	width	0.573
overall height	3.284	overall height	3.308
height to spring	2.369	height to spring	2.365
Light3		Window	
width	0.553	overall width	1.660
overall height	3.300	overall height	4.722
height to spring	2.392	height to spring	2.483
Arch		Mullion 1	
span	2.725	width	0.127
height from spring	2.293		
		Mullion 2	
		width	0.126

### Units

<b>Most likely:</b> 0.354m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.968	0.970	0.959
TFH/LHAP		0.698	0.693	0.695
TFH/OWH	0.486			
OWW/OWH	0.352			
OWW/WHS	0.669			
OWH/AS	0.609			
LW/LHSP		0.226	0.242	0.231
LW/LHAP		0.163	0.173	0.168
LW/OWW		0.322	0.345	0.333
LW/OWH		0.113	0.121	0.117
LW/AS		0.196	0.210	0.203
OWW/LHSP		0.701	0.702	0.694
OWW/LHAP		0.506	0.502	0.503
MW/OWW		0.077	0.076	
MW/LW		0.238	0.222	0.230
MW/LW		0.235	0.219	0.227



## Athassal Augustinian priory: Chancel east Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.586	width	0.656
overall height	3.483	overall height	3.567
height to spring	3.140	height to spring	3.164
Light3		Window	
width	0.600	overall width	1.841
overall height	3.493	overall height	4.854
height to spring	3.178	height to spring	3.128
Arch		Mullion 1	
span	2.058	width	0.208
height from spring	1.727		
		Mullion 2	
		width	0.203

### Units

<b>Most likely:</b> 0.325m
<b>Within 10%:</b> 0.324
<b>Within 20%:</b>

### Proportions

		Light/ Mullion 1	Light/ Mullion 2	Light/ Mullion 3
	<b>Single</b>			
TFH/LHSP		0.550	0.546	0.543
TFH/LHAP		0.496	0.484	0.494
TFH/OWH	0.356			
OWW/OWH	0.379			
OWW/WHS	0.588			
OWH/AS	0.895			
LW/LHSP		0.186	0.207	0.189
LW/LHAP		0.168	0.184	0.172
LW/OWW		0.318	0.356	0.326
LW/OWH		0.121	0.135	0.124
LW/AS		0.285	0.319	0.291
OWW/LHSP		0.586	0.582	0.579
OWW/LHAP		0.528	0.516	0.527
MW/OWW		0.113	0.110	
MW/LW		0.356	0.317	0.347
MW/LW		0.346	0.309	0.338

## Athenry collegiate church: Nave south, eastern Co. Galway, Connaught



### Measurements

Light1	m
width	0.659
overall height	1.823
height to spring	1.496
Light2	
width	0.655
overall height	1.835
height to spring	1.497
Window	
overall width	1.308
overall height	2.952
height to spring	1.508
Arch	
span	1.356
height from spring	1.445
Mullion 1	
width	0.162

### Units

<b>Most likely:</b> 0.324m
<b>Within 10%:</b> 0.282 0.325
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.965	0.965
TFH/LHAP		0.792	0.787
TFH/OWH	0.489		
OWW/OWH	0.443		
OWW/WHS	0.868		
OWH/AS	0.965		
LW/LHSP		0.440	0.438
LW/LHAP		0.361	0.357
LW/OWW		0.504	0.501
LW/OWH		0.223	0.223
LW/AS		0.486	0.483
OWW/LHSP		0.874	0.874
OWW/LHAP		0.718	0.713
MW/OWW		0.124	
MW/LW		0.246	0.247



## Athenry collegiate church: Nave south, western Co. Galway, Connaught



### Measurements

Light 1	m
width	0.651
overall height	1.795
height to spring	1.481
Light 2	
width	0.639
overall height	1.825
height to spring	1.512
Window	
overall width	1.214
overall height	2.918
height to spring	1.498
Arch	
span	1.297
height from spring	1.421
Mullion 1	
width	0.171

### Units

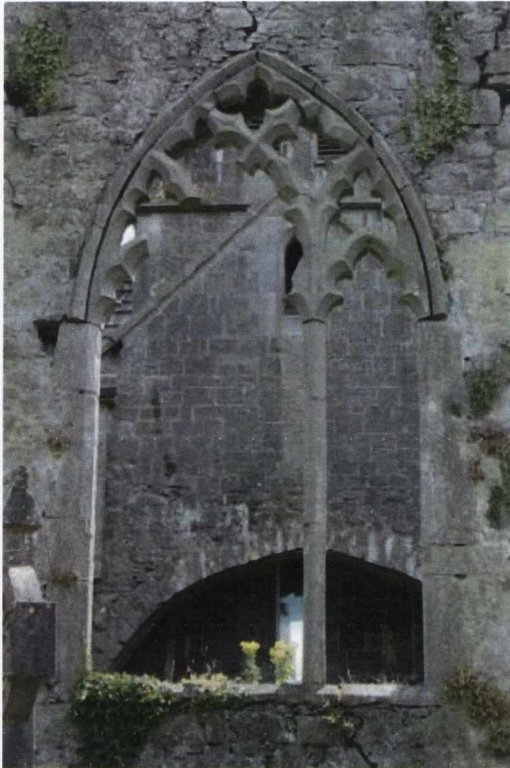
<b>Most likely:</b> 0.361m
<b>Within 10%:</b> 0.360
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.959	0.939
TFH/LHAP		0.791	0.778
TFH/OWH	0.487		
OWW/OWH	0.416		
OWW/WHS	0.811		
OWH/AS	0.936		
LW/LHSP		0.439	0.422
LW/LHAP		0.362	0.350
LW/OWW		0.536	0.526
LW/OWH		0.223	0.223
LW/AS		0.502	0.492
OWW/LHSP		0.820	0.803
OWW/LHAP		0.676	0.665
MW/OWW		0.141	
MW/LW		0.263	0.269



## Athenry collegiate church: North transept north Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.765	width	0.772
overall height		overall height	
height to spring	2.354	height to spring	2.393
Light3		Window	
width	0.770	overall width	2.304
overall height	2.939	overall height	4.309
height to spring	2.389	height to spring	2.406
Arch		Mullion 1	
span	2.356	width	0.164
height from spring	1.904		
		Mullion 2	
		width	0.153

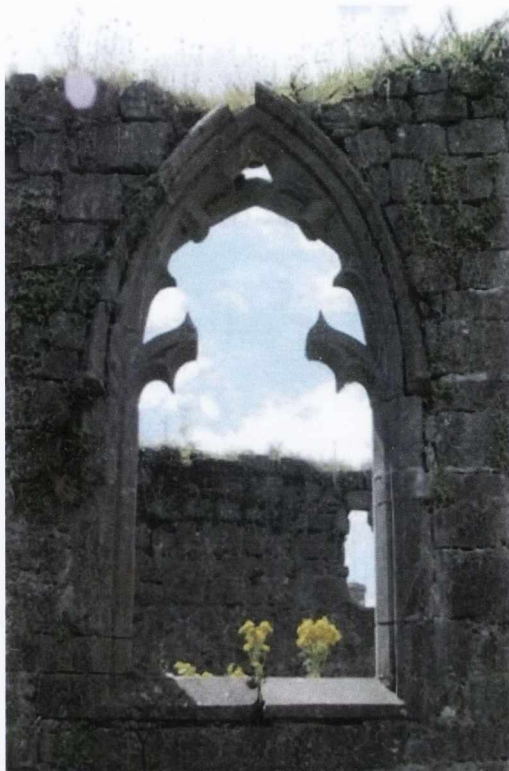
### Units

<b>Most likely:</b> 0.239m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.809	0.796	0.797
TFH/LHAP				0.648
TFH/OWH	0.442			
OWW/OWH	0.535			
OWW/WHS	0.958			
OWH/AS	0.978			
LW/LHSP		0.325	0.323	0.322
LW/LHAP				0.262
LW/OWW		0.332	0.335	0.334
LW/OWH		0.178	0.179	0.179
LW/AS		0.325	0.327	0.327
OWW/LHSP		0.979	0.963	0.964
OWW/LHAP				0.784
MW/OWW		0.071	0.067	
MW/LW		0.215	0.213	0.214
MW/LW		0.201	0.199	0.199

## Athenry collegiate church: South transept east Co. Galway, Connaught



### Measurements

Light 1	m
width	0.850
overall height	1.568
height to spring	1.315
Light 2	
width	0.823
overall height	1.575
height to spring	1.314
Window	
overall width	1.662
overall height	2.762
height to spring	1.322
Arch	
span	1.678
height from spring	1.441
Mullion 1	
width	0.174

### Units

<b>Most likely:</b> 0.331m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.913	0.912
TFH/LHAP		0.919	0.915
TFH/OWH	0.522		
OWW/OWH	0.602		
OWW/WHS	0.796		
OWH/AS	0.990		
LW/LHSP		0.646	0.626
LW/LHAP		0.542	0.522
LW/OWW		0.511	0.495
LW/OWH		0.308	0.308
LW/AS		0.506	0.490
OWW/LHSP		0.792	0.791
OWW/LHAP		0.943	0.948
MW/OWW		0.105	
MW/LW		0.205	0.212



**Athenry collegiate church: South transept south**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.842	width	0.767
height to spring	2.765	height to spring	
Light3		Window	
width	0.834	overall width	2.169
height to spring	2.733	overall height	4.856
		height to spring	2.760
Arch		Mullion 1	
span	2.477	width	0.147
height from spring	2.096		
		Mullion 2	
		width	0.128

**Units**

<b>Most likely:</b> 0.331m
<b>Within 10%:</b> 0.281 0.282 0.329 0.330
<b>Within 20%:</b> 0.216 0.249 0.274 0.275 0.277 0.278 0.280 0.283 0.324 0.325 0.328 0.332 0.333 0.334

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.758		0.767
TFH/LHAP				
TFH/OWH	0.432			
OWW/OWH	0.447			
OWW/WHS	0.786			
OWH/AS	0.876			
LW/LHSP		0.305		0.305
LW/LHAP				
LW/OWW		0.388	0.354	0.384
LW/OWH		0.173	0.158	0.172
LW/AS		0.340	0.310	0.337
OWW/LHSP		0.784		0.794
OWW/LHAP				
MW/OWW		0.068	0.059	
MW/LW		0.175	0.192	0.177
MW/LW		0.152	0.167	0.154



## Athenry Dominican priory: Chancel north, eastern Co. Galway, Connaught



### Measurements

Light 1	m
width	0.853
overall height	2.739
height to spring	2.289
Light 2	
width	0.835
overall height	2.739
height to spring	2.280
Window	
overall width	1.661
overall height	3.710
height to spring	2.416
Arch	
span	1.769
height from spring	1.294
Mullion 1	
width	0.156

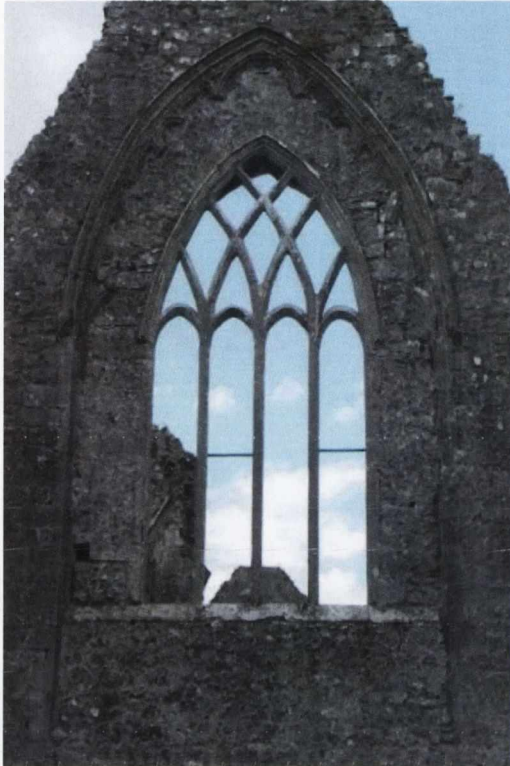
### Units

<b>Most likely:</b> 0.228m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.565	0.567
TFH/LHAP		0.472	0.472
TFH/OWH	0.349		
OWW/OWH	0.448		
OWW/WHS	0.688		
OWH/AS	0.939		
LW/LHSP		0.373	0.366
LW/LHAP		0.311	0.305
LW/OWW		0.513	0.502
LW/OWH		0.230	0.230
LW/AS		0.482	0.472
OWW/LHSP		0.726	0.729
OWW/LHAP		0.607	0.606
MW/OWW		0.094	
MW/LW		0.183	0.187

## Athenry Dominican priory: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.740	width	0.740
overall height	3.182	overall height	3.161
height to spring	2.796	height to spring	2.784
Light3		Light4	
width	0.705	width	0.755
overall height	3.168	overall height	3.145
height to spring	2.795	height to spring	2.791
Window		Arch	
overall width	2.939	span	2.972
overall height	5.294	height from spring	2.498
height to spring	2.800		
Mullion 1		Mullion 3	
width	0.151	width	0.133
Mullion 2			
width	0.140		

### Units

<b>Most likely:</b> 0.279m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.893	0.897	0.894	0.895
TFH/LHAP		0.785	0.790	0.788	0.794
TFH/OWH	0.472				
OWW/OWH	0.555				
OWW/WHS	0.953				
OWH/AS	0.989				
LW/LHSP		0.265	0.266	0.252	0.271
LW/LHAP		0.232	0.234	0.223	0.240
LW/OWW		0.252	0.252	0.240	0.257
LW/OWH		0.140	0.140	0.133	0.143
LW/AS		0.249	0.249	0.237	0.254
OWW/LHSP		0.951	0.951	0.951	0.950
OWW/LHAP		0.924	0.930	0.928	0.935
MW/OWW		0.051	0.048	0.045	
MW/LW		0.205	0.204	0.189	
MW/LW		0.198	0.189	0.176	



## Athenry Dominican priory: Nave north, eastern Co. Galway, Connaught



### Measurements

Light 1	m
width	0.682
overall height	2.373
height to spring	1.616
Light 2	
width	0.672
overall height	2.357
height to spring	1.603
Window	
overall width	1.342
overall height	2.875
height to spring	1.695
Arch	
span	1.392
height from spring	1.180
Mullion 1	
width	0.120

### Units

<b>Most likely:</b> 0.254m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.253

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.730	0.736
TFH/LHAP		0.497	0.500
TFH/OWH	0.410		
OWW/OWH	0.467		
OWW/WHS	0.792		
OWH/AS	0.964		
LW/LHSP		0.422	0.419
LW/LHAP		0.287	0.285
LW/OWW		0.508	0.500
LW/OWH		0.237	0.237
LW/AS		0.490	0.482
OWW/LHSP		0.831	0.837
OWW/LHAP		0.566	0.569
MW/OWW		0.089	
MW/LW		0.175	0.178



## Athenry Dominican priory: Nave north, western Co. Galway, Connaught



### Measurements

Light1	m
width	0.690
overall height	2.389
height to spring	1.636
Light2	
width	0.650
overall height	2.389
height to spring	1.639
Window	
overall width	1.329
overall height	2.884
height to spring	1.716
Arch	
span	1.402
height from spring	1.168
Mullion 1	
width	0.129

### Units

<b>Most likely:</b> 0.245m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.233 0.246 0.247

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.714	0.713
TFH/LHAP		0.489	0.489
TFH/OWH	0.405		
OWW/OWH	0.461		
OWW/WHS	0.774		
OWH/AS	0.948		
LW/LHSP		0.422	0.397
LW/LHAP		0.289	0.272
LW/OWW		0.520	0.489
LW/OWH		0.239	0.239
LW/AS		0.493	0.464
OWW/LHSP		0.812	0.811
OWW/LHAP		0.556	0.556
MW/OWW		0.097	
MW/LW		0.188	0.199

## Athenry Dominican priory: North transept east southern Co. Galway, Connaught



### Measurements

Light1	m
width	0.860
overall height	3.242
height to spring	2.342
Light2	
width	0.798
overall height	3.245
height to spring	2.339
Window	
overall width	1.640
overall height	3.859
height to spring	2.475
Arch	
span	1.666
height from spring	1.384
Mullion 1	
width	0.220

### Units

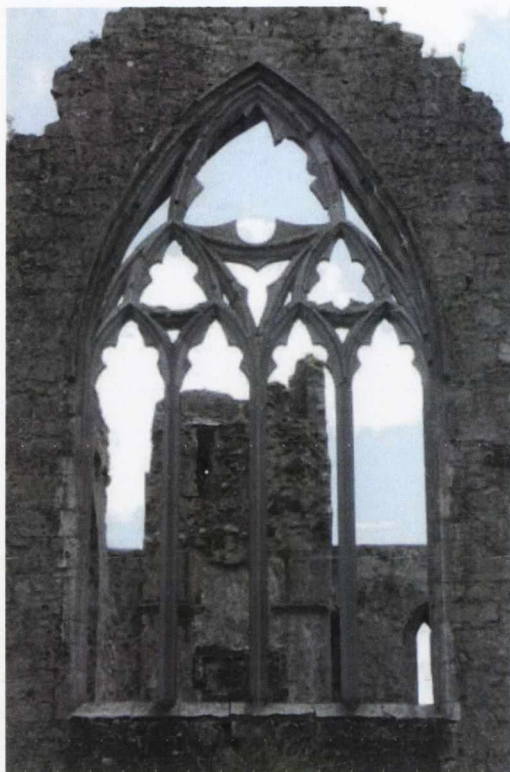
<b>Most likely:</b> 0.350m
<b>Within 10%:</b> 0.220
<b>Within 20%:</b> 0.218 0.219 0.309 0.312 0.350

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.591	0.591
TFH/LHAP		0.427	0.426
TFH/OWH	0.359		
OWW/OWH	0.425		
OWW/WHS	0.662		
OWH/AS	0.984		
LW/LHSP		0.367	0.341
LW/LHAP		0.265	<b>0.246</b>
LW/OWW		0.525	0.487
LW/OWH		0.223	0.223
LW/AS		0.516	0.479
OWW/LHSP		0.700	0.701
OWW/LHAP		0.506	0.505
MW/OWW		0.134	
MW/LW		0.255	0.275



## Athenry Dominican priory: North transept north Co. Galway, Connaught



### Measurements

Light1		Light2	
width	1.034	width	0.984
overall height	3.772	overall height	3.780
height to spring	3.016	height to spring	3.018
Light3		Light4	
width	0.994	width	1.009
overall height	3.780	overall height	3.800
height to spring	2.999	height to spring	3.027
Window		Arch	
overall width	4.003	span	4.155
overall height	6.593	height from spring	3.425
height to spring	3.170		
Mullion 1		Mullion 3	
width	0.196	width	0.199
Mullion 2			
width	0.212		

### Units

<b>Most likely:</b> 0.302m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.881	0.881	0.876	0.884
TFH/LHAP		0.908	0.906	0.906	0.901
TFH/OWH	0.519				
OWW/OWH	0.607				
OWW/WHS	0.792				
OWH/AS	0.963				
LW/LHSP		0.343	0.326	0.332	0.333
LW/LHAP		0.274	0.260	0.263	0.266
LW/OWW		0.258	0.246	0.248	0.252
LW/OWH		0.157	0.149	0.151	0.153
LW/AS		0.249	0.237	0.239	0.243
OWW/LHSP		0.753	0.753	0.749	0.756
OWW/LHAP		0.942	0.944	0.944	0.949
MW/OWW		0.049	0.053	0.050	
MW/LW		0.189	0.199	0.215	
MW/LW		0.213	0.200	0.197	



## Athenry Dominican priory: North transept west Co. Galway, Connaught



### Measurements

Light1	m
width	0.672
overall height	2.384
height to spring	1.633
Light2	
width	0.676
overall height	2.388
height to spring	1.632
Window	
overall width	1.335
overall height	2.902
height to spring	1.717
Arch	
span	1.392
height from spring	1.187
Mullion 1	
width	0.124

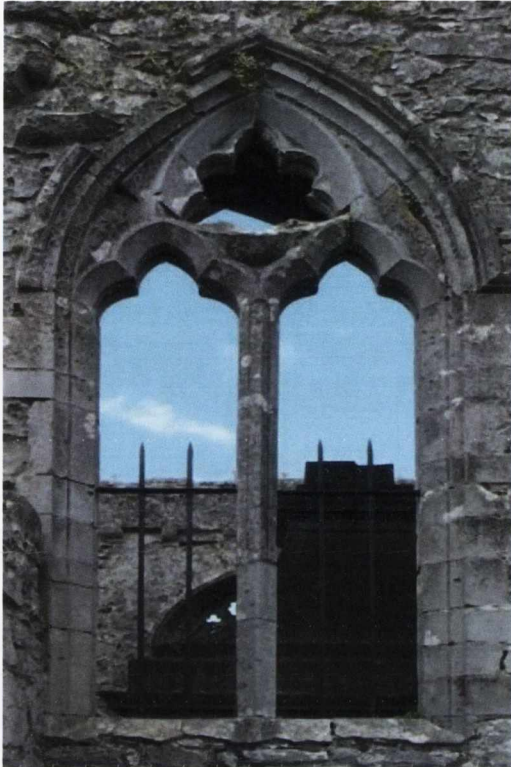
### Units

<b>Most likely:</b> 0.298m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.297

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.727	0.727
TFH/LHAP		0.498	0.497
TFH/OWH	0.409		
OWW/OWH	0.460		
OWW/WHS	0.778		
OWH/AS	0.959		
LW/LHSP		0.412	0.414
LW/LHAP		0.282	0.283
LW/OWW		0.504	0.506
LW/OWH		0.232	0.232
LW/AS		0.483	0.485
OWW/LHSP		0.818	0.818
OWW/LHAP		0.560	0.559
MW/OWW		0.093	
MW/LW		0.185	0.184

**Athenry Dominican priory: Chancel south**  
Co. Galway, Connaught



**Measurements**

None taken due to access issues

**Units**

**Proportions**

## Ballindoon Franciscan friary: Nave west Co. Sligo, Connaught



### Measurements

Light1		Light2	
width	0.427	width	0.435
overall height		overall height	2.062
height to spring		height to spring	1.768
Light3		Window	
width	0.530	overall width	
overall height	2.015	overall height	3.649
height to spring	1.764	height to spring	1.800
Arch		Mullion 1	
span	2.753	width	0.107
height from spring	1.944		
		Mullion 2	
		width	0.123

### Units

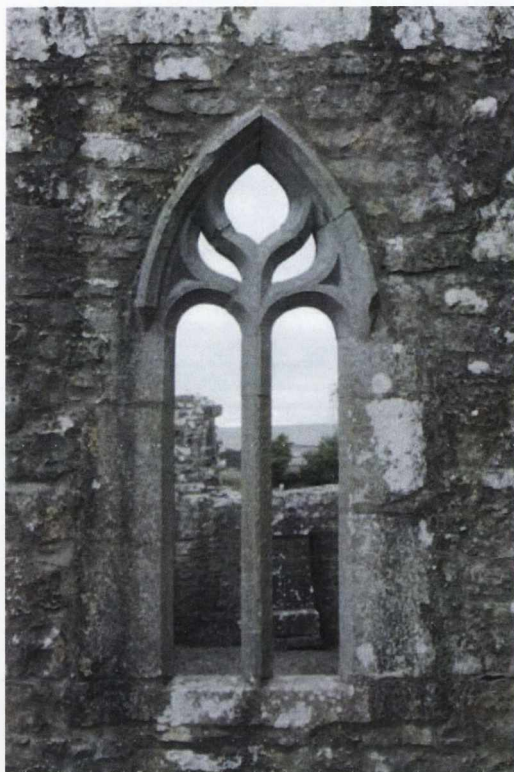
<b>Most likely:</b> 0.322m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single		0.910	0.908
TFH/LHSP				0.965
TFH/LHAP				
TFH/OWH	0.533			
LW/LHSP			0.246	0.300
LW/LHAP				0.263
LW/OWH		0.117	0.119	0.145
LW/AS		0.155	0.158	0.192
MW/LW		0.251	0.246	0.202
MW/LW		0.289	0.283	0.232



## Burriscarra Augustinian priory: Chancel east Co. Mayo, Connaught



### Measurements

Light1	m
width	0.281
overall height	1.264
height to spring	1.130
Light2	
width	0.266
overall height	1.251
height to spring	1.136
Window	
overall width	0.543
overall height	1.819
height to spring	1.223
Arch	
span	0.670
height from spring	0.597
Mullion 1	
width	0.102

### Units

<b>Most likely:</b> 0.341m
<b>Within 10%:</b> 0.338 0.339 0.340 0.342 0.346
<b>Within 20%:</b> 0.263 0.265 0.334 0.335 0.336 0.337 0.343 0.345

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.528	0.525
TFH/LHAP		0.472	0.477
TFH/OWH	0.328		
OW W/OWH	0.298		
OW W/WHS	0.444		
OWH/AS	0.810		
LW/LHSP		0.248	0.234
LW/LHAP		0.222	0.213
LW/OW W		0.517	0.490
LW/OWH		0.154	0.154
LW/AS		0.419	0.397
OW W/LHSP		0.480	0.478
OW W/LHAP		0.429	0.434
MW/OW W		0.188	
MW/LW		0.364	0.383

## Burrishoole Franciscan friary: Chancel east Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.351	width	0.353
overall height	2.082	overall height	2.077
height to spring	1.899	height to spring	1.901
arch height	0.183	arch height	0.176
Light3		Light4	
width	0.352	width	0.344
overall height	2.083	overall height	
height to spring	1.878	height to spring	
arch height	0.205	arch height	0.191
Window		Mullion 1	
overall width	1.399	width	0.104
overall height	3.384		
height to spring	1.904	Mullion 2	
		width	0.102
Arch			
span	1.444	Mullion 3	
height from spring	1.498	width	

### Units

<b>Most likely:</b> 0.347m
<b>Within 10%:</b> 0.259 0.271 0.329 0.346 0.348
<b>Within 20%:</b> 0.261 0.329 0.345

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	Single				
TFH/LHSP		0.781	0.781	0.788	
TFH/LHAP		0.711	0.713		
TFH/OWH	0.437				
OWW/OWH	0.413				
OWW/WHS	0.735				
OWH/AS	0.969				
LW/LHSP		0.185	0.186	0.187	
LW/LHAP		0.169	0.170		
LW/OWW		0.251	0.253	0.252	0.246
LW/OWH		0.104	0.104	0.104	0.102
LW/AS		0.243	0.245	0.244	0.238
OWW/LHSP		0.738	0.738	0.745	
OWW/LHAP		0.672	0.673		
MW/OWW		0.075	0.073		
MW/LW		0.297	0.295	0.289	
MW/LW		0.290			



## Burrishoole Franciscan friary: South transept south Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.522	width	0.530
overall height	1.910	overall height	1.947
height to spring	1.649	height to spring	1.666
Light3		Window	
width	0.514	overall width	1.563
overall height	1.952	overall height	3.851
height to spring	1.678	height to spring	2.217
Arch		Mullion 1	
span	1.961	width	0.128
height from spring	1.701		
		Mullion 2	
		width	0.122

### Units

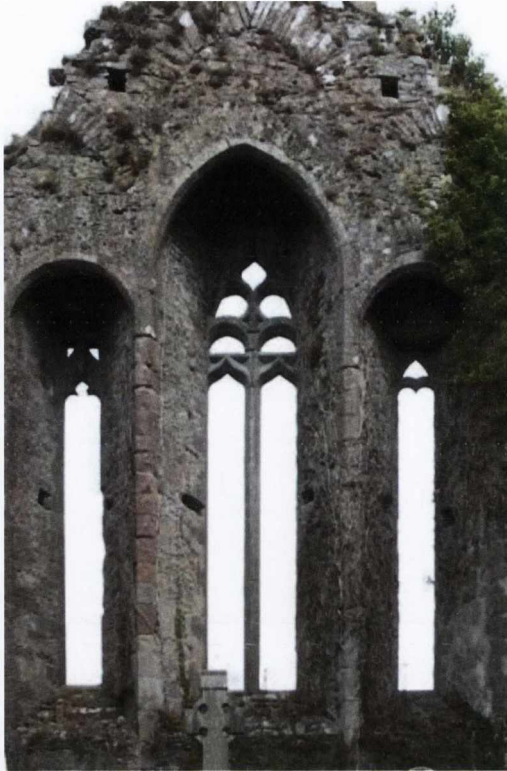
<b>Most likely:</b> 0.261m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.970	0.979	0.987
TFH/LHAP		0.890	0.874	0.871
TFH/OWH	0.442			
OWW/OWH	0.406			
OWW/WHS	0.705			
OWH/AS	0.797			
LW/LHSP		0.317	0.318	0.306
LW/LHAP		0.273	0.272	0.263
LW/OWW		0.334	0.339	0.329
LW/OWH		0.136	0.138	0.133
LW/AS		0.266	0.270	0.262
OWW/LHSP		0.948	0.938	0.932
OWW/LHAP		0.818	0.803	0.801
MW/OWW		0.082	0.078	
MW/LW		0.245	0.242	0.249
MW/LW		0.233	0.229	0.237



## Buttevant Franciscan friary: Chancel east Co. Cork, Desmond



### Measurements

Light1		Light2	
width	0.594	width	0.467
overall height	3.534	overall height	3.698
height to spring	3.269	height to spring	3.446
Light3		Light4	
width	0.462	width	0.465
overall height	3.687	overall height	3.467
height to spring	3.453	height to spring	3.444
Window		Arch	
overall width	1.198	span	2.216
overall height	5.644	height from spring	1.421
height to spring	4.240		
		Mullion 1	
		width	0.198

### Units

<b>Most likely:</b> 0.354m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.435	0.413	0.412	0.413
TFH/LHAP		0.402	0.384	0.386	0.410
TFH/OWH	0.252				
OWW/OWH	0.212				
OWW/WHS	0.282				
OWH/AS	0.540				
LW/LHSP		0.182	0.136	0.134	0.135
LW/LHAP		0.168	0.126	0.125	0.134
LW/OWW		0.496	0.390	0.385	0.388
LW/OWH		0.105	0.083	0.082	0.082
LW/AS		0.268	0.211	0.208	0.210
OWW/LHSP		0.366	0.366	0.347	0.348
OWW/LHAP		0.339	0.324	0.325	0.345
MW/OWW		0.895	0.165	0.913	
MW/LW		0.444	0.349	2.360	
MW/LW		0.429	2.843	2.820	

## Buttevant Franciscan friary: nave south Co. Cork, Desmond



### Measurements

Light1		Light2	
width	0.428	width	0.489
overall height	2.328	overall height	2.323
height to spring	2.124	height to spring	2.119
Light3		Window	
width	0.456	overall width	1.369
overall height	2.308	overall height	4.146
height to spring	2.123	height to spring	2.141
Arch		Mullion 1	
span	2.574	width	0.150
height from spring	2.084		
		Mullion 2	
		width	0.148

### Units

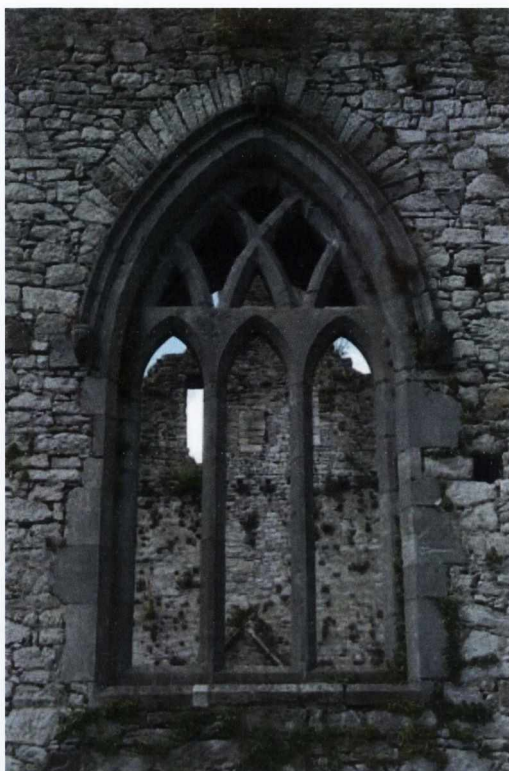
<b>Most likely:</b> 0.277m
<b>Within 10%:</b> 0.276 0.278
<b>Within 20%:</b> 0.245 0.249 0.303 0.304 0.318

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.981	0.983	0.981
TFH/LHAP		0.895	0.897	0.903
TFH/OWH	0.503			
OWW/OWH	0.330			
OWW/WHS	0.639			
OWH/AS	0.532			
LW/LHSP		0.201	0.231	0.215
LW/LHAP		0.184	0.210	0.197
LW/OWW		0.313	0.357	0.333
LW/OWH		0.103	0.118	0.110
LW/AS		0.166	0.190	0.177
OWW/LHSP		0.644	0.646	0.645
OWW/LHAP		0.588	0.589	0.593
MW/OWW		0.110	0.108	
MW/LW		0.351	0.308	0.330
MW/LW		0.347	0.304	0.326



## Cahir Augustinian priory: Chancel east Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.644	width	0.664
overall height	2.293	overall height	2.290
height to spring	1.868	height to spring	1.877
Light3		Window	
width	0.638	overall width	1.946
overall height	2.278	overall height	3.765
height to spring	1.870	height to spring	1.890
Arch		Mullion 1	
span	2.513	width	0.172
height from spring	1.879		
		Mullion 2	
		width	0.187

### Units

<b>Most likely:</b> 0.327m
<b>Within 10%:</b> 0.235 0.243 0.244 0.245 0.326
<b>Within 20%:</b> 0.234 0.241 0.242 0.255 0.268 0.325

### Proportions

		Light	Light	Light
	Single	Mullion 1	Mullion 2	Mullion 3
TFH/LHSP		0.994	0.999	0.995
TFH/LHAP		0.820	0.821	0.825
TFH/OWH	0.499			
OWW/OWH	0.517			
OWW/WHS	0.971			
OWH/AS	0.774			
LW/LHSP		0.345	0.354	0.341
LW/LHAP		0.281	0.290	0.280
LW/OWW		0.331	0.341	0.328
LW/OWH		0.171	0.176	0.169
LW/AS		0.256	0.264	0.254
OWW/LHSP		0.960	0.965	0.961
OWW/LHAP		0.849	0.850	0.854
MW/OWW		0.089	0.096	
MW/LW		0.268	0.259	0.270
MW/LW		0.290	0.281	0.293



## Callan Augustinian Priory: Chancel east Co. Kilkenny, Ormond



### Measurements

Window	
overall width	3.266
overall height	6.357
height to spring	3.326
Arch	
span	3.485
height from spring	3.083

### Units

<b>Most likely:</b> 0.225m
<b>Within 10%:</b> 0.317
<b>Within 20%:</b> 0.242 0.289

### Proportions

	Single
TFH/OWH	0.485
OWW/OWH	0.514
OWW/WHS	0.982
OWH/AS	0.937

## Callan Augustinian Priory: Nave north Co. Kilkenny, Ormond



### Measurements

Light 1	m
width	0.521
height to spring	1.666
Light 2	
width	0.510
height to spring	1.633
Window	
overall width	1.301
overall height	3.364
height to spring	1.823
Arch	
span	1.397
height from spring	1.546
Mullion 1	
width	0.067

### Units

<b>Most likely:</b> 0.280m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.247

### Proportions

		Light/ Mullion 1	Light/ Mullion 2
	Single		
TFH/LHSP		0.928	
TFH/LHAP			
TFH/OWH	0.460		
OWW/OWH	0.387		
OWW/WHS	0.714		
OWH/AS	0.931		
LW/LHSP		0.394	
LW/LHAP			
LW/OWW		0.505	0.501
LW/OWH		0.195	0.195
LW/AS		0.470	0.466
OWW/LHSP		0.781	
OWW/LHAP			
MW/OWW		0.102	
MW/LW		0.203	0.204

## Callan Augustinian Priory: Nave west Co. Kilkenny, Ormond



### Measurements

Light1	m	Light2	
width	0.550	width	0.545
overall height	3.194	overall height	3.190
height to spring	2.884	height to spring	2.895
Window		Arch	
overall width	1.326	span	3.004
overall height	4.574	height from spring	2.405
height to spring	2.924		
		Light 1 lower	
Mullion 1		Height	0.292
width	0.213		
		Light 2 lower	
		Height	0.358

### Units

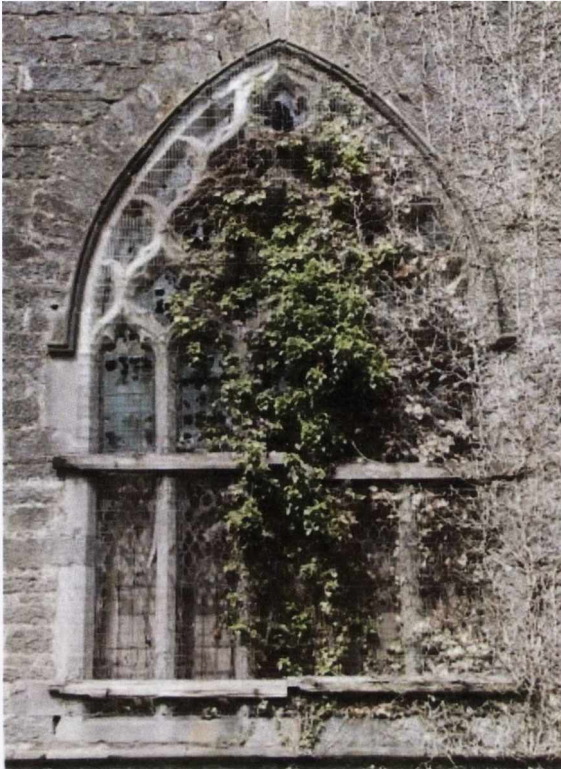
<b>Most likely:</b> 0.281m
<b>Within 10%:</b> 0.223 0.231 0.232 0.250 0.279 0.280 0.331
<b>Within 20%:</b> 0.220 0.233 0.245 0.274 0.278 0.290 0.362 0.364

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.834	0.831
TFH/LHAP		0.753	0.754
TFH/OWH	0.526		
OWW/OWH	0.290		
OWW/WHS	0.453		
OWH/AS	0.441		
LW/LHSP		0.233	0.226
LW/LHAP		0.211	0.205
LW/OWW		0.508	0.494
LW/OWH		0.147	0.147
LW/AS		0.224	0.218
OWW/LHSP		0.460	0.458
OWW/LHAP		0.415	0.416
MW/OWW		0.238	
MW/LW		0.469	0.482



**St. Mary's parish church, Callan: Chancel east**  
Co. Kilkenny, Ormond



**Measurements**

Light1		Light2	
width	0.592	width	0.604
overall height	3.143	overall height	3.113
height to spring	2.827	height to spring	2.836
Light3		Light4	
width	0.638	width	0.611
Light5		Window	
width	0.573	overall width	3.016
overall height		overall height	5.583
height to spring		height to spring	2.877
Arch		Mullion 2	
span	3.289	width	0.155
height from spring	2.707		
		Mullion 3	
Mullion 1		width	0.142
width	0.152		
		Mullion 4	
		width	0.134

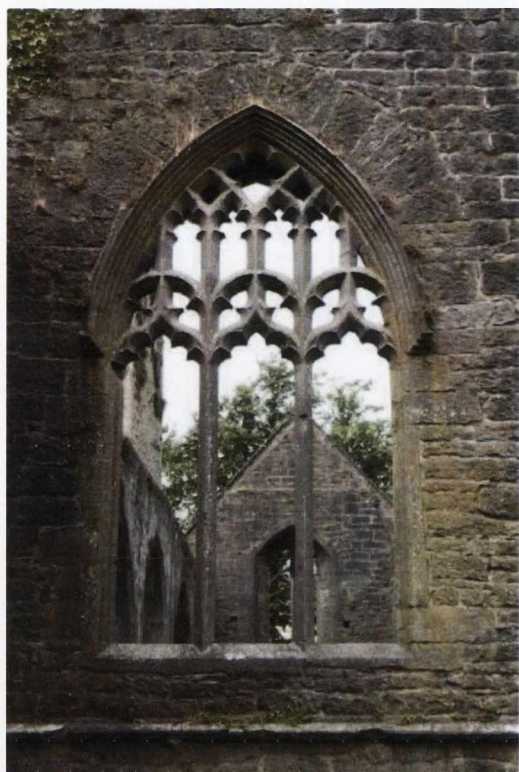
**Units**

<b>Most likely:</b> 0.230m
<b>Within 10%:</b> 0.246
<b>Within 20%:</b>

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.958	0.955			
TFH/LHAP		0.861	0.870			
TFH/OWH	0.485					
OWW/OWH	0.540					
OWW/WHS	0.515					
OWH/AS	0.917					
LW/LHSP		0.209	0.213			
LW/LHAP		0.188	0.194			
LW/OWW		0.196	0.200	0.211	0.202	0.190
LW/OWH		0.106	0.108	0.114	0.109	0.103
LW/AS		0.180	0.184	0.194	0.186	0.174
OWW/LHSP		0.937	0.940			
OWW/LHAP		0.960	0.969			
MW/OWW		0.050	0.051	0.047	0.045	
MW/LW		0.257	0.252	0.256	0.242	
MW/LW		0.223	0.233	0.220	0.235	

## St. Mary's parish church, Callan: North aisle east Co. Kilkenny, Ormond



### Measurements

Light1		Light2	
width	0.746	width	0.697
overall height	2.349	overall height	2.353
height to spring	2.060	height to spring	2.051
Light3		Window	
width	0.742	overall width	2.184
overall height	2.351	overall height	3.969
height to spring	2.050	height to spring	2.102
Arch		Mullion 1	
span	2.224	width	0.134
height from spring	1.869		
		Mullion 2	
		width	0.132

### Units

<b>Most likely:</b> 0.248m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.269 0.282 0.372

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.907	0.911	0.911
TFH/LHAP		0.795	0.794	0.795
TFH/OWH	0.471			
OWW/OWH	0.550			
OWW/WHS	0.962			
OWH/AS	0.982			
LW/LHSP		0.362	0.340	0.362
LW/LHAP		0.317	0.296	0.316
LW/OWW		0.341	0.319	0.340
LW/OWH		0.188	0.176	0.187
LW/AS		0.335	0.313	0.334
OWW/LHSP		0.943	0.939	0.939
OWW/LHAP		0.930	0.928	0.929
MW/OWW		0.061	0.060	
MW/LW		0.179	0.192	0.180
MW/LW		0.177	0.190	0.178



**St. Mary's parish church, Callan: North aisle north, eastern  
Co. Kilkenny, Ormond**



**Measurements**

Light1	m
width	0.721
overall height	2.301
height to spring	1.917
Light2	
width	0.731
overall height	2.299
height to spring	1.918
Window	
overall width	1.447
overall height	2.605
height to spring	1.936
Arch	
span	1.515
height from spring	0.669
Mullion 1	
width	0.137

**Units**

<b>Most likely:</b> 0.288m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
	<b>Single</b>		
TFH/LHSP		0.349	0.349
TFH/LHAP		0.291	0.291
TFH/OWH	0.257		
OWW/OWH	0.555		
OWW/WHS	0.747		
OWH/AS	0.955		
LW/LHSP		0.376	0.381
LW/LHAP		0.314	0.318
LW/OWW		0.499	0.505
LW/OWH		0.277	0.277
LW/AS		0.476	0.482
OWW/LHSP		0.755	0.754
OWW/LHAP		0.629	0.629
MW/OWW		0.094	
MW/LW		0.189	0.187



**St. Mary's parish church, Callan: North aisle north, mid  
Co. Kilkenny, Ormond**



**Measurements**

Light1	m
width	0.723
overall height	2.216
height to spring	1.847
Light2	
width	0.715
overall height	2.237
height to spring	1.871
Window	
overall width	1.435
overall height	2.489
height to spring	1.874
Arch	
span	1.456
height from spring	0.614
Mullion 1	
width	0.138

**Units**

<b>Most likely:</b> 0.216m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.333	0.328
TFH/LHAP		0.277	0.275
TFH/OWH	0.247		
OWW/OWH	0.577		
OWW/WHS	0.766		
OWH/AS	0.985		
LW/LHSP		0.392	0.382
LW/LHAP		0.326	0.320
LW/OWW		0.504	0.498
LW/OWH		0.291	0.291
LW/AS		0.497	0.491
OWW/LHSP		0.777	0.767
OWW/LHAP		0.648	0.642
MW/OWW		0.096	
MW/LW		0.191	0.193

**St. Mary's parish church, Callan: North aisle north, western  
Co. Kilkenny, Ormond**



**Measurements**

Light1	m
width	0.728
overall height	2.251
height to spring	1.849
Light2	
width	0.731
overall height	2.268
height to spring	1.874
Window	
overall width	1.456
overall height	2.556
height to spring	1.889
Arch	
span	1.514
height from spring	0.667
Mullion 1	
width	0.135

**Units**

<b>Most likely:</b> 0.242m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.265

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.361	0.356
TFH/LHAP		0.296	0.294
TFH/OWH	0.261		
OWW/OWH	0.570		
OWW/WHS	0.771		
OWH/AS	0.962		
LW/LHSP		0.394	0.390
LW/LHAP		0.323	0.322
LW/OW W		0.500	0.502
LW/OWH		0.285	0.285
LW/AS		0.481	0.483
OWW/LHSP		0.788	0.777
OWW/LHAP		0.647	0.642
MW/OW W		0.093	
MW/LW		0.186	0.185



**St. Mary's parish church, Callan: Nave south, western  
Co. Kilkenny, Ormond**



**Measurements**

Light1	m
width	0.619
overall height	2.129
height to spring	1.880
Light2	
width	0.622
overall height	2.135
height to spring	1.879
Window	
overall width	1.240
overall height	2.981
height to spring	1.889
Arch	
span	1.324
height from spring	1.093
Mullion 1	
width	0.137

**Units**

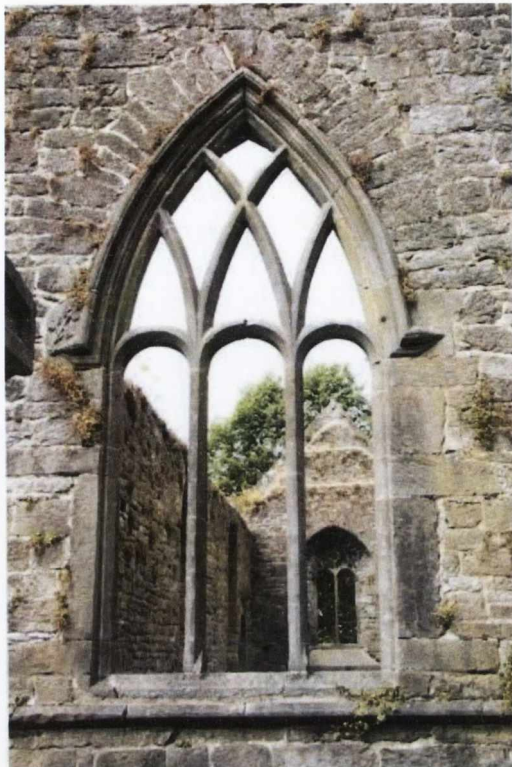
<b>Most likely:</b> 0.354m
<b>Within 10%:</b> 0.221 0.353 0.355 0.356 0.357
<b>Within 20%:</b> 0.235 0.236

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.581	0.582
TFH/LHAP		0.513	0.512
TFH/OWH	0.367		
OWW/OWH	0.416		
OWW/WHS	0.657		
OWH/AS	0.937		
LW/LHSP		0.329	0.331
LW/LHAP		0.291	0.291
LW/OWW		0.499	0.501
LW/OWH		0.208	0.208
LW/AS		0.467	0.470
OWW/LHSP		0.660	0.660
OWW/LHAP		0.583	0.581
MW/OWW		0.110	
MW/LW		0.221	0.220



## St. Mary's parish church, Callan: South aisle east Co. Kilkenny, Ormond



### Measurements

Light1		Light2	
width	0.641	width	0.671
overall height	2.285	overall height	2.296
height to spring	2.024	height to spring	2.020
Light3		Window	
width	0.626	overall width	1.937
overall height	2.263	overall height	4.002
height to spring	2.042	height to spring	2.049
Arch		Mullion 1	
span	1.950	width	0.146
height from spring	1.954		
		Mullion 2	
		width	0.137

### Units

<b>Most likely:</b> 0.267m
<b>Within 10%:</b> 0.234 0.266
<b>Within 20%:</b> 0.254 0.265 0.340 0.355

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.966	0.967	0.957
TFH/LHAP		0.855	0.851	0.864
TFH/OWH	0.488			
OWW/OWH	0.484			
OWW/WHS	0.945			
OWH/AS	0.993			
LW/LHSP		0.317	0.332	0.306
LW/LHAP		0.281	0.292	0.277
LW/OWW		0.331	0.346	0.323
LW/OWH		0.160	0.168	0.156
LW/AS		0.329	0.344	0.321
OWW/LHSP		0.957	0.959	0.949
OWW/LHAP		0.848	0.844	0.856
MW/OWW		0.075	0.071	
MW/LW		0.228	0.218	0.233
MW/LW		0.214	0.204	0.219

**St. Mary's parish church, Callan: South aisle west**  
Co. Kilkenny, Ormond



**Measurements**

Light1	m
width	0.691
overall height	2.292
height to spring	2.016
Light2	
width	0.688
overall height	2.282
height to spring	2.022
Window	
overall width	1.371
overall height	3.172
height to spring	2.023
Arch	
span	1.386
height from spring	1.150
Mullion 1	
width	0.146

**Units**

<b>Most likely:</b> 0.304m
<b>Within 10%:</b> 0.276 0.305
<b>Within 20%:</b> 0.230 0.298 0.299 0.303 0.304

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.570	0.569
TFH/LHAP		0.502	0.504
TFH/OWH	0.362		
OWW/OWH	0.432		
OWW/WHS	0.678		
OWH/AS	0.990		
LW/LHSP		0.343	0.340
LW/LHAP		0.301	0.301
LW/OWW		0.504	0.501
LW/OWH		0.218	0.218
LW/AS		0.498	0.496
OWW/LHSP		0.680	0.678
OWW/LHAP		0.598	0.601
MW/OWW		0.107	
MW/LW		0.212	0.213



## St. Mary's parish church, Callan: South chapel south Co. Kilkenny, Ormond



### Measurements

Light1		Light2	
width	0.620	width	0.590
overall height	1.481	overall height	1.489
height to spring	1.245	height to spring	1.256
Light3		Window	
width	0.633	overall width	1.834
overall height	1.492	overall height	2.762
height to spring	1.248	height to spring	1.268
Arch		Mullion 1	
span	1.867	width	0.135
height from spring	1.494		
		Mullion 2	
		width	0.128

### Units

<b>Most likely:</b> 0.236m
<b>Within 10%:</b> 0.221 0.235 0.249 0.250 0.344 0.372
<b>Within 20%:</b> 0.220 0.262 0.343 0.345 0.371

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.834	0.841	0.836
TFH/LHAP		0.991	0.997	0.998
TFH/OWH	0.541			
OWW/OWH	0.664			
OWW/WHS	0.692			
OWH/AS	0.982			
LW/LHSP		0.498	0.470	0.507
LW/LHAP		0.419	0.396	0.424
LW/OWW		0.338	0.322	0.345
LW/OWH		0.224	0.214	0.229
LW/AS		0.332	0.316	0.339
OWW/LHSP		0.679	0.685	0.681
OWW/LHAP		0.807	0.812	0.813
MW/OWW		0.074	0.070	
MW/LW		0.218	0.229	0.214
MW/LW		0.206	0.217	0.202



**St. Mary's parish church, Callan: Nave west**  
Co. Kilkenny, Ormond



**Measurements**

Light1	m
width	0.730
overall height	2.992
height to spring	2.570
Light2	
width	0.717
overall height	2.953
height to spring	2.553
Window	
overall width	1.444
overall height	3.860
height to spring	2.577
Arch	
span	1.509
height from spring	1.283
Mullion 1	
width	0.138

**Units**

<b>Most likely:</b> 0.286m
<b>Within 10%:</b> 0.275
<b>Within 20%:</b> 0.241

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.499	0.502
TFH/LHAP		0.429	0.434
TFH/OWH	0.332		
OWW/OWH	0.374		
OWW/WHS	0.560		
OWH/AS	0.957		
LW/LHSP		0.284	0.281
LW/LHAP		0.244	0.243
LW/OWW		0.506	0.497
LW/OWH		0.189	0.189
LW/AS		0.484	0.476
OWW/LHSP		0.562	0.566
OWW/LHAP		0.483	0.489
MW/OWW		0.096	
MW/LW		0.189	0.193

**Cashel Dominican priory: Chancel east**  
Co. Tipperary, Ormond



**Measurements**

Light1		Light2	
width	0.520	width	0.466
overall height	2.447	overall height	2.446
height to spring	2.240	height to spring	2.235
Light3		Light4	
width	0.464	width	0.516
overall height	2.447	overall height	2.448
height to spring	2.242	height to spring	2.243
Window		Arch	
overall width	1.950	span	2.004
overall height	4.307	height from spring	1.927
height to spring	2.380		
		Mullion 2	
Mullion 1		width	0.145
width	0.143		
		Mullion 3	
		width	0.144

**Units**

<b>Most likely:</b> 0.306m
<b>Within 10%:</b> 0.288 0.307
<b>Within 20%:</b> 0.308

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.860	0.862	3.859	0.859
TFH/LHAP		0.787	0.788	3.787	0.787
TFH/OWH	0.447				
OWW/OWH	0.453				
OWW/WHS	0.819				
OWH/AS	0.973				
LW/LHSP		0.232	0.208	0.207	0.230
LW/LHAP		0.213	0.190	0.189	0.211
LW/OWW		0.267	0.239	0.238	0.265
LW/OWH		0.121	0.108	0.108	0.120
LW/AS		0.260	0.232	0.231	0.258
OWW/LHSP		0.870	0.870	0.869	0.869
OWW/LHAP		0.797	0.797	0.797	0.796
MW/OWW		0.073	0.074	0.074	
MW/LW		0.275	0.307	0.311	
MW/LW		0.312	0.312	0.280	



## Cashel Dominican priory: South transept south Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width		width	0.517
overall height		overall height	2.917
height to spring		height to spring	2.668
Light3		Light4	
width	0.518	width	0.518
overall height	3.021	overall height	2.912
height to spring	2.667	height to spring	2.660
Light 5		Window	
width	0.585	overall width	2.709
overall height	2.920	overall height	5.041
height to spring	2.660	height to spring	2.672
Arch		Mullion 1	
span	2.688		
height from spring	2.370	Mullion 3	
		width	0.126
Mullion 2			
width	0.123	Mullion 4	
		width	0.120

### Units

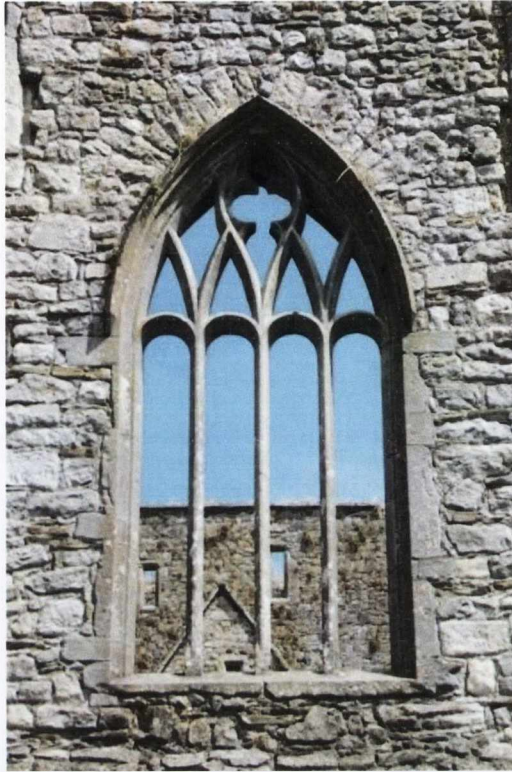
<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.344 0.349
<b>Within 20%:</b> 0.350

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
	Single					
TFH/LHSP			0.888	0.889	0.891	0.890
TFH/LHAP			0.813	0.785	0.814	0.812
TFH/OWH	0.470					
OWW/OWH	0.537					
OWW/WHS	0.530					
OWH/AS	1.008					
LW/LHSP			0.194	0.194	0.195	0.220
LW/LHAP			0.177	0.172	0.178	0.200
LW/OWW			0.191	0.191	0.191	0.216
LW/OWH			0.103	0.103	0.103	0.116
LW/AS			0.192	0.193	0.193	0.218
OWW/LHSP			0.985	0.984	0.982	0.983
OWW/LHAP			0.929	0.897	0.930	0.928
MW/OWW			0.045	0.046	0.044	
MW/LW			0.000	0.238	0.238	
MW/LW		0.243	0.243	0.232	0.206	



## Cashel Dominican priory: Nave west Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.507	width	0.383
overall height	3.004	overall height	2.999
height to spring	2.793	height to spring	2.750
Light3		Light4	
width	0.389	width	0.534
overall height	3.047	overall height	3.185
height to spring	2.765	height to spring	2.726
Window		Arch	
overall width	1.672	span	1.935
overall height	4.887	height from spring	2.104
height to spring	2.789		
		Mullion 2	
Mullion 1		width	0.098
width	0.087		
		Mullion 3	
		width	0.091

### Units

<b>Most likely:</b> 0.290m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	Single				
TFH/LHSP		0.753	0.765	0.761	0.772
TFH/LHAP		0.700	0.702	0.690	0.660
TFH/OWH	0.430				
OWW/OWH	0.342				
OWW/WHS	0.600				
OWH/AS	0.864				
LW/LHSP		0.182	0.139	0.141	0.196
LW/LHAP		0.169	0.128	0.128	0.168
LW/OWW		0.303	0.229	0.233	0.319
LW/OWH		0.104	0.078	0.080	0.109
LW/AS		0.262	0.198	0.201	0.276
OWW/LHSP		0.599	0.599	0.605	0.613
OWW/LHAP		0.557	0.558	0.549	0.525
MW/OWW		0.052	0.058	0.055	
MW/LW		0.172	0.227	0.255	
MW/LW		0.251	0.235	0.171	

## Castledermot Franciscan friary: South transept south Co. Kildare, Ormond



### Measurements

Light1		Light2	
width	1.194	width	1.209
height to spring	4.590	height to spring	
Light3		Light4	
width	1.210	width	1.219
height to spring		height to spring	4.549
Window		Arch	
overall width	4.831	span	5.353
overall height	8.803	height from spring	4.177
height to spring	2.159		
		Mullion 2	
Mullion 1		width	0.191
width	0.206		
		Mullion 3	
		width	0.197

### Units

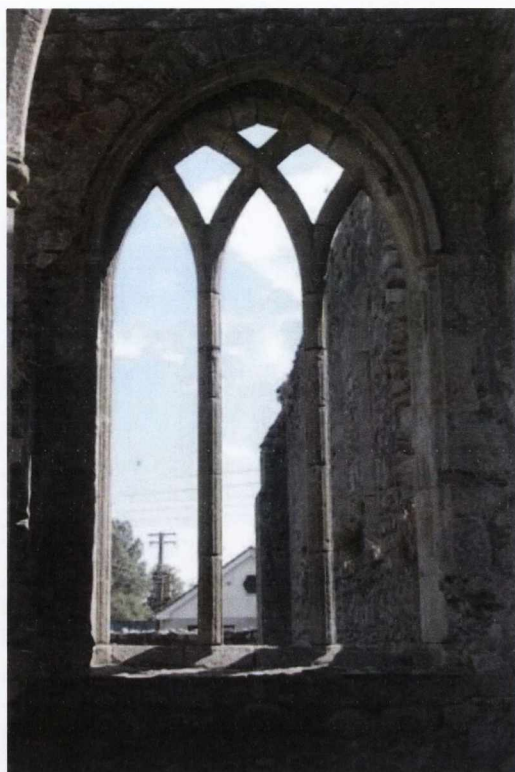
<b>Most likely:</b> 0.363m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.278

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.910			
TFH/LHAP					
TFH/OWH	0.474				
OWW/OWH	0.549				
OWW/WHS	0.960				
OWH/AS	0.902				
LW/LHSP		0.260			
LW/LHAP					
LW/OWW		0.247	0.250	0.251	0.252
LW/OWH		0.136	0.137	0.137	0.138
LW/AS		0.223	0.226	0.226	0.228
OWW/LHSP		0.950	0.950		
OWW/LHAP					
MW/OWW		0.043	0.039	0.041	
MW/LW		0.173	0.171	0.158	
MW/LW		0.158	0.163	0.162	



## Castledermot Franciscan friary: South trans west, northern Co. Kildare, Ormond



### Measurements

Light1		Light2	
width	0.274	width	0.733
overall height	3.260	overall height	3.250
height to spring	2.399	height to spring	2.395
Light3		Window	
width	0.723	overall width	2.179
overall height	3.248	overall height	3.923
height to spring	2.401	height to spring	2.571
Arch		Mullion 1	
span	2.237	width	0.152
height from spring	1.359		
		Mullion 2	
		width	0.156

### Units

<b>Most likely:</b> 0.241m
<b>Within 10%:</b> 0.240 0.288
<b>Within 20%:</b> 0.287 0.310

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.567	0.567	0.566
TFH/LHAP		0.417	0.418	0.418
TFH/OWH	0.347			
OWW/OWH	0.556			
OWW/WHS	0.848			
OWH/AS	0.974			
LW/LHSP		0.302	0.306	0.301
LW/LHAP		0.222	0.226	0.223
LW/OWW		0.332	0.336	0.332
LW/OWH		0.184	0.187	0.184
LW/AS		0.323	0.328	0.323
OWW/LHSP		0.908	0.910	0.908
OWW/LHAP		0.668	0.670	0.671
MW/OWW		0.070	0.071	
MW/LW		0.211	0.208	0.211
MW/LW		0.215	0.212	0.215



## Castledermot Franciscan friary: South transept west, mid Co. Kildare, Ormond



### Measurements

Light1		Light2	
width	0.712	width	0.745
overall height	3.279	overall height	3.290
height to spring	2.424	height to spring	2.428
Light3		Window	
width	0.732	overall width	2.188
overall height	3.299	overall height	3.909
height to spring	2.413	height to spring	2.607
Arch		Mullion 1	
span	2.116	width	0.151
height from spring	1.309		
		Mullion 2	
		width	0.158

### Units

<b>Most likely:</b> 0.291m
<b>Within 10%:</b> 0.313
<b>Within 20%:</b> 0.280 0.290 0.314

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.540	0.539	0.543
TFH/LHAP		0.399	0.398	0.397
TFH/OWH	0.335			
OWW/OWH	0.560			
OWW/WHS	0.839			
OWH/AS	0.967			
LW/LHSP		0.294	0.307	0.303
LW/LHAP		0.217	0.226	0.222
LW/OWW		0.325	0.341	0.334
LW/OWH		0.182	0.191	0.187
LW/AS		0.336	0.352	0.346
OWW/LHSP		0.903	0.901	0.907
OWW/LHAP		0.667	0.665	0.663
MW/OWW		0.069	0.072	
MW/LW		0.213	0.203	0.207
MW/LW		0.222	0.212	0.216

## Claregalway Franciscan friary: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.688	width	0.588
overall height	3.537	overall height	3.545
height to spring	3.307	height to spring	3.333
Light3		Light4	
width	0.599	width	0.589
overall height	3.541	overall height	3.535
height to spring	3.291	height to spring	3.277
Light5		Window	
width	0.691	overall width	3.122
overall height	3.533	overall height	6.357
height to spring	3.305	height to spring	3.443
Old Window		Arch	
span	5.325	span	3.158
lower width	4.286	height from spring	2.916
height to spring	6.774		
Mullion 1		Mullion 3	
width	0.145	width	0.140
Mullion 2		Mullion 4	
width	0.148	width	0.155

### Units

<b>Most likely:</b> 0.301m
<b>Within 10%:</b> 0.225 0.229 0.247 0.259 0.303 0.353
<b>Within 20%:</b> 0.224 0.228 0.302 0.304

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.882	0.875	0.886	0.890	0.882
TFH/LHAP		0.824	0.823	0.824	0.825	0.825
TFH/OWH	0.459					
OWW/OWH	0.491					
OWW/WHS	0.542					
OWH/AS	0.989					
LW/LHSP		0.208	0.176	0.182	0.180	0.209
LW/LHAP		0.195	0.166	0.169	0.167	0.196
LW/OWW		0.220	0.188	0.192	0.189	0.221
LW/OWH		0.108	0.092	0.094	0.093	0.109
LW/AS		0.218	0.186	0.190	0.186	0.219
OWW/LHSP		0.944	0.937	0.948	0.953	0.945
OWW/LHAP		0.883	0.881	0.882	0.883	0.884
MW/OWW		0.046	0.047	0.045	0.050	
MW/LW		0.211	0.247	0.252	0.247	
MW/LW		0.234	0.238	0.262	0.224	



## Claregalway Franciscan friary: North transept north Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.785	width	0.591
overall height	1.613	overall height	1.614
height to spring	1.411	height to spring	1.403
Light3		Window	
width	0.770	overall width	2.033
overall height	1.627	overall height	3.369
height to spring	1.409	height to spring	1.603
Arch		Mullion 1	
span	2.067	width	0.138
height from spring	1.767		
		Mullion 2	
		width	0.141

### Units

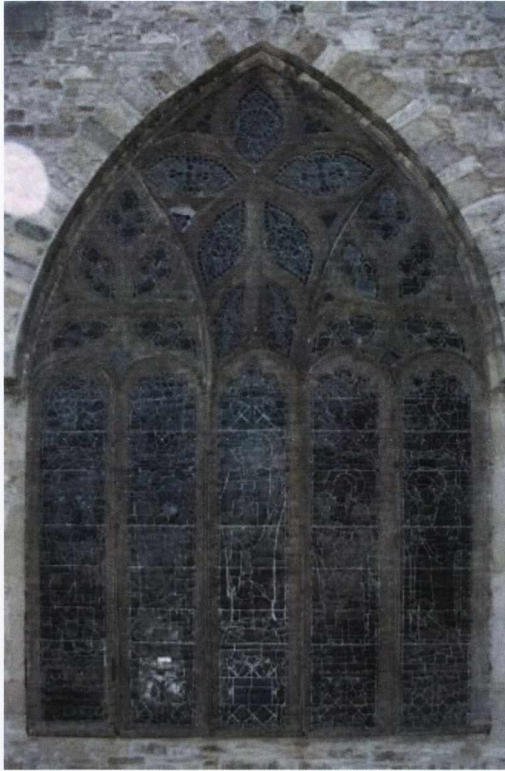
<b>Most likely:</b> 0.214m
<b>Within 10%:</b> 0.280
<b>Within 20%:</b> 0.293 0.294 0.295

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.798	0.794	0.797
TFH/LHAP		0.913	0.913	0.921
TFH/OWH	0.525			
OWW/OWH	0.603			
OWW/WHS	0.788			
OWH/AS	0.984			
LW/LHSP		0.556	0.422	0.547
LW/LHAP		0.487	0.367	0.473
LW/OWW		0.386	0.291	0.379
LW/OWH		0.233	0.176	0.229
LW/AS		0.380	0.286	0.373
OWW/LHSP		0.694	0.690	0.693
OWW/LHAP		0.793	0.794	0.800
MW/OWW		0.068	0.069	
MW/LW		0.176	0.233	0.179
MW/LW		0.180	0.238	0.183



**St. Mary's parish church, Clonmel: Chancel east**  
Co. Tipperary, Ormond



**Measurements**

Light1		Light2	
width	0.748	width	0.763
Light3		Light4	
width	0.766	width	0.740
Light5		Window	
width	0.729	overall width	3.740
Arch			
span	4.202		
height from spring	3.535		
Mullion 1		Mullion 3	
width	0.184	width	0.165
Mullion 2		Mullion 4	
width	0.178	width	0.180

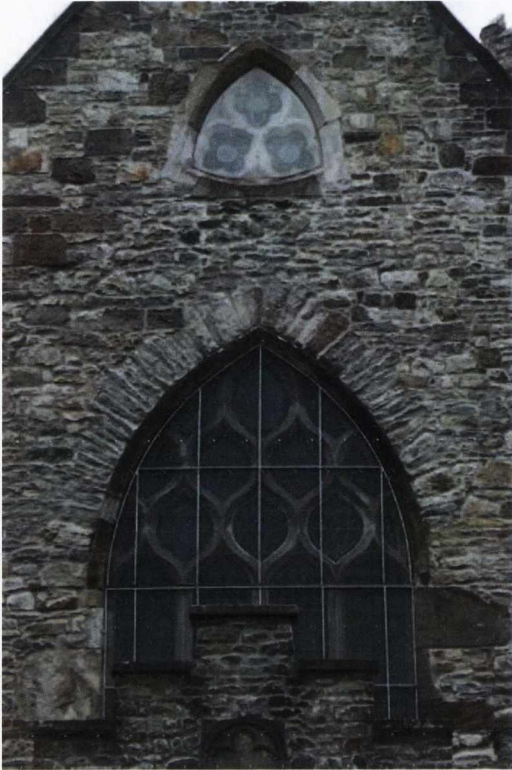
**Units**

<b>Most likely:</b> 0.280m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.274 0.371 0.372

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
	<b>Single</b>					
TFH/OWW	0.945					
OWW/AS	0.890					
LW/OWW		0.200	0.204	0.205	0.198	0.195
LW/AS		0.178	0.182	0.182	0.176	0.173
MW/OWW		0.049	0.047	0.044	0.048	
MW/LW		<b>0.247</b>	0.242	0.233	0.232	
MW/LW		0.215	0.223	0.243	<b>0.247</b>	

**St. Mary's parish church, Clonmel: Nave west**  
Co. Tipperary, Ormond



**Measurements**

None taken due to access issues

**Units**

**Proportions**

## Clontuskert Augustinian priory: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.541	width	0.551
overall height	3.949	overall height	3.967
height to spring	3.728	height to spring	3.759
Light3		Light4	
width	0.558	width	0.552
overall height	4.640	overall height	3.959
height to spring	3.762	height to spring	3.753
Light5		Window	
width	0.543	overall width	2.734
overall height	3.956	overall height	6.177
height to spring	3.752	height to spring	3.757
Arch			
span	2.779		
height from spring	2.420		
Mullion 1		Mullion 3	
width	0.167	width	0.150
Mullion 2		Mullion 4	
width	0.159	width	0.160

### Units

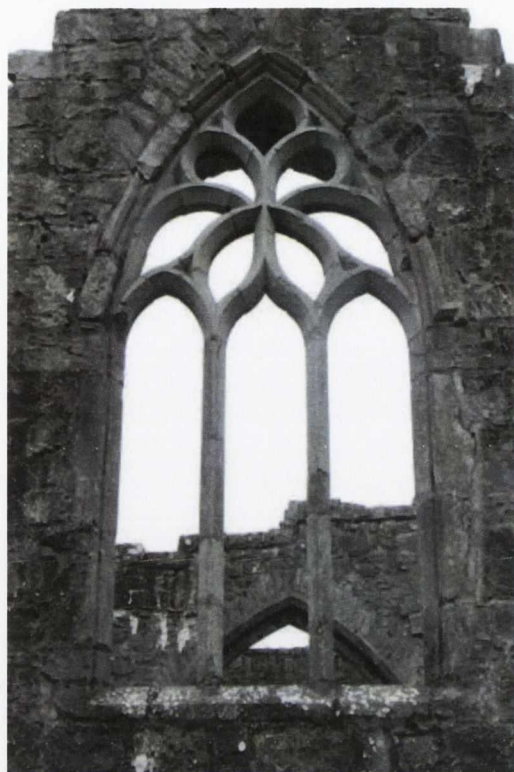
<b>Most likely:</b> 0.331m
<b>Within 10%:</b> 0.240 0.320
<b>Within 20%:</b> 0.313

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.649	0.644	0.643	0.645	0.645
TFH/LHAP		0.613	0.610	0.522	0.611	0.612
TFH/OWH	0.392					
OWW/OWH	0.443					
OWW/WHS	0.608					
OWH/AS	0.984					
LW/LHSP		0.145	0.146	0.148	0.147	0.145
LW/LHAP		0.137	0.139	0.120	0.139	0.137
LW/OWW		0.198	0.201	0.204	0.202	0.199
LW/OWH		0.088	0.089	0.090	0.089	0.088
LW/AS		0.195	0.198	0.201	0.199	0.195
OWW/LHSP		0.733	0.727	0.727	0.728	0.729
OWW/LHAP		0.692	0.689	0.589	0.691	0.691
MW/OWW		0.061	0.058	0.055	0.059	
MW/LW		0.309	0.303	0.289	0.285	
MW/LW		0.268	0.271	0.290	0.295	



## Clontuskert Augustinian priory: North transept north Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.551	width	0.512
overall height	1.821	overall height	1.824
height to spring	1.517	height to spring	1.551
Light3		Window	
width	0.573	overall width	1.633
overall height	1.822	overall height	3.013
height to spring	1.544	height to spring	1.596
Arch		Mullion 1	
span	1.666	width	0.116
height from spring	1.430		
		Mullion 2	
		width	0.120

### Units

<b>Most likely:</b> 0.332m
<b>Within 10%:</b> 0.238 0.331 0.333
<b>Within 20%:</b> 0.219 0.288 0.334 0.343 0.344 0.345 0.346

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.943	0.922	0.926
TFH/LHAP		0.785	0.784	0.785
TFH/OWH	0.475			
OWW/OWH	0.542			
OWW/WHS	0.977			
OWH/AS	0.981			
LW/LHSP		0.363	0.330	0.371
LW/LHAP		0.303	0.281	0.315
LW/OWW		0.337	0.314	0.351
LW/OWH		0.183	0.170	0.190
LW/AS		0.331	0.308	0.344
OWW/LHSP		0.929	0.950	0.945
OWW/LHAP		0.897	0.896	0.896
MW/OWW		0.071	0.073	
MW/LW		0.210	0.225	0.201
MW/LW		0.217	0.234	0.209

## Creevelea Franciscan friary: Chancel east Co. Leitrim, Connaught



### Measurements

Light1		Light2	
width	0.695	width	0.703
overall height	3.368	overall height	3.369
height to spring	3.041	height to spring	3.044
Light3		Light4	
width	0.708	width	0.682
overall height	3.369	overall height	3.347
height to spring	3.021	height to spring	3.034
Window		Arch	
overall width	2.785	span	2.998
overall height	5.792	height from spring	2.744
height to spring	3.050		
		Window frame	
Mullion 1		width	2.841
width	0.141		
Mullion 2		Mullion 3	
width	0.141	width	0.140

### Units

<b>Most likely:</b> 0.259m
<b>Within 10%:</b> 0.285 0.286 0.289
<b>Within 20%:</b> 0.264 0.265 0.266 0.348

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.902	0.901	0.908	0.904
TFH/LHAP		<b>0.815</b>	<b>0.814</b>	<b>0.815</b>	<b>0.820</b>
TFH/OWH	0.474				
OWW/OWH	0.481				
OWW/WHS	0.913				
OWH/AS	0.929				
LW/LHSP		0.228	0.231	0.234	0.225
LW/LHAP		0.206	0.209	0.210	0.204
LW/OWW		<b>0.249</b>	<b>0.252</b>	0.254	0.245
LW/OWH		0.120	0.121	0.122	0.118
LW/AS		0.232	0.234	0.236	0.227
OWW/LHSP		0.916	0.916	0.922	0.918
OWW/LHAP		<b>0.827</b>	<b>0.827</b>	<b>0.827</b>	<b>0.832</b>
MW/OWW		0.051	0.050	0.050	
MW/LW		0.203	0.201	0.200	
MW/LW		0.199	0.197	0.205	



## Creevelea Franciscan friary: Nave west Co. Leitrim, Connaught



### Measurements

Light 1	m
width	0.770
overall height	2.058
height to spring	1.737
Light 2	
width	0.787
overall height	2.037
height to spring	1.662
Window	
overall width	1.554
overall height	4.001
height to spring	1.794
Arch	
span	1.788
height from spring	2.209
Mullion 1	
width	0.128

### Units

<b>Most likely:</b> 0.316m
<b>Within 10%:</b> 0.256
<b>Within 20%:</b> 0.276

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.787	0.752
TFH/LHAP		0.932	0.922
TFH/OWH	0.552		
OWW/OWH	0.388		
OWW/WHS	0.866		
OWH/AS	0.869		
LW/LHSP		0.443	0.473
LW/LHAP		0.374	0.386
LW/OWW		0.495	0.506
LW/OWH		0.192	0.192
LW/AS		0.431	0.440
OWW/LHSP		0.894	0.935
OWW/LHAP		0.755	0.763
MW/OWW		0.082	
MW/LW		0.166	0.163



## Fenagh parish church: Chancel east Co. Leitrim, Connaught



### Measurements

Light1		Light2	
width	0.439	width	0.464
overall height	2.899	overall height	2.799
spring to arch peak	2.443	height to spring	2.453
Light3		Light4	
width	0.484	width	0.393
overall height	2.804	overall height	2.836
height to spring	2.449	height to spring	2.449
Window		Arch	
overall width	1.725	span	2.066
overall height	5.194	height from spring	2.738
height to spring	2.482		
Mullion 1		Mullion 3	
width	0.181	width	0.171
Mullion 2			
width	0.175		

### Units

<b>Most likely:</b> 0.264m
<b>Within 10%:</b> 0.263
<b>Within 20%:</b> 0.273

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP	0.000	0.892	0.896	0.895	0.894
TFH/LHAP	0.000	0.944	0.978	0.976	0.965
TFH/OWH	0.527				
OWW/OWH	0.332				
OWW/WHS	0.695				
OWH/AS	0.835				
LW/LHSP	0.000	0.180	0.189	0.198	0.161
LW/LHAP	0.000	0.151	0.166	0.173	0.139
LW/OWW	0.000	0.254	0.269	0.281	0.228
LW/OWH	0.000	0.085	0.089	0.093	0.076
LW/AS	0.000	0.212	0.224	0.234	0.190
OWW/LHSP	0.000	0.706	0.706	0.704	0.704
OWW/LHAP	0.000	0.595	0.616	0.615	0.608
MW/OWW	0.000	0.105	0.101	0.099	
MW/LW	0.000	0.413	0.391	0.377	
MW/LW	0.000	0.361	0.354	0.435	

**Fethard Augustinian priory: Chancel east**  
Co. Tipperary, Ormond



**Measurements**

Light1		Light2	
width		width	0.839
overall height		overall height	2.787
spring to arch peak		height to spring	2.418
Light3		Light4	
width	0.794	width	0.785
overall height	2.794	overall height	2.808
height to spring	2.430	height to spring	2.438
Window		Arch	
overall height	5.474	span	3.403
height to spring	2.473	height from spring	3.002
Mullion 1		Mullion 3	
width	0.167	width	0.180
Mullion 2			
width	0.181		

**Units**

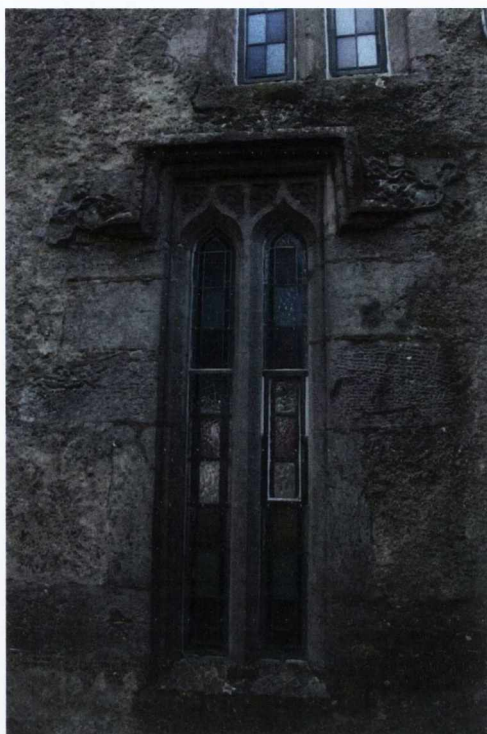
<b>Most likely:</b> 0.349m
<b>Within 10%:</b> 0.261 0.322 0.348
<b>Within 20%:</b> 0.317 0.323 0.332

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP			0.805	0.810	0.812
TFH/LHAP			0.928	0.931	0.935
TFH/OWH	0.548				
LW/LHSP			0.347	0.327	0.322
LW/LHAP			0.301	0.284	0.280
LW/OWH			0.153	0.145	0.143
LW/AS			<b>0.247</b>	0.233	0.231
MW/LW			0.199	0.216	
MW/LW		0.228	0.227	0.229	



**Fethard Augustinian priory: Chancel north, eastern lower  
Co. Tipperary, Ormond**



**Measurements**

Light1	m
width	0.348
overall height	1.896
height to spring	1.754
Light2	
width	0.341
overall height	1.900
height to spring	1.767
Window	
overall width	0.687
overall height	2.120
height to spring	1.750
Arch	
span	0.799
height from spring	0.372
Mullion 1	
width	0.104

**Units**

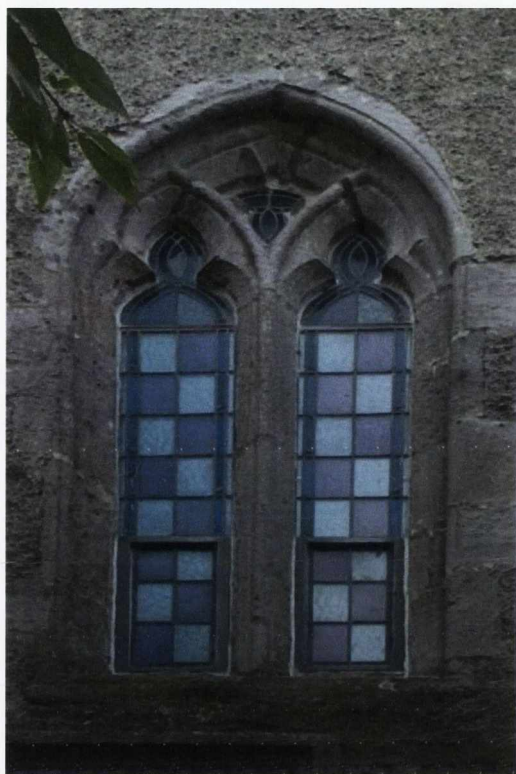
<b>Most likely:</b> 0.228m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.229

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
TFH/LHSP		0.212	0.210
TFH/LHAP		0.196	0.196
TFH/OWH	0.175		
OWW/OWH	0.324		
OWW/WHS	0.392		
OWH/AS	0.859		
LW/LHSP		0.199	0.193
LW/LHAP		0.184	0.179
LW/OWW		0.507	0.496
LW/OWH		0.164	0.164
LW/AS		0.436	0.426
OWW/LHSP		0.392	0.389
OWW/LHAP		0.362	0.361
MW/OWW		0.151	
MW/LW		0.298	0.304



**Fethard Augustinian priory: Chancel north, eastern upper  
Co. Tipperary, Ormond**



**Measurements**

Light1	m
width	0.213
overall height	1.776
height to spring	1.448
Light2	
width	0.224
overall height	1.734
height to spring	1.422
Window	
overall width	0.385
overall height	1.865
height to spring	1.266
Arch	
span	0.516
height from spring	0.603
Mullion 1	
width	0.064

**Units**

<b>Most likely:</b> 0.224m
<b>Within 10%:</b> 0.223
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.417	0.424
TFH/LHAP		0.340	0.348
TFH/OWH	0.323		
OWW/OWH	0.207		
OWW/WHS	0.305		
OWH/AS	0.747		
LW/LHSP		0.147	0.158
LW/LHAP		0.120	0.129
LW/OWW		0.554	0.581
LW/OWH		0.114	0.114
LW/AS		0.413	0.434
OWW/LHSP		0.266	0.271
OWW/LHAP		0.217	0.222
MW/OWW		0.167	
MW/LW		0.302	0.287

**Fethard Augustinian priory: Nave north, mid  
Co. Tipperary, Ormond**



**Measurements**

Light1		Light2	
width	0.617	width	0.626
overall height	3.280	overall height	3.388
height to spring	2.610	height to spring	2.594
Light3		Window	
width	0.597	overall width	1.840
overall height	3.280	overall height	4.833
height to spring	2.584	height to spring	2.621
Arch		Mullion 1	
span	1.978	width	0.129
height from spring	2.220		
		Mullion 2	
		width	0.121

**Units**

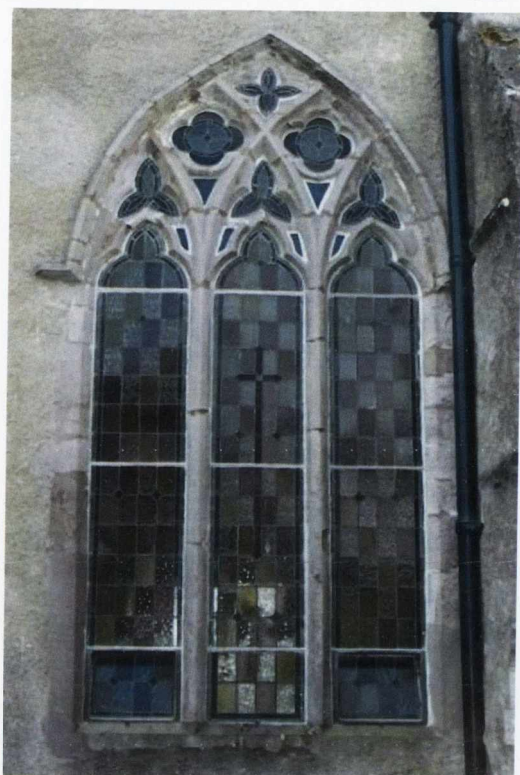
<b>Most likely:</b> 0.246m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.850	0.856	0.859
TFH/LHAP		0.677	0.655	0.677
TFH/OWH	0.459			
OWW/OWH	0.381			
OWW/WHS	0.702			
OWH/AS	0.930			
LW/LHSP		0.236	0.241	0.231
LW/LHAP		0.188	0.185	0.182
LW/OWW		0.335	0.340	0.325
LW/OWH		0.128	0.130	0.124
LW/AS		0.312	0.317	0.302
OWW/LHSP		0.705	0.709	0.712
OWW/LHAP		0.561	0.543	0.561
MW/OWW		0.070	0.066	
MW/LW		0.208	0.205	0.215
MW/LW		0.196	0.193	0.202



## Fethard Augustinian priory: Nave north, western Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.580	width	0.596
overall height	3.464	overall height	3.518
height to spring	2.856	height to spring	2.904
Light3		Window	
width	0.573	overall width	1.733
overall height	3.561	overall height	4.912
height to spring	2.944	height to spring	2.929
Arch		Mullion 1	
span	1.992	width	0.113
height from spring	1.991		
		Mullion 2	
		width	0.112

### Units

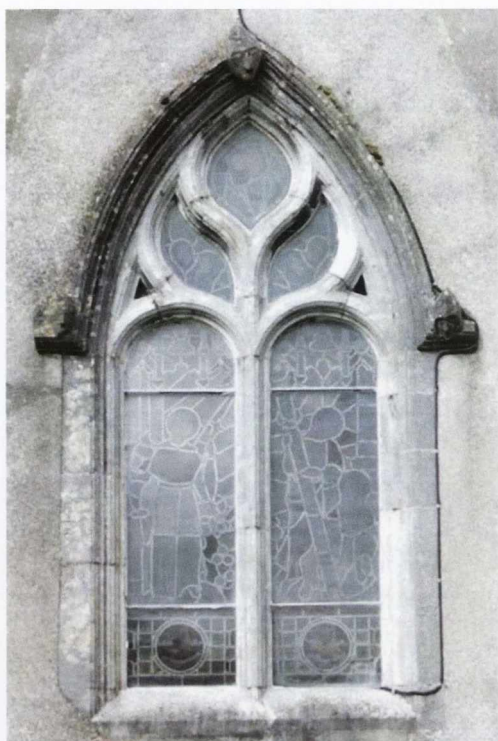
<b>Most likely:</b> 0.230m
<b>Within 10%:</b> 0.227 0.335
<b>Within 20%:</b> 0.226 0.343

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.697	0.686	0.676
TFH/LHAP		0.575	0.566	0.559
TFH/OWH	0.405			
OWW/OWH	0.353			
OWW/WHS	0.592			
OWH/AS	0.870			
LW/LHSP		0.203	0.205	0.195
LW/LHAP		0.168	0.169	0.161
LW/OWW		0.335	0.344	0.331
LW/OWH		0.118	0.121	0.117
LW/AS		0.291	0.299	0.288
OWW/LHSP		0.507	0.597	0.589
OWW/LHAP		0.500	0.493	0.487
MW/OWW		0.065	0.065	
MW/LW		0.195	0.190	0.197
MW/LW		0.194	0.189	0.196



## Fethard Augustinian priory: South transept, east Co. Tipperary, Ormond



### Measurements

Light1	m
width	0.630
overall height	1.502
height to spring	1.313
Light2	
width	0.628
overall height	1.504
height to spring	1.323
Window	
overall width	1.239
overall height	2.503
height to spring	1.327
Arch	
span	1.281
height from spring	1.176
Mullion 1	
width	0.115

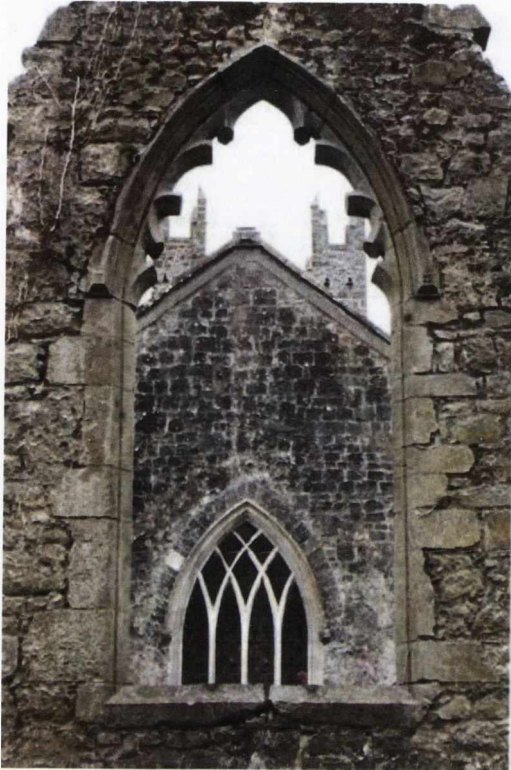
### Units

<b>Most likely:</b> 0.353m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.896	0.889
TFH/LHAP		0.783	0.782
TFH/OWH	0.470		
OWW/OWH	0.495		
OWW/WHS	0.934		
OWH/AS	0.967		
LW/LHSP		0.480	0.475
LW/LHAP		0.420	0.418
LW/OWW		0.509	0.507
LW/OWH		0.252	0.252
LW/AS		0.492	0.490
OWW/LHSP		0.943	0.936
OWW/LHAP		0.825	0.824
MW/OWW		0.093	
MW/LW		0.183	0.184

## Fethard Holy Trinity church: Chancel east Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.760	width	0.711
height to spring	2.679		
Light3		Window	
width	0.761	overall width	2.230
overall height		overall height	4.554
height to spring		height to spring	2.699
Arch		Mullion 1	
span	2.278	width	0.138
height from spring	1.856		
		Mullion 2	
		width	0.137

### Units

<b>Most likely:</b> 0.217m
<b>Within 10%:</b> 0.212 0.276 0.285
<b>Within 20%:</b> 0.253 0.286

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.693		
TFH/LHAP	0.408			
OWW/OWH	0.490			
OWW/WHS	0.826			
OWH/AS	0.979			
LW/LHSP		0.284		
LW/OWW		0.341	0.319	0.341
LW/OWH		0.167	0.156	0.167
LW/AS		0.334	0.312	0.334
OWW/LHSP		0.832		
MW/OWW		0.062	0.061	
MW/LW		0.182	0.195	0.182
MW/LW		0.180	0.192	0.180



## Fethard Holy Trinity church: South aisle east Co. Tipperary, Ormond



### Measurements

Light1		Light4	
height to spring	2.374	height to spring	2.381
Window		Window Frame	
overall width	2.040	overall width	2.718
overall height	4.133	overall height	2.025
height to spring	2.379		
Arch			
span	2.026		
height from spring	1.754		

### Units

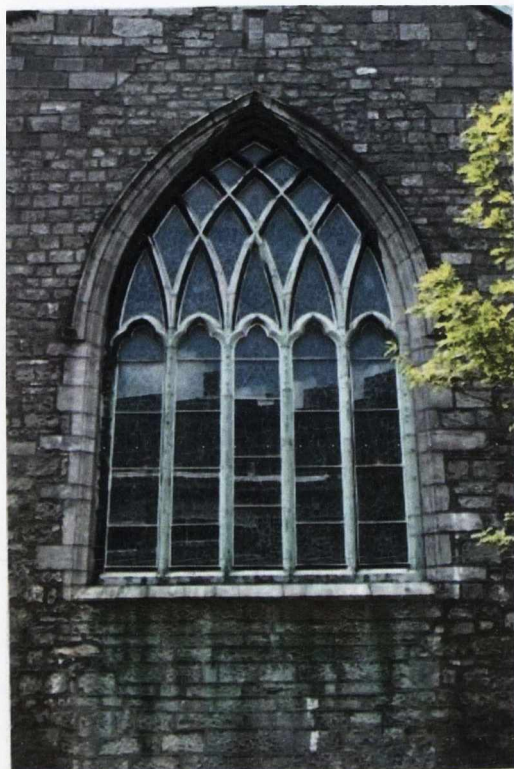
<b>Most likely:</b> 0.352m
<b>Within 10%:</b> 0.264
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
Tracery field height to light height (at springing point)		0.739	0.737
Tracery field height to overall window height	0.425		
Overall window width to overall window height	0.494		
Overall window width to window height to spring	0.858		
Overall window width to arch span	0.993		
Overall window width to light height (at springing point)		0.860	0.857
Frame width to overall window width	0.751		
Frame width to overall window height	0.658		
Frame width to window height to spring	0.875		
Frame width to arch span	0.746		
Frame width to arch height from spring	0.646		
Frame height to overall window width	0.992		
Frame height to overall window height	0.490		
Frame height to window height to spring	0.851		
Frame height to arch span	0.999		
Frame height to arch height from spring	0.866		



## St. Nicholas collegiate church: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.806	width	0.802
overall height	3.408	overall height	3.415
height to spring	2.991	height to spring	3.001
Light3		Light4	
width	0.789	width	0.811
overall height	3.396	overall height	3.403
height to spring	2.983	height to spring	2.983
Light5		Window	
width	0.785	overall width	3.982
overall height	3.420	overall height	6.563
height to spring	2.993	height to spring	3.021
Arch			
span	4.493		
height from spring	3.557		
Mullion 1		Mullion 3	
width	0.045	width	0.049
Mullion 2		Mullion 4	
width	0.050	width	0.048

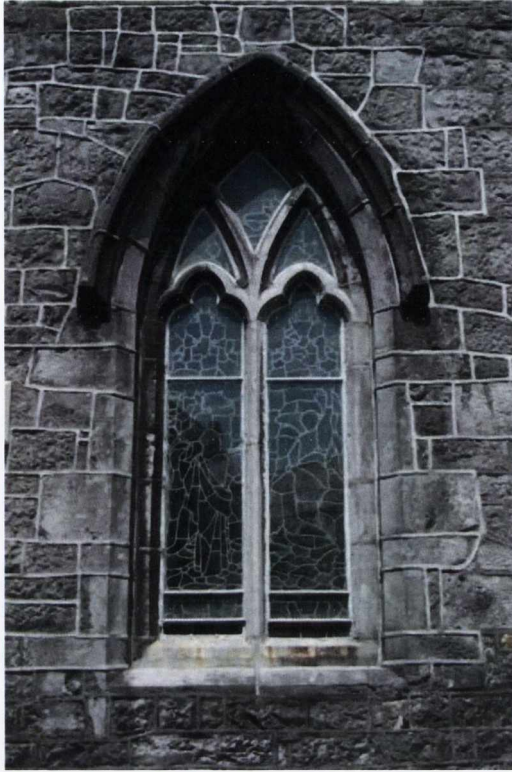
### Units

<b>Most likely:</b> 0.290m
<b>Within 10%:</b> 0.320 0.346
<b>Within 20%:</b> 0.285 0.289 0.31 0.319 0.321 0.322 0.331 0.332 0.342 0.345 0.347

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.841	0.844	0.839	0.839	0.841
TFH/LHAP		0.958	0.960	0.955	0.957	0.961
TFH/OWH	0.542					
OWW/OWH	0.607					
OWW/WHS	0.460					
OWH/AS	0.886					
LW/LHSP		0.270	0.267	0.265	0.272	0.262
LW/LHAP		0.237	0.235	0.232	0.238	0.229
LW/OWW		0.202	0.201	0.198	0.204	0.197
LW/OWH		0.123	0.122	0.120	0.124	0.120
LW/AS		0.179	0.179	0.176	0.181	0.175
OWW/LHSP		0.751	0.754	0.749	0.749	0.752
OWW/LHAP		0.856	0.858	0.853	0.855	0.859
MW/OWW		0.011	0.013	0.012	0.012	
MW/LW		0.056	0.056	0.063	0.064	
MW/LW		0.062	0.061	0.059	0.061	

**St. Nicholas collegiate church: Chancel south, eastern  
Co. Galway, Connaught**



**Measurements**

Light1	m
width	0.642
overall height	2.437
height to spring	2.074
Light2	
width	0.607
overall height	2.425
height to spring	2.068
Window	
overall width	1.249
overall height	3.679
height to spring	2.050
Arch	
span	1.817
height from spring	1.644
Mullion 1	
width	0.059

**Units**

<b>Most likely:</b> 0.235m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.236

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.793	0.795
TFH/LHAP		0.675	0.678
TFH/OWH	0.447		
OWW/OWH	0.339		
OWW/WHS	0.609		
OWH/AS	0.687		
LW/LHSP		0.310	0.293
LW/LHAP		0.264	0.250
LW/OWW		0.514	0.486
LW/OWH		0.175	0.175
LW/AS		0.354	0.334
OWW/LHSP		0.602	0.604
OWW/LHAP		0.513	0.515
MW/OWW		0.048	
MW/LW		0.092	0.098



**St. Nicholas collegiate church: Chancel south, mid  
Co. Galway, Connaught**



**Measurements**

Light1	m
width	0.646
overall height	2.381
height to spring	2.039
Light2	
width	0.628
overall height	2.390
height to spring	2.037
Window	
overall width	1.273
overall height	3.675
height to spring	2.064
Arch	
span	1.878
height from spring	1.626
Mullion 1	
width	0.056

**Units**

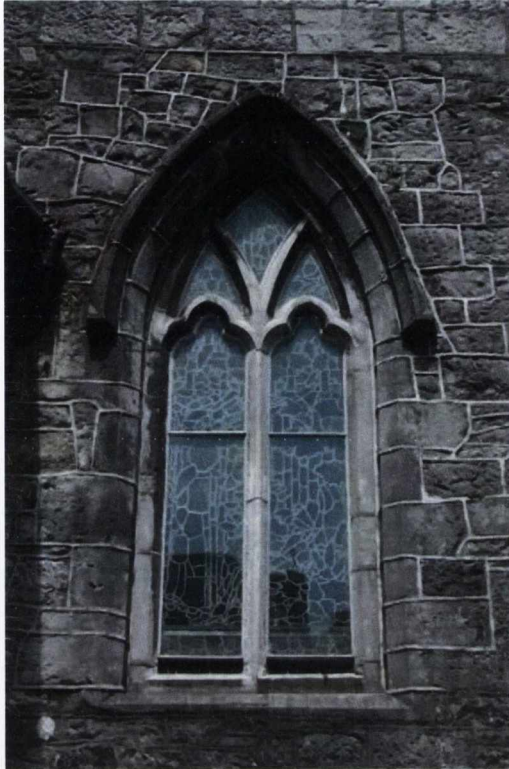
<b>Most likely:</b> 0.325m
<b>Within 10%:</b> 0.217
<b>Within 20%:</b> 0.216 0.256 0.272 0.324 0.341 0.342 0.357

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.798	0.798
TFH/LHAP		0.683	0.680
TFH/OWH	0.442		
OWW/OWH	0.346		
OWW/WHS	0.617		
OWH/AS	0.678		
LW/LHSP		0.317	0.308
LW/LHAP		0.271	0.263
LW/OWW		0.507	0.493
LW/OWH		0.176	0.176
LW/AS		0.344	0.334
OWW/LHSP		0.625	0.625
OWW/LHAP		0.535	0.533
MW/OWW		0.044	
MW/LW		0.086	0.089



**St. Nicholas collegiate church: Chancel south, western  
Co. Galway, Connaught**



**Measurements**

Light1	m
width	0.617
overall height	2.535
height to spring	2.159
Light2	
width	0.629
overall height	2.523
height to spring	2.162
Window	
overall width	1.246
overall height	3.838
height to spring	2.114
Arch	
span	1.791
height from spring	1.732
Mullion 1	
width	0.030

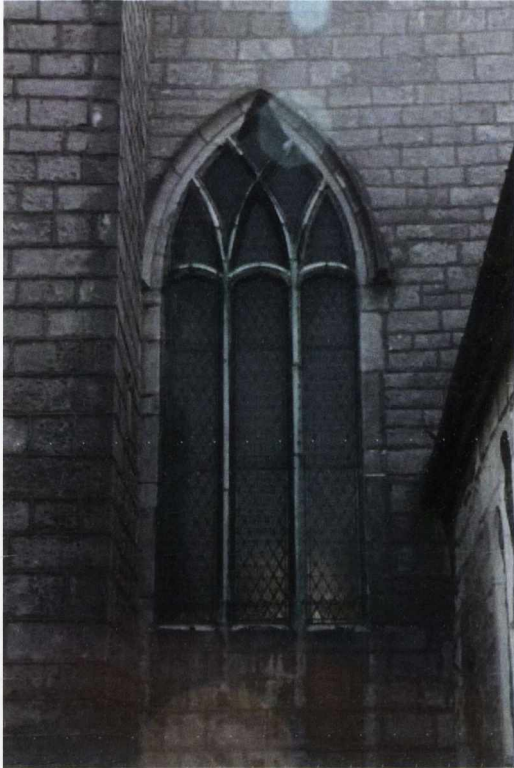
**Units**

<b>Most likely:</b> 0.360m
<b>Within 10%:</b> 0.361 0.372
<b>Within 20%:</b> 0.216 0.325 0.326 0.359

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.802	0.801
TFH/LHAP		0.683	0.687
TFH/OWH	0.451		
OWW/OWH	0.325		
OWW/WHS	0.589		
OWH/AS	0.696		
LW/LHSP		0.286	0.291
LW/LHAP		0.243	0.249
LW/OWW		0.495	0.505
LW/OWH		0.161	0.161
LW/AS		0.345	0.351
OWW/LHSP		0.577	0.576
OWW/LHAP		0.491	0.494
MW/OWW		0.024	
MW/LW		0.048	0.048

**St. Nicholas collegiate church: Nave north, eastern**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.628	width	0.624
overall height	3.435	overall height	3.429
height to spring	3.218	height to spring	3.219
Light3		Window	
width	0.599	overall width	1.851
overall height	3.441	overall height	5.163
height to spring	3.231	height to spring	3.171
Arch		Mullion 1	
span	2.038	width	0.118
height from spring	1.992		
		Mullion 2	
		width	0.127

**Units**

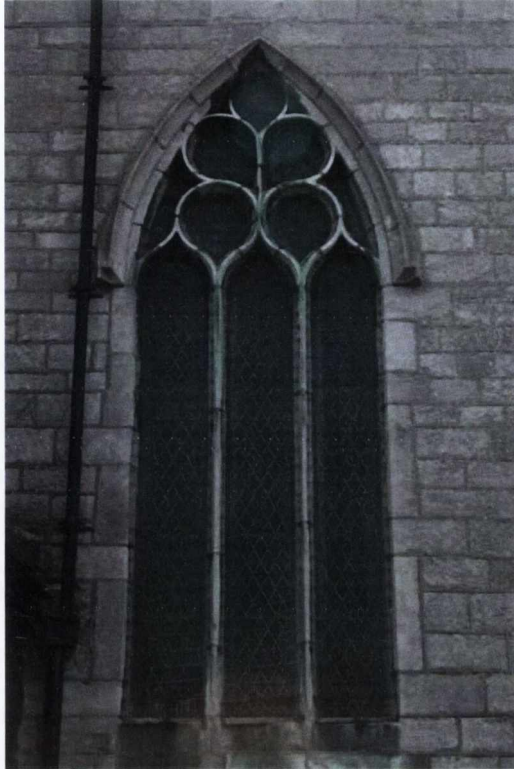
<b>Most likely:</b> 0.254m
<b>Within 10%:</b> 0.239 0.368 0.369
<b>Within 20%:</b> 0.235 0.370

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.619	0.619	0.617
TFH/LHAP		0.580	0.581	0.579
TFH/OWH	0.386			
OWW/OWH	0.358			
OWW/WHS	0.584			
OWH/AS	0.908			
LW/LHSP		0.195	0.194	0.185
LW/LHAP		0.183	0.182	0.174
LW/OWW		0.339	0.337	0.324
LW/OWH		0.122	0.121	0.116
LW/AS		0.308	0.306	0.294
OWW/LHSP		0.575	0.575	0.573
OWW/LHAP		0.539	0.540	0.538
MW/OWW		0.064	0.069	
MW/LW		0.187	0.188	0.196
MW/LW		0.202	0.204	0.212



**St. Nicholas collegiate church: Nave north, mid  
Co. Galway, Connaught**



**Measurements**

Light1		Light2	
width	0.615	width	0.634
overall height	3.739	overall height	3.767
height to spring	3.269	height to spring	3.274
Light3		Window	
width	0.601	overall width	1.849
overall height	3.752	overall height	5.283
height to spring	3.276	height to spring	3.241
Arch		Mullion 1	
span	2.009	width	0.119
height from spring	2.042		
		Mullion 2	
		width	0.120

**Units**

<b>Most likely:</b> 0.364m
<b>Within 10%:</b> 0.240
<b>Within 20%:</b> 0.363

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.625	0.624	0.623
TFH/LHAP		0.546	0.542	0.544
TFH/OWH	0.387			
OWW/OWH	0.350			
OWW/WHS	0.571			
OWH/AS	0.921			
LW/LHSP		0.188	0.194	0.183
LW/LHAP		0.165	0.168	0.160
LW/OWW		0.333	0.343	0.325
LW/OWH		0.116	0.120	0.114
LW/AS		0.306	0.315	0.299
OWW/LHSP		0.566	0.565	0.565
OWW/LHAP		0.495	0.491	0.493
MW/OWW		0.064	0.065	
MW/LW		0.193	0.187	0.197
MW/LW		0.195	0.190	0.200



**St. Nicholas collegiate church: Nave north, western  
Co. Galway, Connaught**



**Measurements**

Light1		Light2	
width	0.596	width	0.629
overall height	3.740	overall height	3.726
height to spring	3.417	height to spring	3.412
Light3		Window	
width	0.609	overall width	1.833
overall height	3.713	overall height	5.455
height to spring	3.398	height to spring	3.373
Arch		Mullion 1	
span	2.057	width	0.132
height from spring	2.085		
		Mullion 2	
		width	0.126

**Units**

<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.349
<b>Within 20%:</b>

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.610	0.611	0.614
TFH/LHAP		0.557	0.562	0.561
TFH/OWH	0.382			
OWW/OWH	0.336			
OWW/WHS	0.543			
OWH/AS	0.891			
LW/LHSP		0.174	0.184	0.179
LW/LHAP		0.159	0.169	0.164
LW/OWW		0.325	0.343	0.332
LW/OWH		0.109	0.115	0.112
LW/AS		0.289	0.306	0.296
OWW/LHSP		0.536	0.537	0.539
OWW/LHAP		0.490	0.494	0.494
MW/OWW		0.072	0.194	
MW/LW		0.222	0.210	0.217
MW/LW		0.195	0.190	0.200

**St. Nicholas collegiate church: Nave south, eastern**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.700	width	0.718
overall height	1.471	overall height	1.546
height to spring	1.010	height to spring	1.023
Light3		Window	
width	0.704	overall width	2.151
overall height	1.578	overall height	2.428
height to spring	1.108	height to spring	0.271
Arch		Mullion 1	
span	2.653	width	0.014
height from spring	2.399		
		Mullion 2	
		width	0.091

**Units**

<b>Most likely:</b> 0.265m
<b>Within 10%:</b> 0.266 0.272
<b>Within 20%:</b> 0.216 0.256 0.272 0.324 0.341 0.342 0.357

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.421	0.426	0.462
TFH/LHAP		0.613	0.644	0.658
TFH/OWH	0.988			
OWW/OWH				
OWW/WHS				
OWH/AS				
LW/LHSP		0.693	0.702	0.636
LW/LHAP		0.476	0.465	0.446
LW/OWW				
LW/OWH		0.288	0.296	0.290
LW/AS		0.264	0.271	0.265
OWW/LHSP				
OWW/LHAP				
MW/OWW				
MW/LW		0.020	0.019	0.020
MW/LW		0.130	0.126	0.129



**St. Nicholas collegiate church: Nave south, mid  
Co. Galway, Connaught**



**Measurements**

Light1		Light2	
width	0.701	width	0.720
overall height	4.194	overall height	4.245
height to spring	3.746	height to spring	3.733
Light3		Window	
width	0.715	overall width	2.135
overall height	4.202	overall height	6.019
height to spring	3.787	height to spring	3.677
Arch		Mullion 1	
span	2.625	width	0.031
height from spring	2.348		
		Mullion 2	
		width	0.020

**Units**

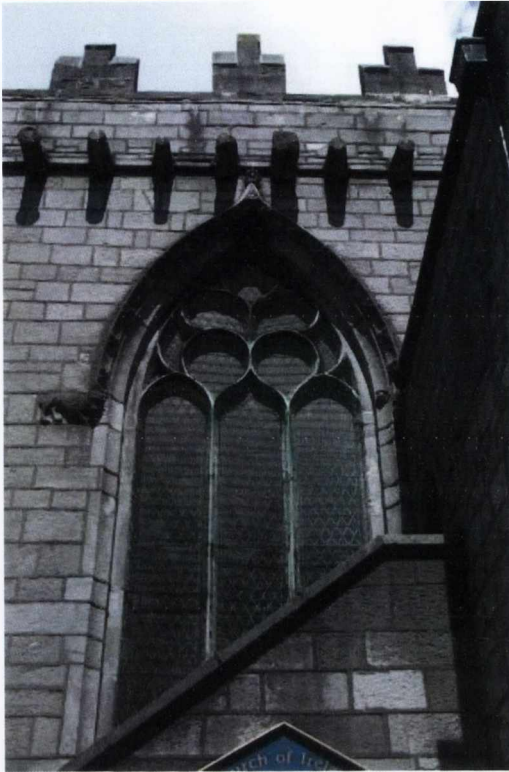
<b>Most likely:</b> 0.356m
<b>Within 10%:</b> 0.293 0.355 0.361
<b>Within 20%:</b> 0.213 0.304 0.357 0.358

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.627	0.629	0.620
TFH/LHAP		0.560	0.553	0.559
TFH/OWH	0.390			
OWW/OWH	0.355			
OWW/WHS	0.581			
OWH/AS	0.814			
LW/LHSP		0.187	0.193	0.189
LW/LHAP		0.167	0.170	0.170
LW/OWW		0.328	0.337	0.335
LW/OWH		0.116	0.120	0.119
LW/AS		0.267	0.274	0.272
OWW/LHSP		0.570	0.572	0.564
OWW/LHAP		0.509	0.503	0.508
MW/OWW		0.015	0.009	
MW/LW		0.044	0.043	0.044
MW/LW		0.028	0.027	0.027



**St. Nicholas collegiate church: Nave south, western**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.714	width	0.723
overall height	1.435	overall height	1.497
height to spring	0.976	height to spring	0.968
Light3		Window	
width	0.718	overall width	2.153
overall height	1.487	overall height	3.355
height to spring	1.052	height to spring	0.995
Arch		Mullion 1	
span	2.654	width	0.016
height from spring	2.391		

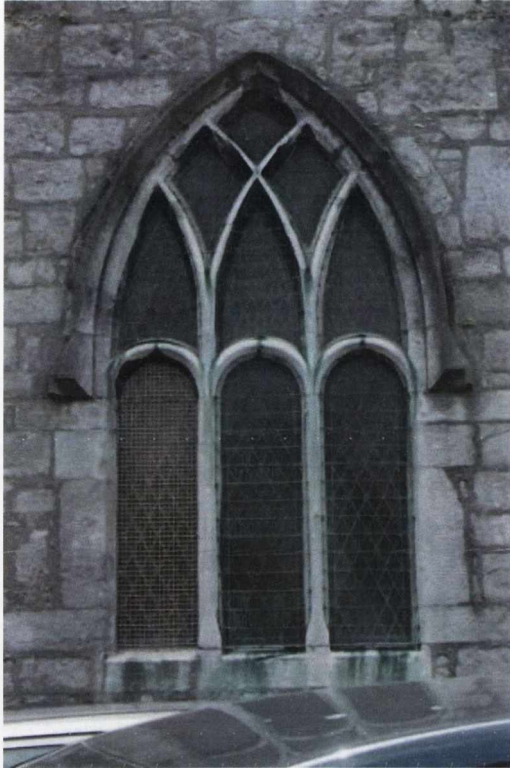
**Units**

<b>Most likely:</b> 0.280m
<b>Within 10%:</b> 0.279
<b>Within 20%:</b> 0.275 0.276 0.277 0.278

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.408	0.405	0.440
TFH/LHAP		0.600	0.626	0.622
TFH/OWH	0.713			
OWW/OWH	0.642			
OWW/WHS	0.462			
OWH/AS	0.811			
LW/LHSP		0.732	0.746	0.682
LW/LHAP		0.498	0.483	0.482
LW/OWW		0.332	0.336	0.333
LW/OWH		0.213	0.215	0.214
LW/AS		0.269	0.272	0.270
OWW/LHSP		0.454	0.450	0.489
OWW/LHAP		0.666	0.696	0.691
MW/OWW		0.007	0.042	
MW/LW		0.022	0.022	0.022
MW/LW		0.128	0.127	0.127

**St. Nicholas collegiate church: North chapel north**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.555	width	0.559
overall height	1.654	overall height	1.646
height to spring	1.394	height to spring	1.382
Light3		Window	
width	0.552	overall width	1.664
overall height	1.647	overall height	3.171
height to spring	1.376	height to spring	1.334
Arch		Mullion 1	
span	1.803	width	0.122
height from spring	1.837		
		Mullion 2	
		width	0.124

**Units**

<b>Most likely:</b> 0.364m
<b>Within 10%:</b> 0.240
<b>Within 20%:</b> 0.363

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.759	0.752	0.749
TFH/LHAP		0.900	0.896	0.897
TFH/OWH	0.579			
OWW/OWH	0.525			
OWW/WHS	0.802			
OWH/AS	0.923			
LW/LHSP		0.398	0.404	0.401
LW/LHAP		0.336	0.340	0.335
LW/OWW		0.334	0.336	0.332
LW/OWH		0.175	0.176	0.174
LW/AS		0.308	0.310	0.306
OWW/LHSP		0.838	0.831	0.827
OWW/LHAP		0.994	0.989	0.990
MW/OWW		0.073	0.074	
MW/LW		0.220	0.218	0.221
MW/LW		0.223	0.222	0.225



**St. Nicholas collegiate church: North transept north**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.585	width	0.585
overall height	3.351	overall height	3.341
height to spring	2.991	height to spring	2.970
Light3		Window	
width	0.592	overall width	1.758
overall height	3.345	overall height	4.375
height to spring	2.976	height to spring	2.925
Arch		Mullion 1	
span	1.736	width	0.033
height from spring	1.451		
		Mullion 2	
		width	0.039

**Units**

<b>Most likely:</b> 0.351m
<b>Within 10%:</b> 0.352
<b>Within 20%:</b> 0.216 0.256 0.272 0.324 0.341 0.342 0.357

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.485	0.489	0.488
TFH/LHAP		0.433	0.434	0.434
TFH/OWH	0.332			
OWW/OWH	0.402			
OWW/WHS	0.601			
OWH/AS	0.988			
LW/LHSP		0.195	0.197	0.199
LW/LHAP		0.174	0.175	0.177
LW/OWW		0.333	0.333	0.337
LW/OWH		0.134	0.134	0.135
LW/AS		0.337	0.337	0.341
OWW/LHSP		0.588	0.592	0.590
OWW/LHAP		0.524	0.526	0.525
MW/OWW		0.019	0.022	
MW/LW		0.057	0.057	0.056
MW/LW		0.067	0.067	0.067



**St. Nicholas collegiate church: South transept east**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.587	width	0.591
overall height	2.324	overall height	2.314
height to spring	2.005	height to spring	2.007
Light3		Window	
width	0.581	overall width	1.759
overall height	2.322	overall height	3.514
height to spring	2.007	height to spring	1.959
Arch		Mullion 1	
span	1.838	width	0.029
height from spring	1.557		
		Mullion 2	
		width	0.029

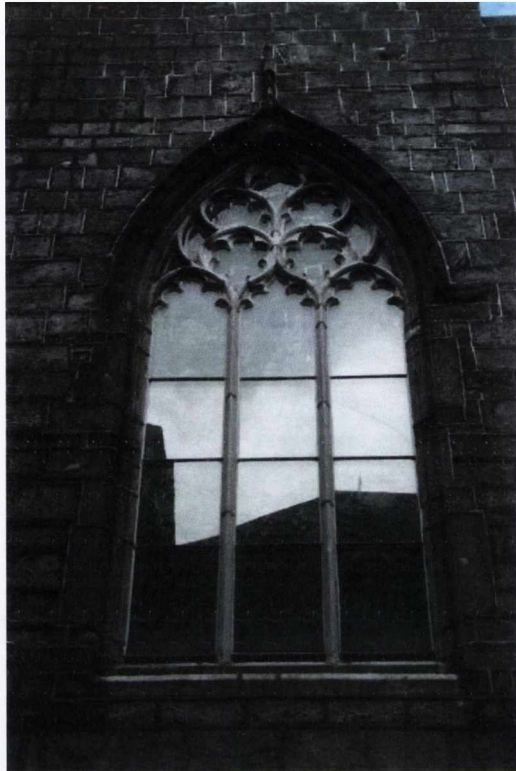
**Units**

<b>Most likely:</b> 0.349m
<b>Within 10%:</b> 0.334 0.350 0.366
<b>Within 20%:</b> 0.348 0.365

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.776	0.775	0.776
TFH/LHAP		0.670	0.673	0.670
TFH/OWH	0.443			
OWW/OWH	0.500			
OWW/WHS	0.898			
OWH/AS	0.957			
LW/LHSP		0.293	0.294	0.290
LW/LHAP		0.253	0.255	0.250
LW/OWW		0.334	0.336	0.331
LW/OWH		0.167	0.168	0.165
LW/AS		0.319	0.321	0.316
OWW/LHSP		0.877	0.876	0.876
OWW/LHAP		0.757	0.760	0.757
MW/OWW		0.016	0.017	
MW/LW		0.049	0.049	0.050
MW/LW		0.050	0.049	0.050

**St. Nicholas collegiate church: South transept south**  
Co. Galway, Connaught



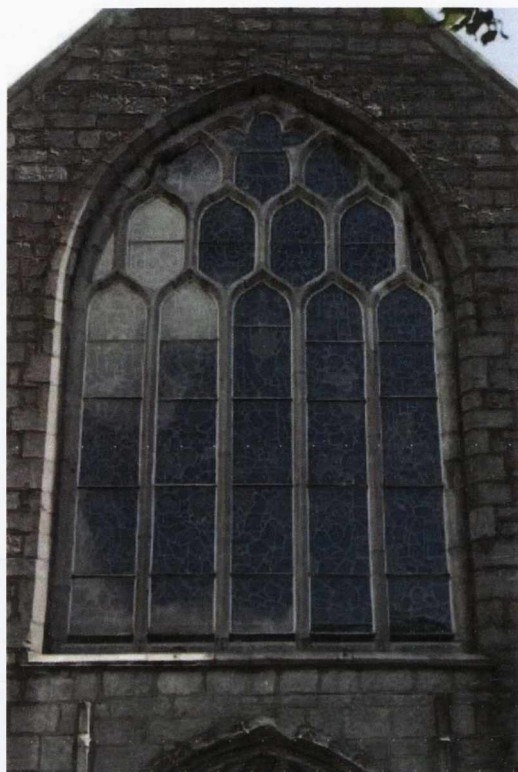
**Measurements**

None taken due to access issues

**Units**

**Proportions**

## St. Nicholas collegiate church: Nave west Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.764	width	0.791
overall height	4.460	overall height	4.458
height to spring	3.930	height to spring	3.924
Light3		Light4	
width	0.801	width	0.798
overall height	4.451	overall height	4.459
height to spring	3.933	height to spring	3.949
Light5		Window	
width	0.801	overall width	3.954
overall height	4.482	overall height	7.040
height to spring	3.973	height to spring	3.857
Arch			
span	4.484		
height from spring	3.188		
Mullion 1		Mullion 3	
width	0.145	width	0.144
Mullion 2		Mullion 4	
width	0.140	width	0.146

### Units

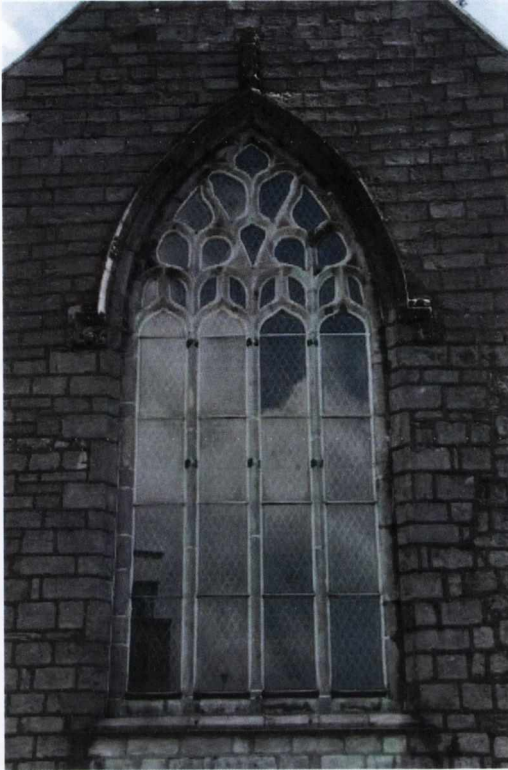
<b>Most likely:</b> 0.227m
<b>Within 10%:</b> 0.290
<b>Within 20%:</b> 0.288 0.289

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.811	0.813	0.811	0.807	0.803
TFH/LHAP		0.715	0.715	0.716	0.715	0.711
TFH/OWH	0.453					
OWW/OWH	0.562					
OWW/WHS	0.548					
OWH/AS	0.882					
LW/LHSP		0.194	0.202	0.204	0.202	0.202
LW/LHAP		0.171	0.177	0.180	0.179	0.179
LW/OWW		0.193	0.200	0.203	0.202	0.202
LW/OWH		0.109	0.112	0.114	0.113	0.114
LW/AS		0.170	0.176	0.179	0.178	0.179
OWW/LHSP		0.994	0.992	0.995	0.999	0.995
OWW/LHAP		0.887	0.887	0.888	0.887	0.882
MW/OWW		0.037	0.035	0.036	0.037	
MW/LW		0.190	0.183	0.177	0.175	
MW/LW		0.180	0.181	0.183	0.182	



**St. Nicholas collegiate church: North aisle west**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.673	width	0.686
overall height	4.767	overall height	4.754
height to spring	4.308	height to spring	4.304
Light3		Light4	
width	0.693	width	0.671
overall height	4.758	overall height	4.760
height to spring	4.284	height to spring	4.287
Window		Arch	
overall width	2.721	span	3.310
overall height	7.429	height from spring	3.192
height to spring	4.242		
		Mullion 2	
Mullion 1		width	0.120
width	0.122		
		Mullion 3	
		width	0.121

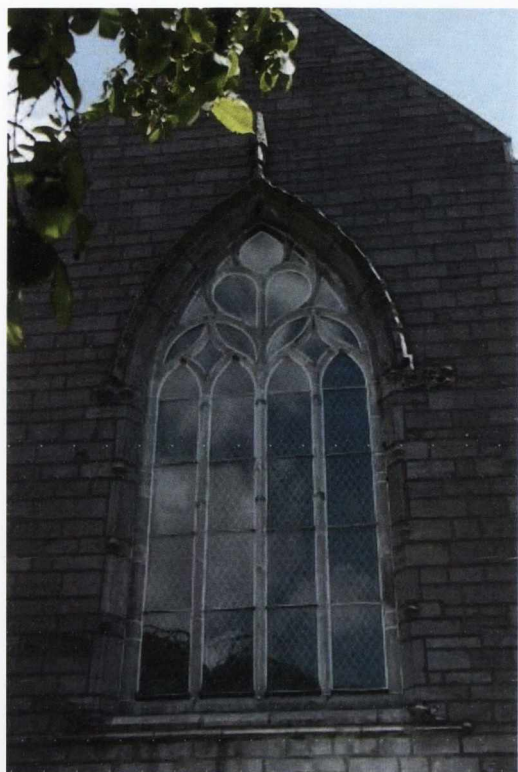
**Units**

<b>Most likely:</b> 0.340m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.741	0.741	0.745	0.744
TFH/LHAP		0.670	0.671	0.671	0.671
TFH/OWH	0.430				
OWW/OWH	0.366				
OWW/WHS	0.641				
OWH/AS	0.822				
LW/LHSP		0.156	0.159	0.162	0.156
LW/LHAP		0.141	0.144	0.146	0.141
LW/OWW		0.247	0.252	0.255	0.246
LW/OWH		0.091	0.092	0.093	0.090
LW/AS		0.203	0.207	0.209	0.203
OWW/LHSP		0.632	0.632	0.635	0.635
OWW/LHAP		0.571	0.572	0.572	0.572
MW/OWW		0.045	0.044	0.045	
MW/LW		0.182	0.178	0.175	
MW/LW		0.173	0.175	0.181	

## St. Nicholas collegiate church: South aisle west Co. Galway, Connaught



### Measurements

Light1		Light2	
width	1.050	width	0.708
overall height	4.655	overall height	4.646
height to spring	4.050	height to spring	4.026
Light3		Light4	
width	0.716	width	1.005
overall height	4.652	overall height	4.666
height to spring	4.030	height to spring	4.047
Window		Arch	
overall width	3.266	span	5.466
overall height	7.546	height from spring	3.942
height to spring	4.703		
		Mullion 2	
Mullion 1		width	0.019
width	0.022		
		Mullion 3	
		width	0.021

### Units

<b>Most likely:</b> 0.282m
<b>Within 10%:</b> 0.303 0.349 0.350
<b>Within 20%:</b> 0.264 0.269 0.304

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.973	0.979	0.978	0.974
TFH/LHAP		0.847	0.848	0.847	0.845
TFH/OWH	0.522				
OWW/OWH	0.433				
OWW/WHS	0.694				
OWH/AS	0.598				
LW/LHSP		0.259	0.176	0.178	0.248
LW/LHAP		0.226	0.152	0.154	0.215
LW/OWW		0.321	0.217	0.219	0.308
LW/OWH		0.139	0.094	0.095	0.133
LW/AS		0.192	0.130	0.131	0.184
OWW/LHSP		0.807	0.807	0.810	0.807
OWW/LHAP		0.702	0.703	0.702	0.700
MW/OWW		0.007	0.006	0.006	
MW/LW		0.021	0.031	0.026	
MW/LW		0.026	0.029	0.021	



**St. Mary's collegiate church, Gowran: North aisle west**  
Co. Kilkenny, Ormond



**Measurements**

Light1	m
width	0.708
overall height	2.153
height to spring	1.781
Light2	
width	0.712
overall height	2.161
height to spring	1.781
Window	
overall width	1.419
overall height	2.921
height to spring	1.784
Arch	
span	1.545
height from spring	1.138
Mullion 1	
width	0.258

**Units**

<b>Most likely:</b> 0.282m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
	<b>Single</b>		
TFH/LHSP		0.639	0.639
TFH/LHAP		0.529	0.527
TFH/OWH	0.390		
OWW/OWH	0.486		
OWW/WHS	0.795		
OWH/AS	0.918		
LW/LHSP		0.397	0.400
LW/LHAP		0.329	0.329
LW/OWW		0.499	0.502
LW/OWH		0.242	0.242
LW/AS		0.458	0.461
OWW/LHSP		0.797	0.797
OWW/LHAP		0.659	0.657
MW/OWW		0.182	
MW/LW		0.365	0.363



**St. Mary's collegiate church, Gowran: South aisle west**  
Co. Kilkenny, Ormond



**Measurements**

Light1	m
width	0.729
overall height	2.158
height to spring	1.784
Light2	
width	0.706
overall height	2.143
height to spring	1.779
Window	
overall width	1.435
overall height	2.881
height to spring	1.776
Arch	
span	1.578
height from spring	1.105
Mullion 1	
width	0.256

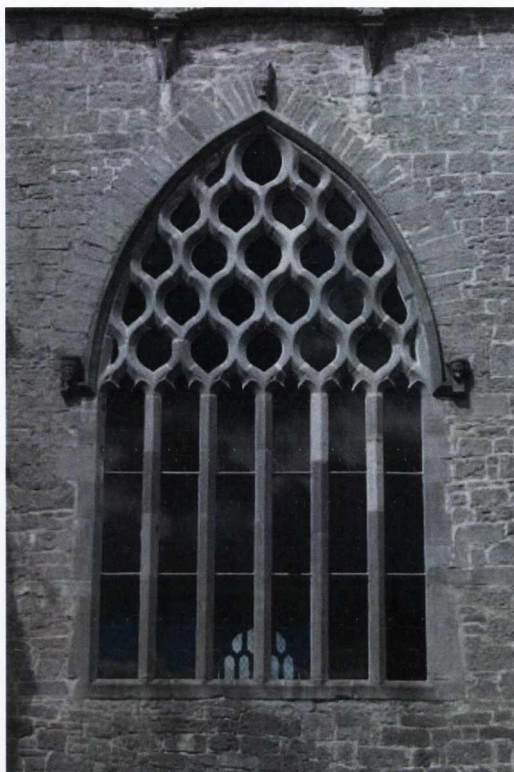
**Units**

<b>Most likely:</b> 0.359m
<b>Within 10%:</b> 0.238 0.268 0.281 0.295 0.309 0.357 0.358 0.360
<b>Within 20%:</b> 0.254 0.267 0.273 0.279 0.280 0.308 0.332 0.333 0.356

**Proportions**

		<b>Light/ Mullion1</b>	<b>Light/ Mullion2</b>
	<b>Single</b>		
TFH/LHSP		0.620	0.621
TFH/LHAP		0.512	0.516
TFH/OWH	0.384		
OW W/OWH	0.498		
OW W/WHS	0.808		
OWH/AS	0.909		
LW/LHSP		0.409	0.397
LW/LHAP		0.338	0.330
LW/OW W		0.508	0.492
LW/OWH		0.253	0.253
LW/AS		0.462	0.447
OW W/LHSP		0.804	0.806
OW W/LHAP		0.665	0.670
MW/OW W		0.179	
MW/LW		0.352	0.363

## Holycross Cistercian abbey: Chancel east Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.517	width	0.535
overall height	2.971	overall height	2.985
height to spring	2.719	height to spring	2.700
Light3		Light4	
width	0.533	width	0.536
overall height	2.971	overall height	2.987
height to spring	2.712	height to spring	2.717
Light5		Light6	
width	0.539	width	0.529
overall height	2.979	overall height	2.986
height to spring	2.713	height to spring	2.720
Window		Outer Window	
overall width	3.187	width	3.179
overall height	5.655		
height to spring	2.715	Arch	
		span	3.284
Mullion 1		height from spring	2.940
width	0.154		
Mullion 2		Mullion 4	
width	0.153	width	0.157
Mullion 3		Mullion 5	
width	0.155	width	0.155

### Units

**Most likely:** 0.309m

**Within 10%:**

**Within 20%:** 0.320

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5	Light/ Mullion6
TFH/LHSP		0.925	0.985	0.922	0.924	0.923	0.925
TFH/LHAP		0.990	0.985	0.990	0.984	0.987	0.985
TFH/OWH	0.520						
OWW/OWH	0.564						
OWW/WHS	0.480						
OWH/AS	0.971						
LW/LHSP		0.190	0.198	0.197	0.197	0.199	0.194
LW/LHAP		0.174	0.179	0.180	0.179	0.181	0.177
LW/OWW		0.162	0.168	0.167	0.168	0.169	0.166
LW/OWH		0.091	0.095	0.094	0.095	0.095	0.093
LW/AS		0.157	0.163	0.162	0.163	0.164	0.161
OWW/LHSP		0.853	0.847	0.851	0.852	0.851	0.853
OWW/LHAP		0.932	0.937	0.932	0.937	0.935	0.937
MW/OWW		0.048	0.048	0.049	0.049	0.049	
MW/LW		0.299	0.288	0.286	0.287	0.291	0.289
MW/LW		0.293	0.292	0.288	0.293		



## Holycross Cistercian abbey: North aisle north Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.650	width	0.492
overall height	2.127	overall height	2.242
height to spring	1.954	height to spring	1.932
Light3		Window	
width	0.728	overall width	1.567
overall height	2.180	overall height	3.281
height to spring	1.928	height to spring	1.869
Arch		Mullion 1	
span	2.888	width	0.169
height from spring	1.645		
		Mullion 2	
		width	0.138

### Units

<b>Most likely:</b> 0.289m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.835	0.846	0.853
TFH/LHAP		0.774	0.734	0.755
TFH/OWH	0.501			
OWW/OWH	0.477			
OWW/WHS	0.838			
OWH/AS	0.543			
LW/LHSP		0.330	0.253	0.377
LW/LHAP		0.306	0.219	0.334
LW/OWW		0.415	0.314	0.465
LW/OWH		0.198	0.150	0.222
LW/AS		0.225	0.170	0.252
OWW/LHSP		0.795	0.806	0.812
OWW/LHAP		0.737	0.699	0.718
MW/OWW		0.108	0.088	
MW/LW		0.260	0.344	0.233
MW/LW		0.212	0.280	0.189



## Holycross Cistercian abbey: North trans east, north chapel Co. Tipperary, Ormond



### Measurements

Light 1	m
width	0.630
overall height	1.361
height to spring	1.214
Light 2	
width	0.635
overall height	1.373
height to spring	1.228
Window	
overall width	1.258
overall height	2.553
height to spring	1.225
outer width	1.914
Arch	
span	1.307
height from spring	1.439
Mullion 1	
width	0.135

### Units

<b>Most likely:</b> 0.273m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.274m

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.844	0.854
TFH/LHAP		0.946	0.955
TFH/OWH	0.564		
OWW/OWH	0.493		
OWW/WHS	0.974		
OWH/AS	0.962		
LW/LHSP		0.519	0.517
LW/LHAP		0.463	0.463
LW/OWW		0.501	0.505
LW/OWH		0.247	0.247
LW/AS		0.482	0.486
OWW/LHSP		0.965	0.976
OWW/LHAP		0.924	0.916
MW/OWW		0.107	
MW/LW		0.214	0.212
MW/LW			

## Holycross Cistercian abbey: North trans east, south chapel Co. Tipperary, Ormond



### Measurements

Light1	m
width	0.462
overall height	1.392
height to spring	1.137
Light2	
width	0.457
overall height	1.398
height to spring	1.142
Window	
overall width	0.918
overall height	2.337
height to spring	1.153
outer width	1.358
Arch	
span	0.979
height from spring	1.185
Mullion 1	
width	0.120

### Units

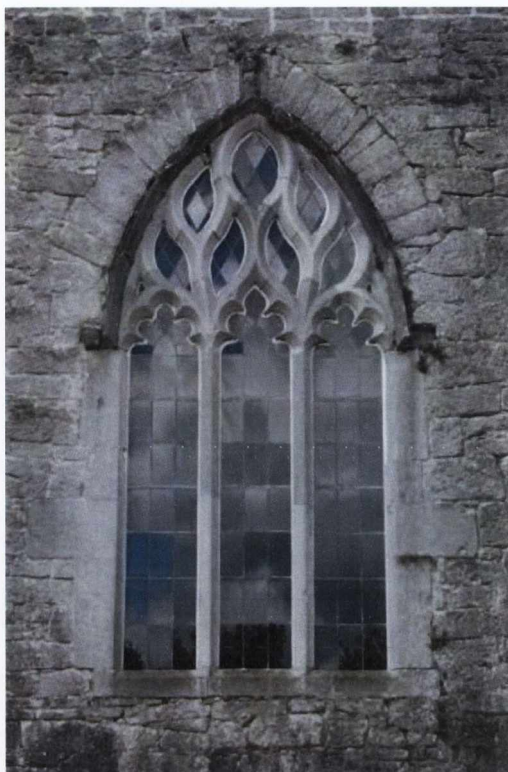
<b>Most likely:</b> 0.346m
<b>Within 10%:</b> 0.345 0.347 0.348 0.349
<b>Within 20%:</b> 0.246 0.265 0.301 0.344

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.959	0.964
TFH/LHAP		0.851	0.848
TFH/OWH	0.507		
OWW/OWH	0.393		
OWW/WHS	0.797		
OWH/AS	0.938		
LW/LHSP		0.407	0.400
LW/LHAP		0.332	0.327
LW/OWW		0.504	0.497
LW/OWH		0.198	0.198
LW/AS		0.472	0.466
OWW/LHSP		0.808	0.804
OWW/LHAP		0.660	0.657
MW/OWW		0.131	
MW/LW		0.260	0.264



## Holycross Cistercian abbey: North transept north Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.604	width	0.618
overall height	2.486	overall height	2.639
height to spring	2.142	height to spring	2.142
Light3		Window	
width	0.615	overall width	1.733
overall height	2.499	overall height	3.851
height to spring	2.138	height to spring	2.138
Arch		Mullion 1	
span	1.935	width	0.131
height from spring	1.715		
		Mullion 2	
		width	0.136

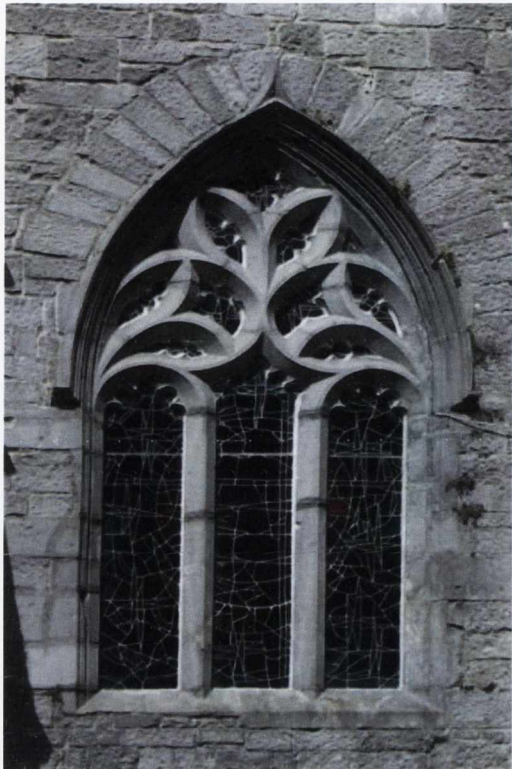
### Units

<b>Most likely:</b> 0.342m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.220 0.257

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.801	0.801	0.802
TFH/LHAP		0.690	0.650	0.687
TFH/OWH	0.445			
OWW/OWH	0.477			
OWW/WHS	0.859			
OWH/AS	0.949			
LW/LHSP		0.282	0.289	0.288
LW/LHAP		0.243	0.234	<b>0.246</b>
LW/OWW		0.329	0.337	0.335
LW/OWH		0.157	0.161	0.160
LW/AS		0.312	0.320	0.318
OWW/LHSP		0.858	0.858	0.859
OWW/LHAP		0.739	0.696	0.735
MW/OWW		0.071	0.074	
MW/LW		0.217	0.212	0.213
MW/LW		0.225	0.220	0.221

## Holycross Cistercian abbey: South trans east, north chapel Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.553	width	0.489
overall height	1.658	overall height	1.808
height to spring	1.471	height to spring	1.466
Light3		Window	
width	0.553	overall width	1.584
overall height	1.661	overall height	3.015
height to spring	1.469	height to spring	1.495
Arch		Mullion 1	
span	1.631	width	0.133
height from spring	1.520		
		Mullion 2	
		width	0.135

### Units

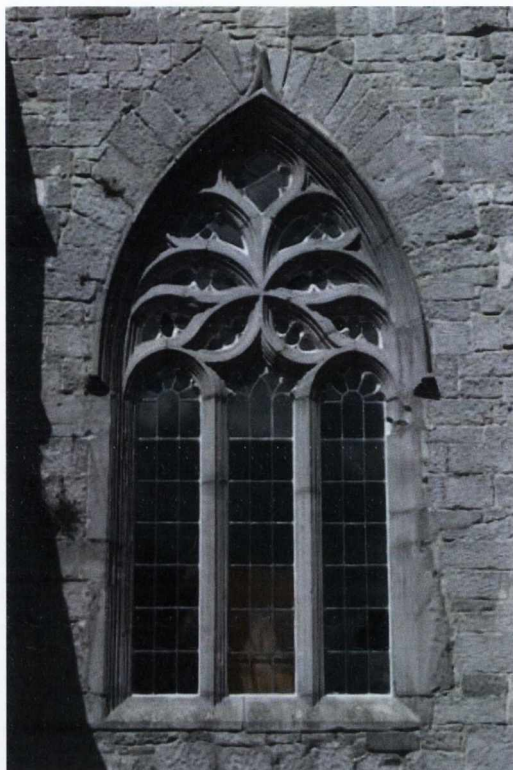
<b>Most likely:</b> 0.276m
<b>Within 10%:</b> 0.275
<b>Within 20%:</b> 0.279

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.968	0.965	0.966
TFH/LHAP		0.917	0.841	0.915
TFH/OWH	0.504			
OWW/OWH	0.525			
OWW/WHS	0.944			
OWH/AS	0.971			
LW/LHSP		0.376	0.334	0.376
LW/LHAP		0.334	0.271	0.333
LW/OWW		0.349	0.309	0.349
LW/OWH		0.183	0.162	0.183
LW/AS		0.339	0.300	0.339
OWW/LHSP		0.929	0.926	1.078
OWW/LHAP		0.956	0.877	0.954
MW/OWW		0.084	0.085	
MW/LW		0.240	0.272	0.240
MW/LW		0.244	0.276	0.244



## Holycross Cistercian abbey: South trans east, south chapel Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.551	width	0.495
overall height	1.663	overall height	1.720
height to spring	1.479	height to spring	1.475
Light3		Window	
width	0.531	overall width	1.568
overall height	1.670	overall height	2.948
height to spring	1.471	height to spring	1.472
Arch		Mullion 1	
span	1.601	width	0.134
height from spring	1.478		
		Mullion 2	
		width	0.139

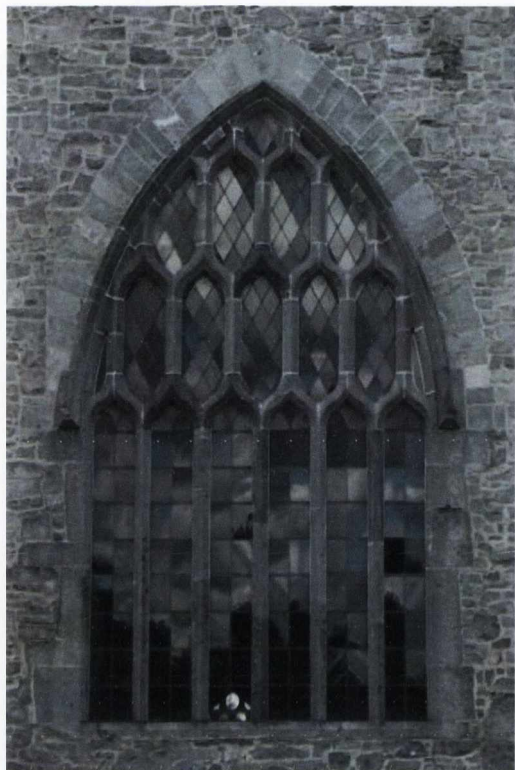
### Units

<b>Most likely:</b> 0.368m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.999	0.998	0.995
TFH/LHAP		0.889	0.859	0.885
TFH/OWH	0.501			
OWW/OWH	0.532			
OWW/WHS	0.939			
OWH/AS	0.979			
LW/LHSP		0.372	0.336	0.361
LW/LHAP		0.331	0.288	0.318
LW/OWW		0.351	0.316	0.339
LW/OWH		0.187	0.168	0.180
LW/AS		0.344	0.309	0.332
OWW/LHSP		0.944	0.941	0.938
OWW/LHAP		0.943	0.912	0.939
MW/OWW		0.085	0.089	
MW/LW		0.243	0.270	0.252
MW/LW		0.253	0.281	0.262

## Holycross Cistercian abbey: Nave west Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.507	width	0.524
overall height	2.604	overall height	2.594
height to spring	2.366	height to spring	2.356
Light3		Light4	
width	0.518	width	0.518
overall height	2.605	overall height	2.596
height to spring	2.361	height to spring	2.365
Light5		Light6	
width	0.515	width	0.506
overall height	2.589	overall height	2.591
height to spring	2.343	height to spring	2.339
Window		Arch	
overall width	3.082	span	3.239
overall height	5.146	height from spring	2.800
height to spring	2.349		
outer width	3.083	Mullion 3	
		width	0.144
Mullion 1		Mullion 4	
width	0.143	width	0.141
Mullion 2		Mullion 5	
width	0.144	width	0.153

### Units

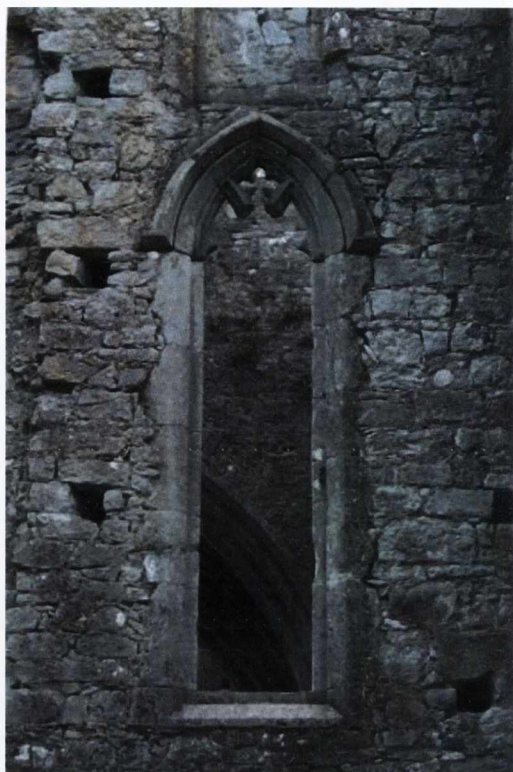
<b>Most likely:</b> 0.221m
<b>Within 10%:</b> 0.220
<b>Within 20%:</b> 0.223 0.224 0.295

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5	Light/ Mullion6
TFH/LHSP		0.845	1.079	0.843	0.845	0.837	0.835
TFH/LHAP		0.930	0.926	0.930	0.927	0.925	0.925
TFH/OWH	0.544						
OWW/OWH	0.599						
OWW/WHS	0.456						
OWH/AS	0.952						
LW/LHSP		0.214	0.222	0.219	0.219	0.220	0.216
LW/LHAP		0.195	0.202	0.199	0.200	0.199	0.195
LW/OWW		0.164	0.170	0.168	0.168	0.167	0.164
LW/OWH		0.098	0.102	0.101	0.101	0.100	0.098
LW/AS		0.156	0.162	0.160	0.160	0.159	0.156
OWW/LHSP		0.768	0.764	0.766	0.767	0.760	0.759
OWW/LHAP		0.845	0.842	0.845	0.842	0.840	0.841
MW/OWW		0.046	0.047	0.047	0.046	0.050	
MW/LW		0.282	0.273	0.274	0.278	0.278	0.278
MW/LW		0.273	0.274	0.297	0.303		



## Hore Cistercian abbey: Chancel east Co. Tipperary, Ormond



### Measurements

Light1	
width	0.611
overall height	3.260
height to spring	2.561
Window	
overall width	0.905
overall height	3.496
height to spring	2.745
Arch	
span	0.972
height from spring	0.750

### Units

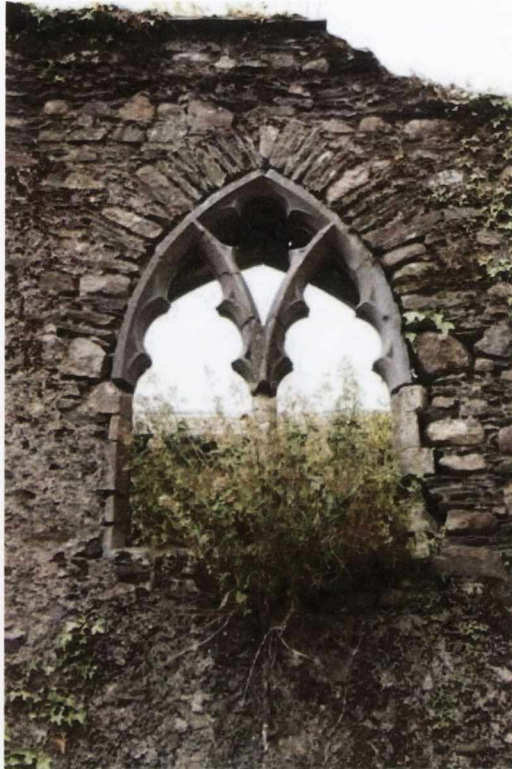
<b>Most likely:</b> 0.244m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single
TFH/LHSP	0.293
TFH/LHAP	0.230
OWW/OWH	0.259
LW/LHSP	0.238
LW/LHAP	0.187
WW/LHSP	0.353
WW/LSAP	0.278
TFH/OWH	0.215
OWW/WHS	0.330
OWW/AS	0.932
LW/LHSP	0.238
LW/LHAP	0.187
LW/OWW	0.675
LW/OWH	0.175
LW/AS	0.629
OWW/LHSP	0.353
OWW/LSAP	0.278

Different ratios are used here because of the unusual one-light design

## Inistoige church: Nave north Co. Kilkenny, Ormond



### Measurements

Light1	m
width	0.527
height to spring	0.784
Light2	
width	0.526
height to spring	0.692
Window	
overall width	1.211
overall height	1.267
height to spring	0.788
Arch	
span	1.238
height from spring	1.173
Mullion 1	
width	0.097

### Units

<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.347
<b>Within 20%:</b> 0.261 0.346

### Proportions

		Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.668	0.590
TFH/OWH	0.926		
OWW/OWH	0.956		
OWW/WHS	0.651		
OWH/AS	0.978		
LW/LHSP		0.672	0.760
LW/OWW		0.435	0.434
LW/OWH		0.416	0.416
LW/AS		0.426	0.425
OWW/LHSP		0.647	0.571
MW/OWW		0.080	
MW/LW		0.184	0.184



## Jerpont Cistercian abbey: Chancel east Co. Kilkenny, Ormond



### Measurements

Light1		Light2	
width	1.003	width	1.082
overall height	4.075	overall height	3.557
height to spring	3.157	height to spring	3.146
Light3		Window	
width	1.013	overall width	3.097
overall height	4.126	overall height	5.541
height to spring	3.158	height to spring	3.174
Arch		Mullion 1	
span	3.115	width	0.134
height from spring	2.367		
		Mullion 2	
		width	0.149

### Units

<b>Most likely:</b> 0.296m
<b>Within 10%:</b> 0.217 0.226 0.249 0.295 0.302
<b>Within 20%:</b> 0.264 0.295

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.750	0.753	0.750
TFH/LHAP		0.581	0.666	0.574
TFH/OWH	0.427			
OWW/OWH	0.559			
OWW/WHS	0.976			
OWH/AS	0.994			
LW/LHSP		0.318	0.344	0.321
LW/LHAP		0.246	0.304	0.246
LW/OWW		0.324	0.349	0.327
LW/OWH		0.181	0.195	0.183
LW/AS		0.322	0.347	0.325
OWW/LHSP		0.981	0.984	0.980
OWW/LHAP		0.760	0.871	0.751
MW/OWW		0.043	0.048	
MW/LW		0.133	0.124	0.132
MW/LW		0.148	0.137	0.147

## Jerpoint Cistercian abbey: North aisle east, northern Co. Kilkenny, Ormond



### Measurements

Light1	m
width	0.435
overall height	1.687
height to spring	1.460
Light2	
width	0.406
overall height	
height to spring	1.480
Window	
overall width	1.148
overall height	2.481
height to spring	1.470
Arch	
span	1.222
height from spring	1.011
Mullion 1	
width	0.106

### Units

<b>Most likely:</b> 0.309m
<b>Within 10%:</b> 0.218 0.266 0.268 0.307 0.308 0.310 0.311
<b>Within 20%:</b> 0.216 0.217 0.232 0.267 0.306

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.693	0.683
TFH/LHAP		0.599	
TFH/OWH	0.408		
OWW/OWH	0.463		
OWW/WHS	0.781		
OWH/AS	0.940		
LW/LHSP		0.298	0.275
LW/LHAP		0.258	
LW/OWW		0.379	0.354
LW/OWH		0.175	0.175
LW/AS		0.356	0.333
OWW/LHSP		0.787	0.776
OWW/LHAP		0.681	
MW/OWW		0.092	
MW/LW		0.244	0.261



**Jerpoint Cistercian abbey: North aisle east, southern  
Co. Kilkenny, Ormond**



**Measurements**

Light1	m
width	0.481
overall height	1.256
height to spring	1.038
Light2	
width	0.483
overall height	1.269
height to spring	1.055
Window	
overall width	0.964
overall height	1.724
height to spring	1.059
Arch	
span	0.954
height from spring	0.664
Mullion 1	
width	0.066

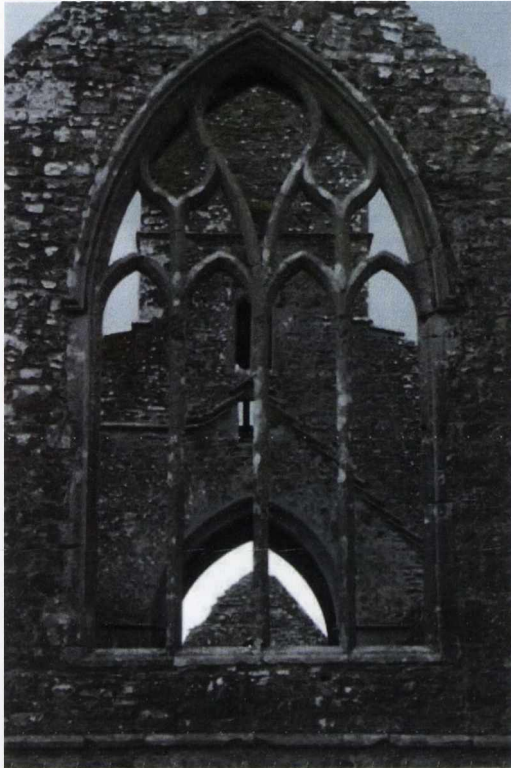
**Units**

<b>Most likely:</b> 0.237m
<b>Within 10%:</b> 0.263
<b>Within 20%:</b> 0.222 0.223 0.236 0.288 0.289 0.290 0.317 0.318 0.319

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.640	0.630
TFH/LHAP		0.529	0.524
TFH/OWH	0.385		
OWW/OWH	0.560		
OWW/WHS	0.910		
OWH/AS	0.989		
LW/LHSP		0.463	0.458
LW/LHAP		0.383	0.381
LW/OWW		0.499	0.501
LW/OWH		0.279	0.279
LW/AS		0.504	0.507
OWW/LHSP		0.929	0.914
OWW/LHAP		0.768	0.760
MW/OWW		0.068	
MW/LW		0.137	0.136

## Kilconnell Franciscan friary: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.730	width	0.749
overall height	3.395	overall height	3.411
height to spring	2.925	height to spring	2.911
Light3		Light4	
width	0.733	width	0.733
overall height	3.381	overall height	3.389
height to spring	2.920	height to spring	2.914
Window		Arch	
overall width	2.942	span	2.893
overall height	5.417	height from spring	2.489
height to spring	2.929		
		Mullion 2	
Mullion 1		width	0.141
width	0.141		
		Mullion 3	
		width	0.140

### Units

<b>Most likely:</b> 0.274m
<b>Within 10%:</b> 0.275
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.851	0.855	0.852	0.854
TFH/LHAP		0.733	0.730	0.736	0.734
TFH/OWH	0.459				
OWW/OWH	0.543				
OWW/WHS	0.996				
OWH/AS	0.983				
LW/LHSP		0.249	0.257	0.251	0.252
LW/LHAP		0.215	0.219	0.217	0.216
LW/OWW		0.248	0.254	0.249	0.249
LW/OWH		0.135	0.138	0.135	0.135
LW/AS		0.252	0.259	0.253	0.254
OWW/LHSP		0.994	0.994	0.992	0.990
OWW/LHAP		0.867	0.863	0.870	0.868
MW/OWW		0.048	0.048	0.048	
MW/LW		0.193	0.189	0.188	
MW/LW		0.192	0.191	0.191	



## Kilconnell Franciscan friary: Chancel south, eastern Co. Galway, Connaught



### Measurements

Light1	m
width	0.529
overall height	1.734
height to spring	1.326
Light2	
width	0.512
overall height	1.734
height to spring	1.336
Window	
overall width	1.041
overall height	2.252
height to spring	1.325
Arch	
span	1.021
height from spring	0.927
Mullion 1	
width	0.109

### Units

<b>Most likely:</b> 0.307m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.306

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.699	0.694
TFH/LHAP		0.534	0.534
TFH/OWH	0.412		
OWW/OWH	0.462		
OWW/WHS	0.786		
OWH/AS	0.981		
LW/LHSP		0.399	0.384
LW/LHAP		0.305	0.296
LW/OWW		0.508	0.492
LW/OWH		0.235	0.235
LW/AS		0.518	0.502
OWW/LHSP		0.785	0.779
OWW/LHAP		0.600	0.600
MW/OWW		0.105	
MW/LW		0.207	0.213

## Kilconnell Franciscan friary: Chancel south, western Co. Galway, Connaught



### Measurements

Light1	m
width	0.518
overall height	1.736
height to spring	1.328
Light2	
width	0.508
overall height	1.722
height to spring	1.329
Window	
overall width	1.026
overall height	2.224
height to spring	1.314
Arch	
span	1.039
height from spring	0.911
Mullion 1	
width	0.110

### Units

<b>Most likely:</b> 0.306m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.305

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.686	0.685
TFH/LHAP		0.525	0.529
TFH/OWH	0.409		
OWW/OWH	0.461		
OWW/WHS	0.781		
OWH/AS	<b>0.987</b>		
LW/LHSP		0.390	0.382
LW/LHAP		0.299	0.295
LW/OWW		<b>0.505</b>	<b>0.495</b>
LW/OWH		0.233	0.233
LW/AS		<b>0.499</b>	0.489
OWW/LHSP		0.773	0.772
OWW/LHAP		0.591	<b>0.596</b>
MW/OWW		0.107	
MW/LW		0.212	0.216



## Kilconnell Franciscan friary: South transept south, eastern Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.704	width	0.735
overall height	2.861	overall height	2.848
height to spring	2.315	height to spring	2.315
Light3		Window	
width	0.719	overall width	2.158
overall height	2.859	overall height	4.430
height to spring	2.309	height to spring	2.311
Arch		Mullion 1	
span	2.175	width	0.111
height from spring	2.120		
		Mullion 2	
		width	0.111

### Units

<b>Most likely:</b> 0.356m
<b>Within 10%:</b> 0.272 0.277 357 0.369
<b>Within 20%:</b> 0.309 0.355 0.358

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.915	0.916	0.918
TFH/LHAP		0.741	0.744	0.741
TFH/OWH	0.478			
OWW/OWH	0.487			
OWW/WHS	0.934			
OWH/AS	0.992			
LW/LHSP		0.304	0.317	0.311
LW/LHAP		0.246	0.258	0.252
LW/OWW		0.326	0.341	0.333
LW/OWH		0.159	0.166	0.162
LW/AS		0.324	0.338	0.331
OWW/LHSP		0.932	0.932	0.934
OWW/LHAP		0.754	0.758	0.755
MW/OWW		0.052	0.052	
MW/LW		0.158	0.152	0.155
MW/LW		0.158	0.151	0.155

## Kilconnell Franciscan friary: South transept south, western Co. Galway, Connaught



### Measurements

Light1	m
width	0.593
overall height	2.114
height to spring	1.881
Light2	
width	0.590
overall height	2.115
height to spring	1.871
Window	
overall width	1.183
overall height	3.051
height to spring	1.862
Arch	
span	1.182
height from spring	1.189
Mullion 1	
width	0.132

### Units

<b>Most likely:</b> 0.254m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.632	0.635
TFH/LHAP		0.562	0.562
TFH/OWH	0.390		
OWW/OWH	0.388		
OWW/WHS	0.635		
OWH/AS	1.000		
LW/LHSP		0.315	0.315
LW/LHAP		0.281	0.279
LW/OWW		0.502	0.499
LW/OWH		0.194	0.194
LW/AS		0.502	0.499
OWW/LHSP		0.629	0.632
OWW/LHAP		0.559	0.559
MW/OWW		0.112	
MW/LW		0.223	0.224



## Kilconnell Franciscan friary: Nave west Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.557	width	0.593
overall height	3.012	overall height	3.024
height to spring	2.648	height to spring	2.579
Light3		Window	
width	0.567	overall width	1.712
overall height	3.050	overall height	4.374
height to spring	2.572	height to spring	2.644
Arch		Mullion 1	
span	1.806	width	0.131
height from spring	1.733		
		Mullion 2	
		width	0.114

### Units

<b>Most likely:</b> 0.227m
<b>Within 10%:</b> 0.344
<b>Within 20%:</b> 0.224 0.343

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.654	0.672	0.674
TFH/LHAP		0.575	0.573	0.568
TFH/OWH	0.396			
OWW/OWH	0.391			
OWW/WHS	0.648			
OWH/AS	0.948			
LW/LHSP		0.210	0.230	0.221
LW/LHAP		0.185	0.196	0.186
LW/OWW		0.325	0.346	0.331
LW/OWH		0.127	0.136	0.130
LW/AS		0.309	0.328	0.314
OWW/LHSP		0.647	0.664	0.666
OWW/LHAP		0.569	0.566	0.561
MW/OWW		0.077	0.067	
MW/LW		0.236	0.221	0.231
MW/LW		0.204	0.192	0.201

## Kilcooley Cistercian abbey: Chancel east Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.647	width	0.601
overall height	2.470	overall height	2.562
height to spring	2.243	height to spring	2.242
Light3		Light4	
width	0.590	width	0.594
overall height	2.465	overall height	2.459
height to spring	2.241	height to spring	2.232
Light5		Light6	
width	0.614	width	0.631
overall height	2.583	overall height	2.468
height to spring	2.237	height to spring	2.251
Window		Arch	
overall width	3.675	span	3.707
overall height	5.343	height from spring	3.097
height to spring	2.246		
		Mullion 3	
		width	0.145
Mullion 1		Mullion 4	
width	0.145	width	0.143
Mullion 2		Mullion 5	
width	0.143	width	0.147

### Units

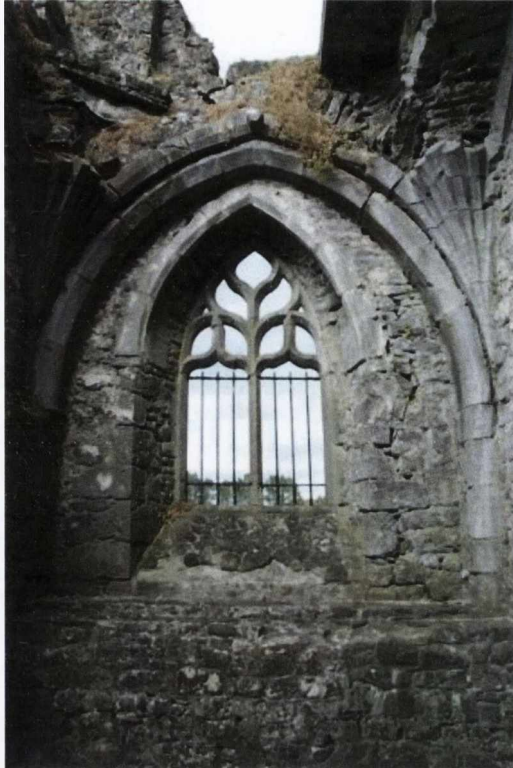
Most likely: 0.217m
Within 10%: 0.224 0.225
Within 20%: 0.214 0.232 0.235 0.239 0.298 0.353

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5	Light/ Mullion6
TFH/LHSP		0.724	1.209	0.724	0.721	0.722	0.727
TFH/LHAP		0.797	0.877	0.796	0.794	0.814	0.797
TFH/OWH	0.580						
OWW/OWH	0.688						
OWW/WHS	0.420						
OWH/AS	0.991						
LW/LHSP		0.289	0.268	0.263	0.266	0.274	0.280
LW/LHAP		0.262	0.235	0.240	0.241	0.238	0.256
LW/OWW		0.176	0.164	0.161	0.162	0.167	0.172
LW/OWH		0.121	0.112	0.111	0.111	0.115	0.118
LW/AS		0.175	0.162	0.159	0.160	0.166	0.170
OWW/LHSP		0.611	0.610	0.610	0.607	0.609	0.613
OWW/LHAP		0.672	0.697	0.671	0.669	0.703	0.672
MW/OWW		0.039	0.039	0.039	0.039	0.040	
MW/LW		0.223	0.241	0.238	0.242	0.246	0.244
MW/LW		0.242	0.234	0.240	0.234		



## Kilcooley Cistercian abbey: North transept east Co. Tipperary, Ormond



### Measurements

Light1	m
width	0.663
overall height	1.345
height to spring	1.156
Light2	
width	0.644
overall height	1.346
height to spring	1.169
Window	
overall width	1.306
overall height	2.627
height to spring	1.281
frame width	1.822
Arch	
span	1.795
height from spring	1.389
Mullion 1	
width	0.125

### Units

<b>Most likely:</b> 0.244m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.832	0.841
TFH/LHAP		0.968	0.969
TFH/OWH	0.529		
OWW/OWH	0.497		
OWW/WHS	0.981		
OWH/AS	0.728		
LW/LHSP		0.573	0.551
LW/LHAP		0.493	0.478
LW/OWW		0.507	0.493
LW/OWH		0.252	0.252
LW/AS		0.369	0.359
OWW/LHSP		0.885	0.895
OWW/LHAP		0.971	0.970
MW/OWW		0.096	
MW/LW		0.189	0.194

## Kilcooley Cistercian abbey: South transept east, northern Co. Tipperary, Ormond



### Measurements

Light1	m
width	0.604
overall height	1.448
height to spring	1.215
Light2	
width	0.598
overall height	1.447
height to spring	1.215
Window	
overall width	1.202
overall height	2.515
height to spring	1.460
frame width	1.576
Arch	
span	1.514
height from spring	1.082
Mullion 1	
width	0.157

### Units

<b>Most likely:</b> 0.242m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.228 0.241

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.890	0.890
TFH/LHAP		0.747	0.748
TFH/OWH	0.430		
OWW/OWH	0.478		
OWW/WHS	0.823		
OWH/AS	0.794		
LW/LHSP		0.497	0.492
LW/LHAP		0.417	0.413
LW/OWW		0.503	0.497
LW/OWH		0.240	0.240
LW/AS		0.399	0.395
OWW/LHSP		0.989	0.989
OWW/LHAP		0.830	0.830
MW/OWW		0.131	
MW/LW		0.261	0.263



**Kilcooley Cistercian abbey: South transept east, southern  
Co. Tipperary, Ormond**



**Measurements**

Light 1	m
width	0.599
overall height	1.414
height to spring	1.195
Light 2	
width	0.592
overall height	1.425
height to spring	1.191
Window	
overall width	1.191
overall height	2.589
height to spring	1.506
frame width	1.544
Arch	
span	1.497
height from spring	1.105
Mullion 1	
width	0.150

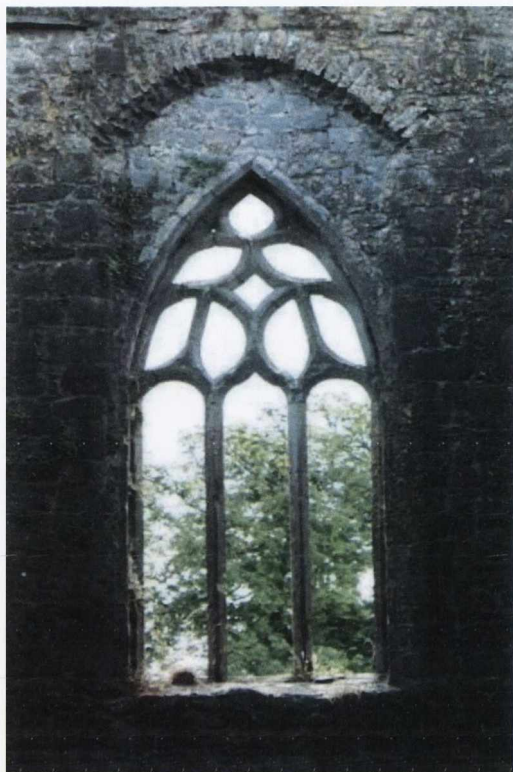
**Units**

<b>Most likely:</b> 0.237m
<b>Within 10%:</b> 0.238 0.299
<b>Within 20%:</b> 0.223 0.300

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.925	0.928
TFH/LHAP		0.781	0.775
TFH/OWH	0.427		
OWW/OWH	0.460		
OWW/WHS	0.791		
OWH/AS	0.795		
LW/LHSP		0.502	0.497
LW/LHAP		0.424	0.415
LW/OWW		0.503	0.497
LW/OWH		0.232	0.232
LW/AS		0.400	0.395
OWW/LHSP		0.997	1.000
OWW/LHAP		0.842	0.835
MW/OWW		0.126	
MW/LW		0.251	0.254

## Kilcooley Cistercian abbey: Nave west Co. Tipperary, Ormond



### Measurements

Light1		Light2	
width	0.576	width	0.612
overall height	2.626	overall height	2.713
height to spring	2.428	height to spring	2.388
Light3		Window	
width	0.563	overall width	1.748
overall height	2.663	overall height	4.309
height to spring	2.392	height to spring	2.484
Arch			
span	1.799	Mullion 2	
height from spring	1.860	width	0.126
Mullion 1			
width	0.126		

### Units

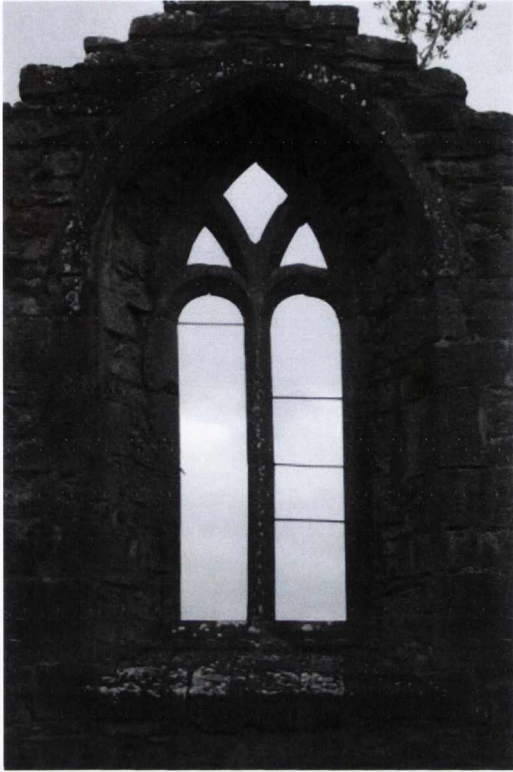
<b>Most likely:</b> 0.248m
<b>Within 10%:</b> 0.231
<b>Within 20%:</b> 0.233

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.766	0.779	0.777
TFH/LHAP		0.708	0.686	0.698
TFH/OWH	0.432			
OWW/OWH	0.406			
OWW/WHS	0.704			
OWH/AS	0.971			
LW/LHSP		0.237	0.256	0.235
LW/LHAP		0.220	0.226	0.211
LW/OWW		0.330	0.350	0.322
LW/OWH		0.134	0.142	0.131
LW/AS		0.320	0.340	0.313
OWW/LHSP		0.720	0.732	0.731
OWW/LHAP		0.666	0.644	0.656
MW/OWW		0.072	0.072	
MW/LW		0.218	0.205	0.223
MW/LW		0.218	0.205	0.223



**Kilcorban Franciscan friary: North transept north**  
Co. Galway, Connaught



**Measurements**

Light 1	m
width	0.497
overall height	1.819
height to spring	1.646
Light 2	
width	0.499
overall height	1.821
height to spring	1.651
Window	
overall width	0.994
overall height	2.639
height to spring	1.657
Arch	
span	0.989
height from spring	0.984
Mullion 1	
width	0.143

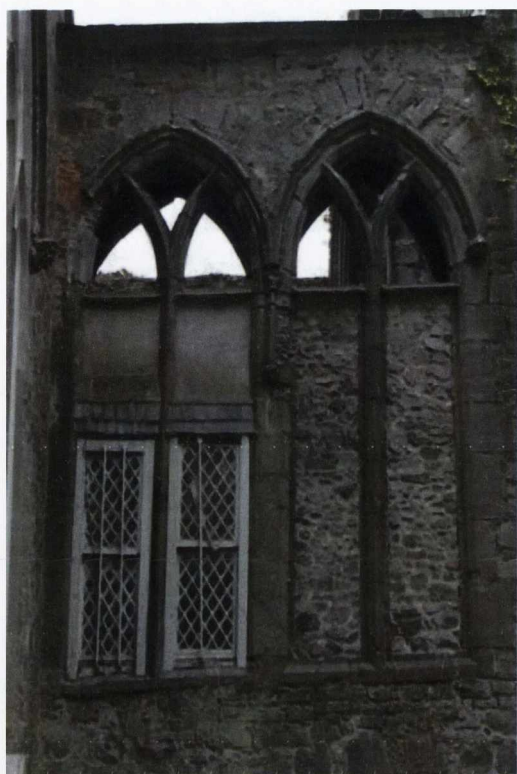
**Units**

<b>Most likely:</b> 0.330m
<b>Within 10%:</b> 0.220 0.331
<b>Within 20%:</b> 0.214

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.598	0.596
TFH/LHAP		0.541	0.541
TFH/OWH	0.373		
OWW/OWH	0.377		
OWW/WHS	0.600		
OWH/AS	0.995		
LW/LHSP		0.302	0.302
LW/LHAP		0.273	0.274
LW/OWW		0.500	0.502
LW/OWH		0.188	0.188
LW/AS		1.990	0.505
OWW/LHSP		0.604	0.602
OWW/LHAP		0.547	0.546
MW/OWW		0.144	
MW/LW		0.289	0.287

## St. John's Augustinian priory: Chancel south Co. Kilkenny, Ormond



### Measurements

Light 1	Western	Eastern
width	0.823	0.850
overall height	3.895	3.839
height to spring	3.119	3.036
Light 2		
width	0.845	0.911
overall height	3.851	3.786
height to spring	3.088	3.034
Window		
overall width	1.668	1.744
overall height	4.233	4.263
height to spring	3.061	3.139
Arch		
span	1.808	1.836
height from spring	1.172	1.125
Mullion 1		
width	0.162	0.252

### Units

	Western	Eastern
<b>Most likely:</b>	0.360m	0.261m
<b>Within 10%:</b>	0.249 0.314	0.367
<b>Within 20%:</b>	0.247 0.312 0.313	

### Proportions

	Chancel North Western			Chancel North Eastern		
	Single	Light/ Mullion1	Light/ Mullion2	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.376	0.380		0.370	0.371
TFH/LHAP		0.301	0.304		0.293	0.297
TFH/OWH	0.277			0.264		
OWW/OWH	0.394			0.409		
OWW/WHS	0.545			0.556		
OWH/AS	0.922			0.950		
LW/LHSP		0.264	0.274		0.280	0.300
LW/LHAP		0.211	0.219		0.221	0.241
LW/OWW		0.493	0.507		0.487	0.523
LW/OWH		0.194	0.194		0.199	0.199
LW/AS		0.455	0.467		0.463	0.496
OWW/LHSP		0.535	0.540		0.574	0.575
OWW/LHAP		0.428	0.433		0.454	0.461
MW/OWW		0.097			0.144	
MW/LW		0.197	0.191		0.296	0.276



**Killagha Augustinian priory: Chancel east**  
Co. Kerry, Desmond



**Measurements**

None taken due to access issues

**Units**

**Proportions**

**Killursa church: Chancel east**  
Co. Galway, Connaught



**Measurements**

Light1	m
width	0.578
overall height	2.270
height to spring	1.973
Light2	
width	0.566
overall height	2.268
height to spring	1.968
Window	
overall width	1.144
overall height	3.574
height to spring	1.963
Arch	
span	1.161
height from spring	1.611
Mullion 1	
width	0.121

**Units**

<b>Most likely:</b> 0.348m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.817	0.819
TFH/LHAP		0.710	0.710
TFH/OWH	0.451		
OWW/OWH	0.320		
OWW/WHS	0.583		
OWH/AS	0.986		
LW/LHSP		0.293	0.288
LW/LHAP		0.255	0.250
LW/OWW		0.505	0.495
LW/OWH		0.162	0.162
LW/AS		0.498	0.488
OWW/LHSP		0.580	0.581
OWW/LHAP		0.504	0.504
MW/OWW		0.106	
MW/LW		0.209	0.213



## Kilmacduagh cathedral: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.532	width	0.487
overall height	2.343	overall height	2.395
height to spring	1.705	height to spring	1.710
Light3		Window	
width	0.530	overall width	1.537
overall height	2.343	overall height	3.297
height to spring	1.698	height to spring	1.694
Arch		Mullion 1	
span	1.591	width	0.146
height from spring	1.604		
		Mullion 2	
		width	0.142

### Units

<b>Most likely:</b> 0.320m
<b>Within 10%:</b> 0.319
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.941	0.938	0.945
TFH/LHAP		0.685	0.670	0.685
TFH/OWH	0.487			
OWW/OWH	0.466			
OWW/WHS	0.907			
OWH/AS	0.966			
LW/LHSP		0.312	0.285	0.312
LW/LHAP		0.227	0.204	0.226
LW/OWW		0.346	0.317	0.345
LW/OWH		0.161	0.148	0.161
LW/AS		0.334	0.306	0.333
OWW/LHSP		0.901	0.899	0.905
OWW/LHAP		0.656	0.642	0.656
MW/OWW		0.095	0.093	
MW/LW		0.275	0.300	0.276
MW/LW		0.267	0.292	0.268

## Kilmacduagh cathedral: Nave south Co. Galway, Connaught



### Measurements

Light1	m
width	0.375
overall height	1.581
height to spring	1.398
Light2	
width	0.347
overall height	1.589
height to spring	1.398
Window	
overall width	0.749
overall height	2.065
height to spring	1.398
Arch	
span	0.842
height from spring	0.667
Mullion 1	
width	0.142

### Units

<b>Most likely:</b> 0.280m
<b>Within 10%:</b> 0.281
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.477	0.477
TFH/LHAP		0.422	0.420
TFH/OWH	0.323		
OWW/OWH	0.363		
OWW/WHS	0.536		
OWH/AS	0.890		
LW/LHSP		0.269	0.267
LW/LHAP		0.238	0.235
LW/OWW		0.501	0.499
LW/OWH		0.182	0.182
LW/AS		0.446	0.444
OWW/LHSP		0.536	0.536
OWW/LHAP		0.474	0.471
MW/OWW		0.190	
MW/LW		0.378	0.380



## Kilmacduagh cathedral: South transept east Co. Galway, Connaught



### Measurements

Light1	m
width	0.412
overall height	1.594
height to spring	1.587
Light2	
width	0.397
overall height	1.616
height to spring	1.402
Window	
overall width	0.809
overall height	2.076
height to spring	1.407
Arch	
span	0.865
height from spring	0.669
Mullion 1	
width	0.129

### Units

<b>Most likely:</b> 0.244m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.421	0.477
TFH/LHAP		0.420	0.414
TFH/OWH	0.322		
OWW/OWH	0.390		
OWW/WHS	0.575		
OWH/AS	0.935		
LW/LHSP		0.259	0.283
LW/LHAP		0.258	<b>0.246</b>
LW/OWW		0.509	0.491
LW/OWH		0.198	0.198
LW/AS		0.476	0.459
OWW/LHSP		0.510	0.577
OWW/LHAP		0.507	0.500
MW/OWW		0.159	
MW/LW		0.313	0.324

## Kilmacduagh cathedral: South transept south Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.489	width	0.430
overall height	1.687	overall height	1.699
height to spring	1.532	height to spring	1.543
Light3		Window	
width	0.471	overall width	1.382
overall height	1.693	overall height	2.698
height to spring	1.530	height to spring	1.530
Arch		Mullion 1	
span	1.454	width	0.132
height from spring	1.169		
		Mullion 2	
		width	0.131

### Units

<b>Most likely:</b> 0.291m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.244 0.307 0.308 0.321 0.340

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.763	0.758	0.764
TFH/LHAP		0.693	0.688	0.690
TFH/OWH	0.433			
OWW/OWH	0.512			
OWW/WHS	0.903			
OWH/AS	0.951			
LW/LHSP		0.319	0.279	0.308
LW/LHAP		0.290	<b>0.253</b>	0.278
LW/OWW		0.354	0.311	0.341
LW/OWH		0.181	0.159	0.175
LW/AS		0.336	0.296	0.324
OWW/LHSP		0.902	0.896	0.903
OWW/LHAP		0.819	0.813	0.816
MW/OWW		0.096	0.095	
MW/LW		0.271	0.308	0.281
MW/LW		0.268	0.305	0.278



## Kilmallock collegiate church: Nave south Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.452	width	0.469
overall height	2.912	overall height	2.923
height to spring	2.230	height to spring	2.247
Light3		Window	
width	0.449	overall width	1.367
overall height	2.897	overall height	3.478
height to spring	2.224	height to spring	2.216
Arch		Mullion 1	
span	1.497	width	0.156
height from spring	1.263		
		Mullion 2	
		width	0.163

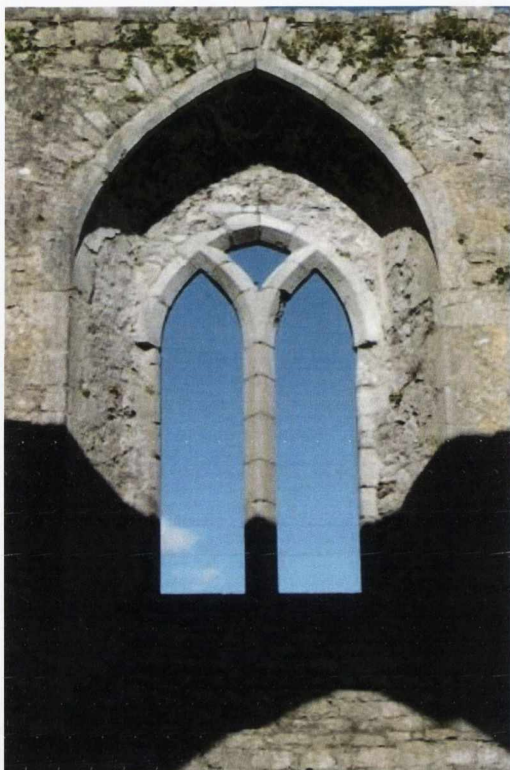
### Units

<b>Most likely:</b> 0.334m
<b>Within 10%:</b> 0.257 0.333 0.335 0.336 0.337
<b>Within 20%:</b> 0.228 0.230 0.332 0.343 0.344

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.566	0.562	0.568
TFH/LHAP		0.434	0.432	0.436
TFH/OWH	0.363			
OWW/OWH	0.393			
OWW/WHS	0.617			
OWH/AS	0.913			
LW/LHSP		0.202	0.209	0.202
LW/LHAP		0.155	0.160	0.155
LW/OWW		0.330	0.343	0.328
LW/OWH		0.130	0.135	0.129
LW/AS		0.302	0.313	0.300
OWW/LHSP		0.613	0.608	0.614
OWW/LHAP		0.469	0.468	0.472
MW/OWW		0.114	0.119	
MW/LW		0.345	0.332	0.347
MW/LW		0.360	0.347	0.362

## Kilmallock Dominican priory: South transept east, northern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.826
overall height	3.193
height to spring	2.379
Light2	
width	0.836
overall height	3.208
height to spring	2.377
Window	
overall width	1.655
overall height	4.647
height to spring	2.591
frame width	2.730
Arch	
span	2.706
height from spring	2.132
Mullion 1	
width	0.239

### Units

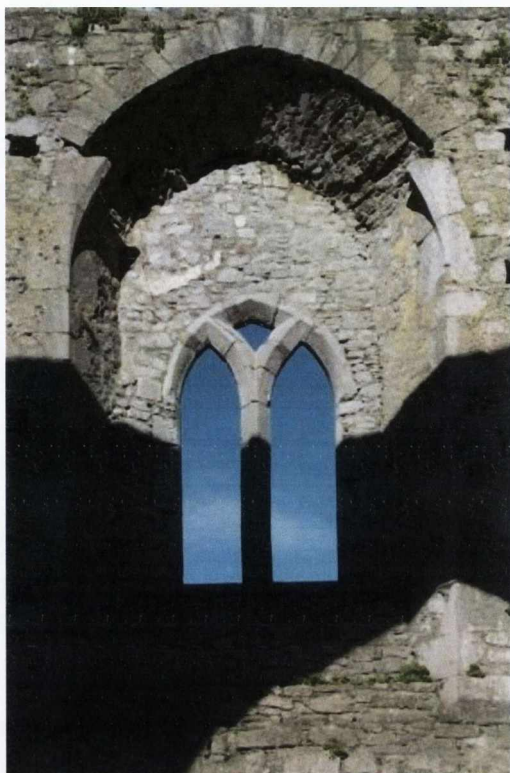
<b>Most likely:</b> 0.357m
<b>Within 10%:</b> 0.356
<b>Within 20%:</b> 0.311 0.367

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.896	0.897
TFH/LHAP		0.668	0.664
TFH/OWH	0.459		
OWW/OWH	0.356		
OWW/WHS	0.639		
OWH/AS	0.612		
LW/LHSP		0.347	0.351
LW/LHAP		0.259	0.260
LW/OWW		0.499	0.505
LW/OWH		0.178	0.178
LW/AS		0.305	0.309
OWW/LHSP		0.696	0.696
OWW/LHAP		0.518	0.516
MW/OWW		0.145	
MW/LW		0.290	0.286



## Kilmallock Dominican priory: South transept east, southern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.650
overall height	2.241
height to spring	1.621
Light2	
width	0.679
overall height	2.237
height to spring	1.603
Window	
overall width	1.327
overall height	4.456
height to spring	2.611
frame width	2.864
Arch	
span	2.789
height from spring	1.889
Mullion 1	
width	0.236

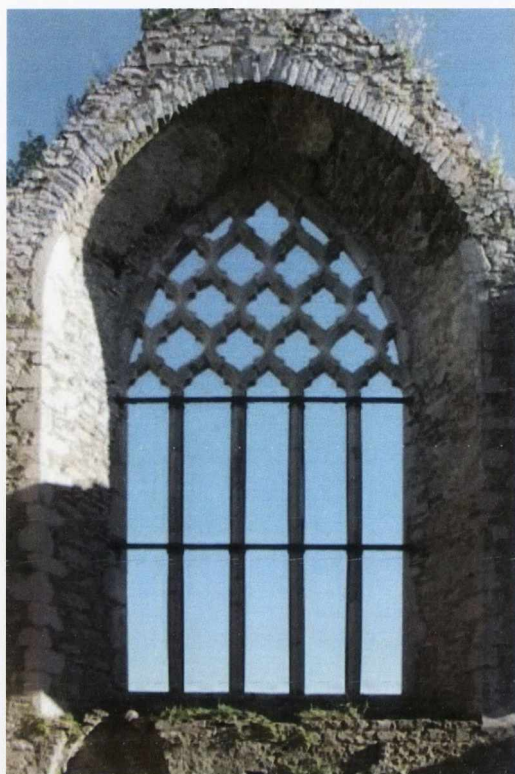
### Units

<b>Most likely:</b> 0.279m
<b>Within 10%:</b> 0.336 0.372
<b>Within 20%:</b> 0.280 0.335 0.357

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.858	0.849
TFH/LHAP		0.843	0.844
TFH/OWH	0.424		
OWW/OWH	0.298		
OWW/WHS	0.508		
OWH/AS	0.476		
LW/LHSP		0.401	0.423
LW/LHAP		0.290	0.303
LW/OWW		0.490	0.511
LW/OWH		0.146	0.146
LW/AS		0.233	0.243
OWW/LHSP		0.819	0.828
OWW/LHAP		0.592	0.593
MW/OWW		0.178	
MW/LW		0.364	0.348

## Kilmallock Dominican priory: South transept south Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.668	width	0.788
overall height	4.460	overall height	4.465
height to spring	4.094	height to spring	4.102
Light3		Light4	
width	0.816	width	0.781
overall height	4.487	overall height	4.521
height to spring	4.112	height to spring	4.160
Light5		Window	
width	0.730	overall width	3.771
overall height	4.589	overall height	7.552
height to spring	4.233	height to spring	4.622
Arch			
span	5.269		
height from spring	2.952		
Mullion 1		Mullion 3	
width	0.194	width	0.203
Mullion 2		Mullion 4	
width	0.191	width	0.207

### Units

<b>Most likely:</b> 0.287m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP	0.000	0.721	0.720	0.718	0.710	0.697
TFH/LHAP	0.000	0.662	0.661	0.658	0.653	0.643
TFH/OWH	0.391					
OWW/OWH	0.499					
OWW/WHS	0.612					
OWH/AS	0.716					
LW/LHSP	0.000	0.163	0.192	0.198	0.188	0.172
LW/LHAP	0.000	0.150	0.177	0.182	0.173	0.159
LW/OWW	0.000	0.177	0.209	0.216	0.207	0.194
LW/OWH	0.000	0.088	0.104	0.108	0.103	0.097
LW/AS	0.000	0.127	0.150	0.155	0.148	0.139
OWW/LHSP	0.000	0.921	0.919	0.917	0.906	0.891
OWW/LHAP	0.000	0.845	0.845	0.840	0.834	0.822
MW/OWW	0.000	0.051	0.051	0.054	0.055	
MW/LW	0.000	0.290	0.246	0.242	0.234	
MW/LW	0.000	0.249	0.260	0.265	0.283	



## Kilmallock Dominican priory: Nave west Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.913	width	1.023
overall height	3.952	overall height	3.917
height to spring	2.580	height to spring	2.542
Light3		Window	
width	0.912	overall width	2.842
overall height	3.939	overall height	4.947
height to spring	2.525	height to spring	2.489
Arch		Mullion 1	
span	3.552	width	0.239
height from spring	2.600		
		Mullion 2	
		width	0.232

### Units

<b>Most likely:</b> 0.339m
<b>Within 10%:</b> 0.336 0.337 0.338 0.343 0.367 0.368
<b>Within 20%:</b> 0.335 0.340 0.341 0.342 0.371 0.372

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.992	0.978	0.971
TFH/LHAP		0.658	0.664	0.660
TFH/OWH	0.526			
OWW/OWH	0.575			
OWW/WHS	0.876			
OWH/AS	0.800			
LW/LHSP		0.354	0.402	0.361
LW/LHAP		0.231	0.261	0.232
LW/OWW		0.321	0.360	0.321
LW/OWH		0.185	0.207	0.184
LW/AS		0.257	0.288	0.257
OWW/LHSP		0.908	0.894	0.888
OWW/LHAP		0.719	0.726	0.722
MW/OWW		0.084	0.081	
MW/LW		0.262	0.234	0.262
MW/LW		0.253	0.226	0.254

## Kilnalahan Abbey: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.628	width	0.607
overall height	2.266	overall height	2.269
height to spring	2.033	height to spring	2.026
Light3		Window	
width	0.598	overall width	1.833
overall height	2.259	overall height	3.576
height to spring	2.037	height to spring	2.027
Arch		Mullion 1	
span	1.898	width	0.137
height from spring	1.549		
		Mullion 2	
		width	0.142

### Units

<b>Most likely:</b> 0.358m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.239 0.244 0.359

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.762	0.765	0.761
TFH/LHAP		0.684	0.683	0.686
TFH/OWH	0.433			
OWW/OWH	0.513			
OWW/WHS	0.904			
OWH/AS	0.966			
LW/LHSP		0.309	0.300	0.294
LW/LHAP		0.277	0.268	0.265
LW/OWW		0.342	0.331	0.326
LW/OWH		0.176	0.170	0.167
LW/AS		0.331	0.320	0.315
OWW/LHSP		0.901	0.905	0.900
OWW/LHAP		0.809	0.808	0.811
MW/OWW		0.075	0.078	
MW/LW		0.219	0.226	0.230
MW/LW		0.226	0.234	0.237



## Kilnalahan Abbey: South aisle east Co. Galway, Connaught



### Measurements

Light1	m
width	0.498
overall height	1.534
height to spring	1.319
Light2	
width	0.499
overall height	1.527
height to spring	1.300
Window	
overall width	0.997
overall height	2.368
height to spring	1.302
Arch	
span	1.062
height from spring	1.066
Mullion 1	
width	0.105

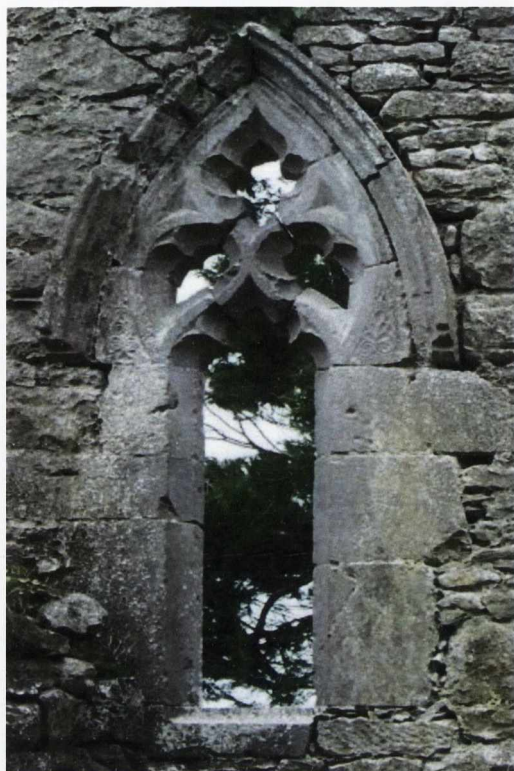
### Units

<b>Most likely:</b> 0.305m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.809	0.820
TFH/LHAP		0.695	0.698
TFH/OWH	0.450		
OWW/OWH	0.421		
OWW/WHS	0.766		
OWH/AS	0.939		
LW/LHSP		0.378	0.383
LW/LHAP		0.325	0.327
LW/OWW		0.500	0.500
LW/OWH		0.210	0.210
LW/AS		0.469	0.470
OWW/LHSP		0.756	0.767
OWW/LHAP		0.650	0.653
MW/OWW		0.106	
MW/LW		0.211	0.211

## Kilteevan church: Chancel east Co. Roscommon, Connaught



### Measurements

Light1	m
width	0.294
overall height	1.242
height to spring	1.045
Window	
overall width	0.389
overall height	1.998
height to spring	1.093
Arch	
span	0.771
height from spring	0.905

### Units

<b>Most likely:</b> 0.231m
<b>Within 10%:</b> 0.232 0.235
<b>Within 20%:</b> 0.220 0.221 0.233 0.234 0.308 0.309 0.310

### Proportions

Tracery field height to light height (at springing point)	0.867
Tracery field height to light height (at arch peak)	0.729
Tracery field height to overall window height	0.453
Overall window width to overall window height	0.195
Overall window width to window height to spring	0.356
Overall window width to arch span	0.505
Light width to light height (at springing point)	0.281
Light width to light height (at arch peak)	0.237
Light width to overall window width	0.756
Light width to overall window height	0.147
Light width to arch span	0.381
Overall window width to light height (at springing point)	0.372
Overall window width to light height (at arch peak)	0.313



**St. Mary's cathedral, Limerick: South trans south, eastern  
Co. Limerick, Desmond**



**Measurements**

Light1		Light2	
width	0.708	width	0.712
overall height	3.641	overall height	3.635
height to spring	3.121	height to spring	3.120
Light3		Light4	
width	0.722	width	0.728
overall height	3.642	overall height	3.641
height to spring	3.110	height to spring	3.108
Light5		Window	
width	0.728	overall width	3.598
overall height	3.634	overall height	6.772
height to spring	3.113	height to spring	3.141
Arch			
span	3.834		
height from spring	3.631		
Mullion 1		Mullion 3	
width	0.148	width	0.146
Mullion 2		Mullion 4	
width	0.138	width	0.144

**Units**

<b>Most likely:</b> 0.312m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.267 0.291

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
	Single					
TFH/LHSP		0.860	0.859	0.857	0.856	0.857
TFH/LHAP		0.997	0.999	0.997	0.997	0.999
TFH/OWH	0.536					
OWW/OWH	0.531					
OWW/WHS	0.464					
OWH/AS	0.938					
LW/LHSP		0.227	0.228	0.232	0.234	0.234
LW/LHAP		0.194	0.196	0.198	0.200	0.200
LW/OWW		0.197	0.198	0.201	0.202	0.202
LW/OWH		0.105	0.105	0.107	0.108	0.108
LW/AS		0.185	0.186	0.188	0.190	0.190
OWW/LHSP		0.868	0.867	0.864	0.864	0.865
OWW/LHAP		0.988	0.990	0.988	0.988	0.990
MW/OWW		0.041	0.038	0.041	0.040	
MW/LW		0.210	0.208	0.194	0.192	
MW/LW		0.202	0.201	0.198	0.198	

**St. Mary's cathedral, Limerick: South trans south, mid  
Co. Limerick, Desmond**



**Measurements**

Light1		Light2	
width	0.588	width	0.618
overall height	4.643	overall height	4.525
height to spring	3.486	height to spring	3.489
Light3		Light4	
width	0.625	width	0.607
overall height		overall height	
height to spring	3.492	height to spring	
Window		Mullion 1	
overall width	2.438	width	0.146
overall height	2.215		
height to spring	0.154	Mullion 2	
		width	0.138
Arch			
span	2.678	Mullion 3	
height from spring	2.131	width	

**Units**

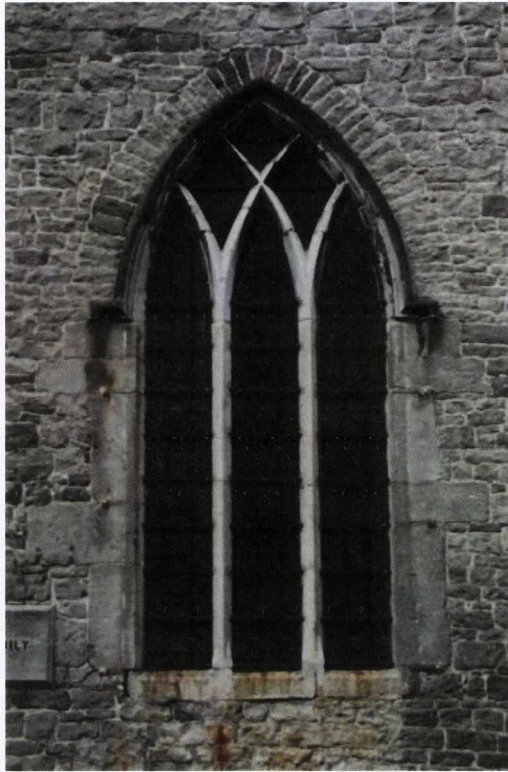
<b>Most likely:</b> 0.367m
<b>Within 10%:</b> 0.223 0.227 0.304 0.317 0.349
<b>Within 20%:</b> 0.221 0.228 0.303 0.368

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.611	0.611	0.610
TFH/LHAP		0.459	0.471	
TFH/OWH	0.962			
OWW/OWH	0.909			
OWW/WHS	0.063			
OWH/AS	0.910			
LW/LHSP		0.169	0.177	0.179
LW/LHAP		0.127	0.137	
LW/OWW		0.241	<b>0.254</b>	0.256
LW/OWH		0.266	0.279	0.282
LW/AS		0.220	0.231	0.233
OWW/LHSP		0.699	0.699	0.698
OWW/LHAP		0.525	0.539	
MW/OWW		0.060	0.057	
MW/LW		0.248	0.236	0.223
MW/LW		0.221		



**St. Mary's cathedral, Limerick: South trans south, western  
Co. Limerick, Desmond**



**Measurements**

Light1		Light2	
width	0.527	width	0.549
overall height	3.365	overall height	3.342
height to spring	2.392	height to spring	2.390
Light3		Window	
width	0.533	overall width	1.609
overall height	3.365	overall height	3.947
height to spring	2.393	height to spring	2.365
Arch		Mullion 1	
span	1.727	width	0.138
height from spring	1.588		
		Mullion 2	
		width	0.132

**Units**

<b>Most likely:</b> 0.266m
<b>Within 10%:</b> 0.228 0.359
<b>Within 20%:</b> 0.264 0.265 0.320 0.358 0.360 0.361

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.664	0.665	0.664
TFH/LHAP		0.472	0.475	0.472
TFH/OWH	0.402			
OWW/OWH	0.408			
OWW/WHS	0.680			
OWH/AS	0.931			
LW/LHSP		0.220	0.230	0.223
LW/LHAP		0.157	0.164	0.158
LW/OWW		0.328	0.341	0.331
LW/OWH		0.133	0.139	0.135
LW/AS		0.305	0.318	0.309
OWW/LHSP		0.673	0.673	0.672
OWW/LHAP		0.478	0.481	0.478
MW/OWW		0.086	0.082	
MW/LW		0.261	0.250	0.258
MW/LW		0.250	0.240	0.247

**St. Mary's cathedral, Limerick: South trans south, westmost  
Co. Limerick, Desmond**



**Measurements**

Light1		Light2	
width	0.457	width	0.474
Light3		Window	
width	0.451	overall width	
overall height		overall height	1.336
height to spring		height to spring	0.700
Arch		Mullion 1	
span	0.433	width	0.037
height from spring	1.322		
		Mullion 2	
		width	0.027

**Units**

<b>Most likely:</b> 0.311m
<b>Within 10%:</b> 0.264 0.265 0.266 0.279 0.280 0.281 0.282 0.283 0.307 0.308 0.309 0.310
<b>Within 20%:</b> 0.263 0.267 0.278 0.284 0.285 0.286 0.294 0.295 0.296 0.297 0.298 0.304 0.305 0.306 0.346

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/OWH		0.990		
LW/OWW	0.249			
LW/OWH	0.274		0.342	0.355
LW/AS	0.227		0.947	0.913
MW/LW			0.081	0.078
MW/LW			0.060	0.058



## St. Mary's cathedral, Limerick: Nave west, northern Co. Limerick, Desmond



### Measurements

Light1	m
width	0.472
overall height	2.442
height to spring	2.204
Light2	
width	0.462
overall height	2.438
height to spring	2.205
Window	
overall width	0.934
overall height	2.868
height to spring	2.147
Arch	
span	1.037
height from spring	0.721
Mullion 1	
width	0.137

### Units

<b>Most likely:</b> 0.287m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.327	0.327
TFH/LHAP		0.295	0.296
TFH/OWH	0.251		
OWW/OWH	0.326		
OWW/WHS	0.435		
OWH/AS	0.901		
LW/LHSP		0.214	0.210
LW/LHAP		0.193	0.190
LW/OWW		0.505	0.495
LW/OWH		0.165	0.165
LW/AS		0.455	0.446
OWW/LHSP		0.424	0.424
OWW/LHAP		0.383	0.383
MW/OWW		0.147	
MW/LW		0.290	0.296

**St. Mary's cathedral, Limerick: Nave west, southern  
Co. Limerick, Desmond**



**Measurements**

Light1	m
width	0.552
Light2	
width	0.556
Window	
overall width	1.107
overall height	1.052
height to spring	
Arch	
span	1.236
height from spring	1.022
Mullion 1	
width	0.034

**Units**

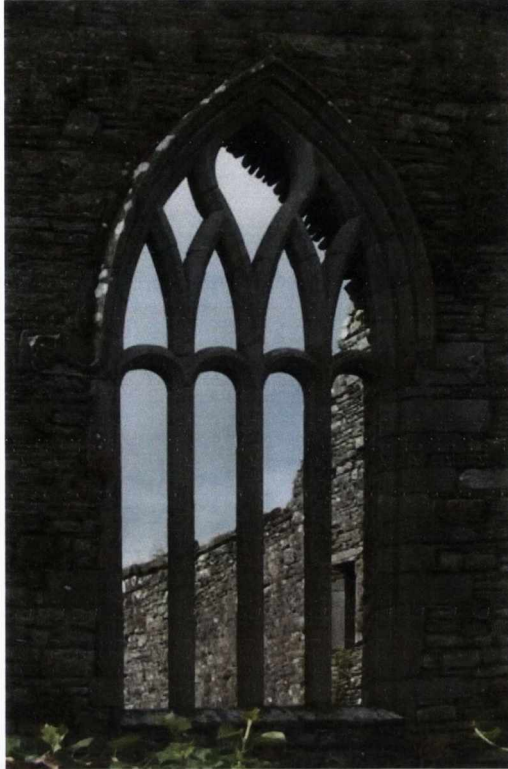
<b>Most likely:</b> 0.371m
<b>Within 10%:</b> 0.370 0.372
<b>Within 20%:</b> 0.277 0.314 0.369

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/OWH	0.972		
OWW/OWH	0.950		
OWH/AS	0.896		
LW/OWW		0.498	0.502
LW/OWH		0.525	0.525
LW/AS		0.446	0.449
MW/OWW		0.030	
MW/LW		0.061	0.060



**Lislaughtin Franciscan friary: Chancel east**  
Co. Kerry, Desmond



**Measurements**

None taken due to access issues

**Units**

**Proportions**

## Lislaughtin Franciscan friary: Nave west Co. Kerry, Desmond



### Measurements

Light1	m
width	0.475
overall height	2.150
height to spring	1.966
Light2	
width	0.481
overall height	2.157
height to spring	1.976
Window	
overall width	0.955
overall height	3.217
height to spring	1.966
Arch	
span	0.999
height from spring	1.251
Mullion 1	
width	0.102

### Units

<b>Most likely:</b> 0.358m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.359

### Proportions

		Light/ Mullion1	Light/ Mullion2
	<b>Single</b>		
TFH/LHSP		0.637	0.633
TFH/LHAP		0.582	0.580
TFH/OWH	0.389		
OWW/OWH	0.297		
OWW/WHS	0.486		
OWH/AS	0.956		
LW/LHSP		0.241	0.244
LW/LHAP		0.221	0.223
LW/OWW		0.497	0.504
LW/OWH		0.148	0.148
LW/AS		0.475	0.482
OWW/LHSP		0.486	0.483
OWW/LHAP		0.444	0.443
MW/OWW		0.106	
MW/LW		0.214	0.211



**Lorrha Augustinian priory: Chancel east**  
Co. Tipperary, Ormond



**Measurements**

Light1	m
width	0.427
overall height	2.086
height to spring	1.816
Light2	
width	0.426
overall height	2.075
height to spring	1.811
Window	
overall width	0.853
overall height	2.915
height to spring	1.425
frame width	0.893
Arch	
span	1.994
height from spring	1.602
Mullion 1	
width	0.167

**Units**

<b>Most likely:</b> 0.319m
<b>Within 10%:</b> 0.213 0.214
<b>Within 20%:</b> 0.237 0.247 0.248 0.259 0.284 0.315

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.882	0.885
TFH/LHAP		0.768	0.772
TFH/OWH	0.549		
OWW/OWH	0.292		
OWW/WHS	0.598		
OWH/AS	0.428		
LW/LHSP		0.235	0.236
LW/LHAP		0.205	0.206
LW/OWW		0.500	0.500
LW/OWH		0.146	0.146
LW/AS		0.214	0.214
OWW/LHSP		0.469	0.471
OWW/LHAP		0.409	0.411
MW/OWW		0.196	
MW/LW		0.391	0.391

## Lorrha Augustinian priory: Nave south Co. Tipperary, Ormond



### Measurements

Light1	m
width	0.452
overall height	1.660
height to spring	1.214
Light2	
width	0.436
overall height	1.667
height to spring	1.203
Window	
overall width	0.888
overall height	2.104
height to spring	1.454
frame width	1.308
Arch	
span	1.253
height from spring	0.776
Mullion 1	
width	0.104

### Units

<b>Most likely:</b> 0.333m
<b>Within 10%:</b> 0.332
<b>Within 20%:</b> 0.334

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.639	0.645
TFH/LHAP		0.467	0.465
TFH/OWH	0.369		
OWW/OWH	0.422		
OWW/WHS	0.611		
OWH/AS	0.708		
LW/LHSP		0.372	0.362
LW/LHAP		0.272	0.261
LW/OWW		0.509	0.491
LW/OWH		0.215	0.215
LW/AS		0.361	0.348
OWW/LHSP		0.731	0.738
OWW/LHAP		0.535	0.533
MW/OWW		0.117	
MW/LW		0.230	0.239



**Lorrha Augustinian priory: Nave west**  
Co. Tipperary, Ormond



**Measurements**

None taken due to access issues

**Units**

**Proportions**

**Lorrha Dominican priory: Chancel east**  
Co. Tipperary, Ormond



**Measurements**

Light1		Light2	
width	0.759	width	1.041
Light3		Light4	
width	1.190	width	1.039
Light5		Window	
width	0.818	overall width	4.812
		height to spring	5.325
Arch			
span	4.799		
Mullion 1		Mullion 3	
width	0.346	width	0.346
Mullion 2		Mullion 4	
width	0.348	width	0.356

**Units**

<b>Most likely:</b> 0.275m
<b>Within 10%:</b>
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
	<b>Single</b>					
OWH/AS	0.997					
LW/OWW		0.158	0.216	<b>0.247</b>	0.216	0.170
LW/AS		0.158	0.217	<b>0.248</b>	0.217	0.170
MW/OWW		0.072	0.072	0.072	0.074	
MW/LW		0.457	<b>0.333</b>	<b>0.334</b>	0.292	
MW/LW		0.291	<b>0.333</b>	0.342	0.435	



## Lorrha Dominican priory: Nave west Co. Tipperary, Ormond



### Measurements

Light 1	m
width	0.531
overall height	2.181
height to spring	1.738
Light 2	
width	0.530
overall height	2.188
height to spring	1.703
Window	
overall width	1.055
overall height	3.449
height to spring	1.919
frame width	2.596
Arch	
span	2.577
height from spring	1.703
Mullion 1	
width	0.198

### Units

<b>Most likely:</b> 0.324m
<b>Within 10%:</b> 0.300
<b>Within 20%:</b> 0.323

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.979	1.000
TFH/LHAP		0.781	0.778
TFH/OWH	0.494		
OWW/OWH	0.306		
OWW/WHS	0.550		
OWH/AS	0.409		
LW/LHSP		0.306	0.311
LW/LHAP		0.244	0.242
LW/OWW		0.504	0.502
LW/OWH		0.154	0.154
LW/AS		0.206	0.206
OWW/LHSP		0.607	0.619
OWW/LHAP		0.484	0.482
MW/OWW		0.188	
MW/LW		0.373	0.374

## Loughrea Carmelite priory: South transept south Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.668	width	0.594
overall height	2.207	overall height	2.201
height to spring	1.906	height to spring	1.904
Light3		Window	
width	0.703	overall width	1.956
overall height	2.210	overall height	3.946
height to spring	1.869	height to spring	1.890
Arch			
span	2.012		
height from spring	2.057		
Mullion 1		Mullion 2	
width	0.148	width	0.160

### Units

<b>Most likely:</b> 0.237m
<b>Within 10%:</b> 0.294
<b>Within 20%:</b> 0.255 0.293 0.295

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.927	0.926	0.909
TFH/LHAP		0.932	0.935	0.931
TFH/OWH	0.521			
OWW/OWH	0.496			
OWW/WHS	0.966			
OWH/AS	0.972			
LW/LHSP		0.350	0.312	0.376
LW/LHAP		0.302	0.270	0.318
LW/OWW		0.341	0.304	0.360
LW/OWH		0.169	0.151	0.178
LW/AS		0.332	0.295	0.350
OWW/LHSP		0.975	0.974	0.956
OWW/LHAP		0.886	0.889	0.885
MW/OWW		0.076	0.082	
MW/LW		0.222	0.249	0.210
MW/LW		0.240	0.270	0.228



## Loughrea Carmelite priory: Nave north Co. Galway, Connaught



### Measurements

Light1	m
width	0.527
overall height	0.889
height to spring	0.486
Light2	
width	0.526
overall height	0.895
height to spring	0.474
Window	
overall width	1.316
overall height	1.603
Mullion 1	
width	0.101

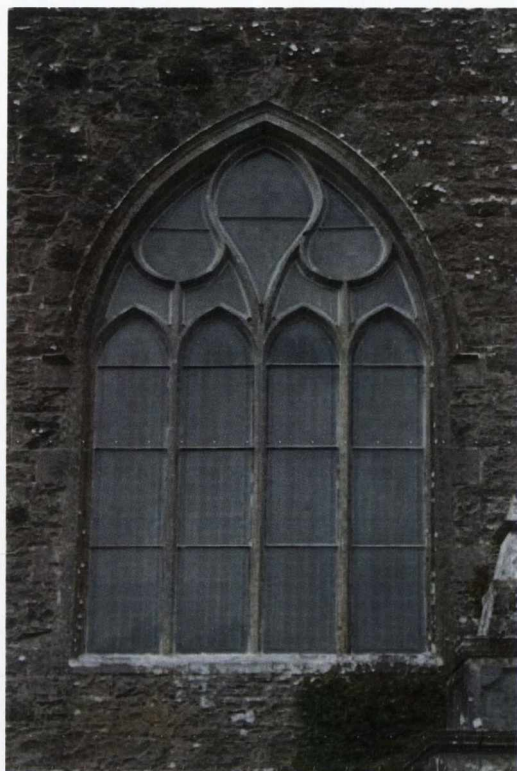
### Units

<b>Most likely:</b> 0.357m
<b>Within 10%:</b> 0.356 0.358 0.359
<b>Within 20%:</b> 0.323 0.355

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.485	0.474
TFH/LHAP		0.888	0.895
TFH/OWH	0.628		
OWW/OWH	0.792		
LW/LHSP		0.921	0.901
LW/LHAP		0.593	0.588
LW/OWW		0.418	0.417
LW/OWH		0.331	0.330
OWW/LHSP		0.385	0.375
OWW/LHAP		0.704	0.709
MW/LW		0.191	0.191

## Meelick church: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.813	width	0.758
overall height	3.690	overall height	3.683
height to spring	3.101	height to spring	3.109
Light3		Light4	
width	0.774	width	0.811
overall height	3.678	overall height	3.670
height to spring	3.013	height to spring	3.111
Window		Arch	
overall width	3.132	span	3.320
overall height	5.679	height from spring	2.742
height to spring	2.938		
		Mullion 2	
Mullion 1		width	0.124
width	0.127		
		Mullion 3	
		width	0.110

### Units

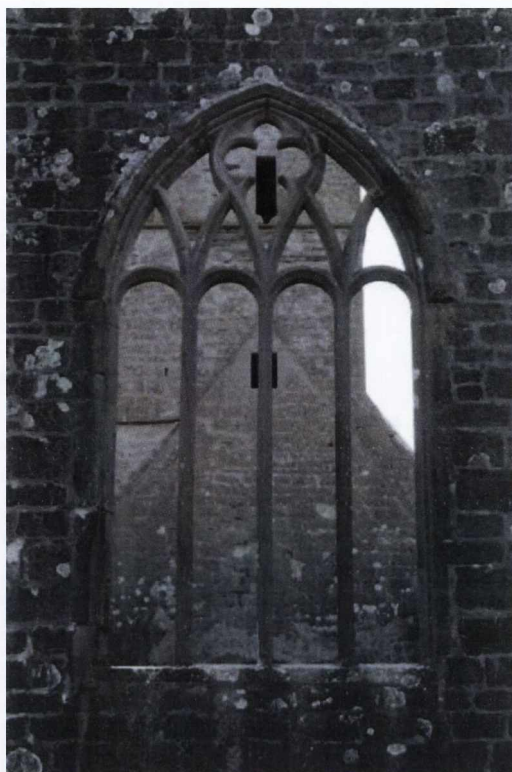
<b>Most likely:</b> 0.233m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.230 0.295

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.884	0.882	0.884	0.881
TFH/LHAP		0.743	0.744	0.745	0.747
TFH/OWH	0.483				
OWW/OWH	0.551				
OWW/WHS	0.938				
OWH/AS	0.943				
LW/LHSP		0.262	0.244	0.249	0.261
LW/LHAP		0.220	0.206	0.210	0.221
LW/OWW		0.260	0.242	0.247	0.259
LW/OWH		0.143	0.134	0.136	0.143
LW/AS		0.245	0.228	0.233	0.244
OWW/LHSP		0.990	0.990	0.991	0.993
OWW/LHAP		0.849	0.850	0.851	0.853
MW/OWW		0.041	0.040	0.035	
MW/LW		0.156	0.168	0.164	
MW/LW		0.160	0.142	0.135	



## Moyne Franciscan friary: Chancel east Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.488	width	0.513
overall height	2.695	overall height	2.660
height to spring	2.464	height to spring	2.452
Light3		Light4	
width	0.520	width	0.478
overall height	2.661	overall height	2.667
height to spring	2.435	height to spring	2.486
Window		Arch	
overall width	1.993	span	2.235
overall height	4.019	height from spring	1.586
height to spring	2.449		
		Mullion 2	
Mullion 1		width	0.115
width	0.117	Mullion 3	
		width	0.118

### Units

<b>Most likely:</b> 0.318m
<b>Within 10%:</b> 0.366
<b>Within 20%:</b> 0.350 0.352 0.353 0.354 0.365

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.644	0.647	0.651	0.638
TFH/LHAP		0.588	0.596	0.596	0.595
TFH/OWH	0.395				
OWW/OWH	0.496				
OWW/WHS	0.814				
OWH/AS	0.892				
LW/LHSP		0.198	0.217	0.213	0.192
LW/LHAP		0.181	0.200	0.195	0.179
LW/OWW		0.245	0.267	0.261	0.240
LW/OWH		0.121	0.132	0.129	0.119
LW/AS		0.218	0.238	0.233	0.214
OWW/LHSP		0.809	0.809	0.819	0.802
OWW/LHAP		0.740	0.750	0.749	0.747
MW/OWW		0.059	0.057	0.059	
MW/LW		0.239	0.219	0.216	
MW/LW		0.221	0.226	0.246	

## Moyne Franciscan friary: Nave south Co. Mayo, Connaught



### Measurements

Light1	
width	0.474
overall height	1.850
height to spring	1.638
Light2	
width	0.464
overall height	1.851
height to spring	1.646
Window	
overall width	0.918
overall height	2.573
height to spring	1.643
Arch	
span	1.118
height from spring	0.943
Mullion 1	
width	0.113

### Units

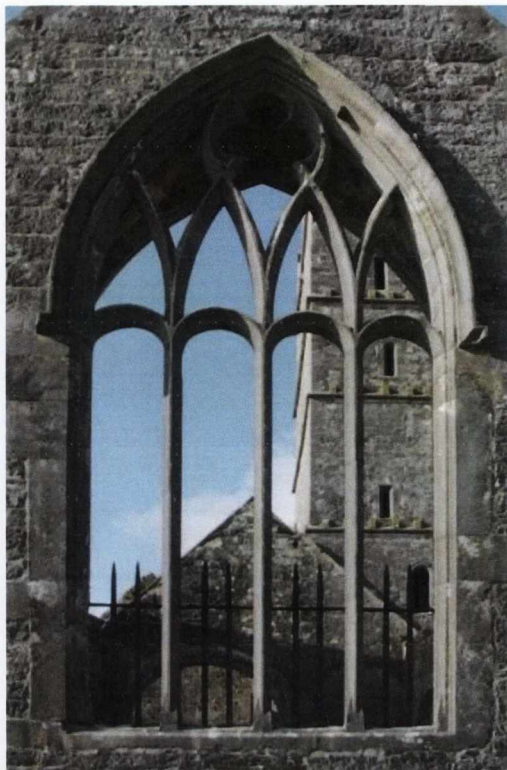
<b>Most likely:</b> 0.309m
<b>Within 10%:</b> 0.308
<b>Within 20%:</b> 0.310 0.352 0.369 0.370

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.576	0.573
TFH/LHAP		0.510	0.510
TFH/OWH	0.365		
OWW/OWH	0.355		
OWW/WHS	0.559		
OWH/AS	0.821		
LW/LHSP		0.289	0.282
LW/LHAP		0.256	0.250
LW/OWW		0.516	0.505
LW/OWH		0.183	0.183
LW/AS		0.424	0.415
OWW/LHSP		0.560	0.558
OWW/LHAP		0.496	0.496
MW/OWW		0.123	
MW/LW		0.239	0.244



## Moyne Franciscan friary: South transept south Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.504	width	0.564
overall height	3.106	overall height	3.097
height to spring	2.852	height to spring	2.863
Light3		Light4	
width	0.567	width	0.512
overall height	3.074	overall height	3.092
height to spring	2.851	height to spring	2.896
Window		Arch	
overall width	2.135	span	2.338
overall height	5.075	height from spring	2.247
height to spring	2.840		
		Mullion 2	
Mullion 1		width	0.116
width	0.127	Mullion 3	
		width	0.122

### Units

<b>Most likely:</b> 0.347m
<b>Within 10%:</b> 0.346 0.348
<b>Within 20%:</b> 0.312 0.313

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	<b>Single</b>				
TFH/LHSP		0.788	0.785	0.788	0.776
TFH/LHAP		0.723	0.725	0.731	0.727
TFH/OWH	0.443				
OWW/OWH	0.421				
OWW/WHS	0.752				
OWH/AS	0.913				
LW/LHSP		0.177	0.197	0.199	0.177
LW/LHAP		0.162	0.182	0.185	0.166
LW/OWW		0.236	0.264	0.266	0.240
LW/OWH		0.099	0.111	0.112	0.101
LW/AS		0.216	0.241	0.243	0.219
OWW/LHSP		0.749	0.749	0.749	0.737
OWW/LHAP		0.687	0.689	0.695	0.691
MW/OWW		0.059	0.054	0.057	
MW/LW		0.251	0.224	0.205	
MW/LW		0.204	0.215	0.238	

## Moyne Franciscan friary: South extension south Co. Mayo, Connaught



### Measurements

Light1	
width	0.479
overall height	2.296
height to spring	2.075
Light2	
width	0.460
overall height	2.286
height to spring	2.086
Window	
overall width	0.923
overall height	3.033
height to spring	2.078
Arch	
span	1.144
height from spring	0.956
Mullion 1	
width	0.116

### Units

<b>Most likely:</b> 0.372m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.461	0.458
TFH/LHAP		0.416	0.418
TFH/OWH	0.314		
OWW/OWH	0.303		
OWW/WHS	0.442		
OWH/AS	0.807		
LW/LHSP		0.231	0.220
LW/LHAP		0.209	0.201
LW/OWW		0.519	0.499
LW/OWH		0.158	0.158
LW/AS		0.419	0.402
OWW/LHSP		0.445	0.442
OWW/LHAP		0.402	0.404
MW/OWW		0.126	
MW/LW		0.242	0.252



## Moyné Franciscan friary: Nave west Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.431	width	0.460
overall height	2.492	overall height	2.519
height to spring	2.308	height to spring	2.315
Light3		Window	
width	0.410	overall width	1.288
overall height	2.509	overall height	3.867
height to spring	2.309	height to spring	2.313
Arch		Mullion 1	
span	1.519	width	0.122
height from spring	1.561		
		Mullion 2	
		width	0.122

### Units

<b>Most likely:</b> 0.243m
<b>Within 10%:</b> 0.277
<b>Within 20%:</b> 0.257 0.264 0.343

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.676	0.674	0.676
TFH/LHAP		0.626	0.620	0.622
TFH/OWH	0.404			
OWW/OWH	0.333			
OWW/WHS	0.557			
OWH/AS	0.848			
LW/LHSP		0.187	0.199	0.178
LW/LHAP		0.173	0.183	0.163
LW/OWW		0.335	0.357	0.318
LW/OWH		0.111	0.119	0.106
LW/AS		0.284	0.303	0.270
OWW/LHSP		0.558	0.556	0.558
OWW/LHAP		0.517	0.511	0.513
MW/OWW		0.095	0.095	
MW/LW		0.284	0.266	0.298
MW/LW		0.283	0.266	0.298

## Muckross Franciscan friary: Chancel east Co. Kerry, Desmond



### Measurements

Light1		Light2	
width	0.854	width	0.750
overall height	5.105	overall height	4.987
height to spring	3.888	height to spring	3.895
Light3		Light4	
width	0.754	width	0.843
overall height	4.996	overall height	5.140
height to spring	3.899	height to spring	3.919
Window		Arch	
overall width	3.189	span	3.187
overall height	6.389	height from spring	2.493
height to spring	3.896		
		Mullion 2	
Mullion 1		width	0.191
width	0.192	Mullion 3	
		width	0.192

### Units

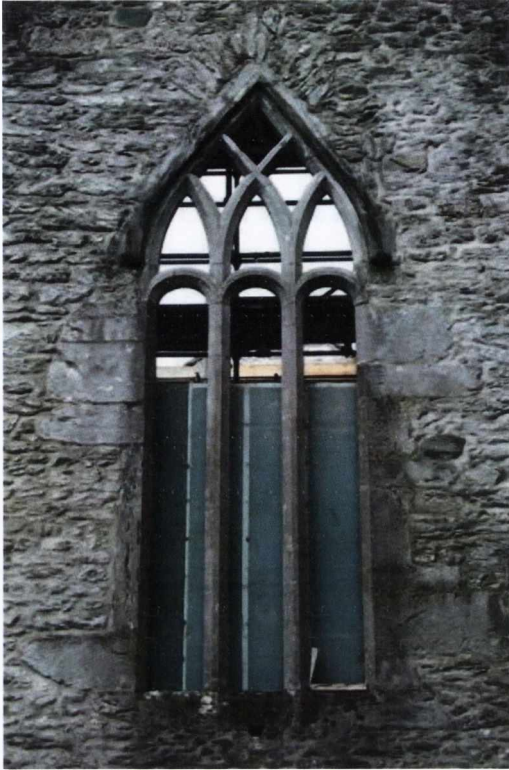
<b>Most likely:</b> 0.365m
<b>Within 10%:</b> 0.249
<b>Within 20%:</b> 0.370

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.641	0.640	0.639	0.636
TFH/LHAP		0.488	0.500	0.499	0.485
TFH/OWH	0.390				
OWW/OWH	0.499				
OWW/WHS	0.819				
OWH/AS	0.999				
LW/LHSP		0.220	0.193	0.194	0.215
LW/LHAP		0.167	0.150	0.151	0.164
LW/OWW		0.268	0.235	0.237	0.264
LW/OWH		0.134	0.117	0.118	0.132
LW/AS		0.268	0.235	0.237	0.264
OWW/LHSP		0.820	0.820	0.818	0.814
OWW/LHAP		0.625	0.639	0.638	0.621
MW/OWW		0.060	0.060	0.060	
MW/LW		0.225	0.256	0.255	
MW/LW		0.254	0.255	0.228	



## Muckross Franciscan friary: South transept south Co. Kerry, Desmond



### Measurements

Light1		Light2	
width	0.503	width	0.508
overall height	3.134	overall height	3.129
height to spring	2.952	height to spring	2.939
Light3		Window	
width	0.489	overall width	1.500
overall height	3.128	overall height	4.866
height to spring	2.938	height to spring	3.266
Arch		Mullion 1	
span	1.582	width	0.157
height from spring	1.600	Mullion 2	
		width	0.161

### Units

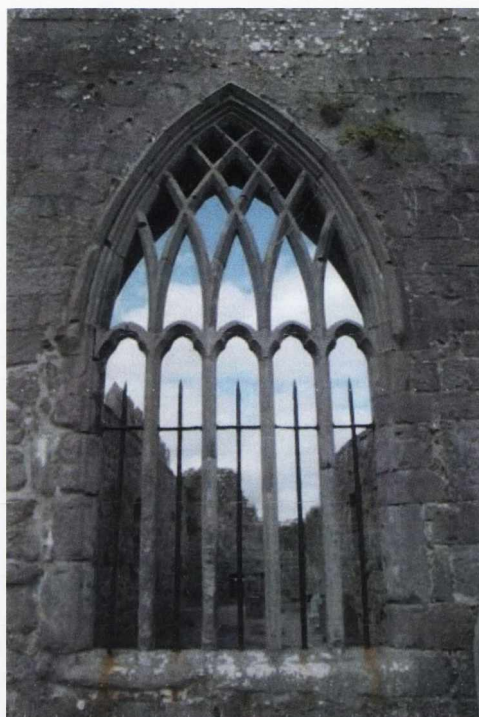
<b>Most likely:</b> 0.336m
<b>Within 10%:</b> 0.335
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.542	0.544	0.545
TFH/LHAP		0.510	0.511	0.511
TFH/OWH	0.329			
OWW/OWH	0.308			
OWW/WHS	0.459			
OWH/AS	0.948			
LW/LHSP		0.170	0.173	0.166
LW/LHAP		0.160	0.162	0.156
LW/OWW		0.335	0.339	0.326
LW/OWH		0.103	0.104	0.100
LW/AS		0.318	0.321	0.309
OWW/LHSP		0.508	0.510	0.510
OWW/LHAP		0.478	0.479	0.479
MW/OWW		0.105	0.107	
MW/LW		0.312	0.309	0.321
MW/LW		0.320	0.317	0.330

## Murrisk Augustinian friary: Chancel east Co. Mayo, Connaught

### Measurements



Light1		Light2	
width	0.347	width	0.393
overall height	2.112	overall height	2.113
height to spring	1.892	height to spring	1.899
Light3		Light4	
width	0.402	width	0.382
overall height	2.111	overall height	2.112
height to spring	1.897	height to spring	1.898
Light 5		Window	
width	0.357	overall width	1.877
overall height	2.115	overall height	4.067
height to spring	1.900	height to spring	2.136
Arch		Mullion 2	
span	2.123	width	0.096
height from spring	1.939		
		Mullion 3	
Mullion 1		width	0.103
width	0.100		
		Mullion 4	
		width	0.103

### Units

<b>Most likely:</b> 0.217m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.219 0.244 0.291

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5
TFH/LHSP		0.975	0.979	0.978	0.979	0.980
TFH/LHAP		0.918	0.918	0.919	0.918	0.917
TFH/OWH	0.477					
OWW/OWH	0.461					
OWW/WHS	0.525					
OWH/AS	0.884					
LW/LHSP		0.183	0.207	0.212	0.202	0.188
LW/LHAP		0.164	0.186	0.190	0.181	0.169
LW/OWW		0.185	0.210	0.214	0.204	0.190
LW/OWH		0.085	0.097	0.099	0.094	0.088
LW/AS		0.163	0.185	0.189	0.180	0.168
OWW/LHSP		0.992	0.988	0.989	0.989	0.988
OWW/LHAP		0.889	0.888	0.889	0.889	0.887
MW/OWW		0.053	0.051	0.055	0.055	
MW/LW		0.287	0.253	0.244	0.239	
MW/LW		0.256	0.269	0.271	0.290	



**Murrisk Augustinian friary: Nave north**  
Co. Mayo, Connaught



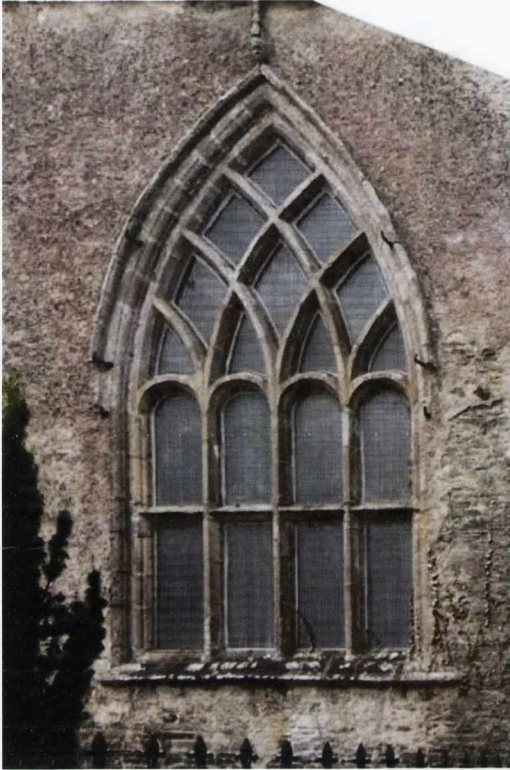
**Measurements**

None taken due to access issues

**Units**

**Proportions**

**Old Leighlin cathedral: Chancel east**  
Co. Carlow, Ormond



**Measurements**

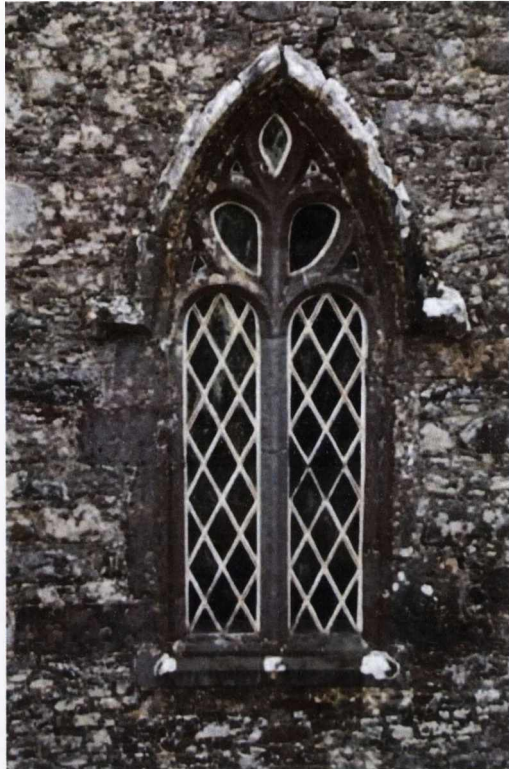
None taken due to access issues

**Units**

**Proportions**



**Old Leighlin cathedral: Nave north, eastern**  
Co. Carlow, Ormond



**Measurements**

Light1	
width	0.361
overall height	1.502
height to spring	1.385
Light2	
width	0.380
overall height	1.494
height to spring	1.378
Window	
overall width	0.728
overall height	2.190
height to spring	1.457
Arch	
span	0.741
height from spring	0.744
Mullion	
width	0.143

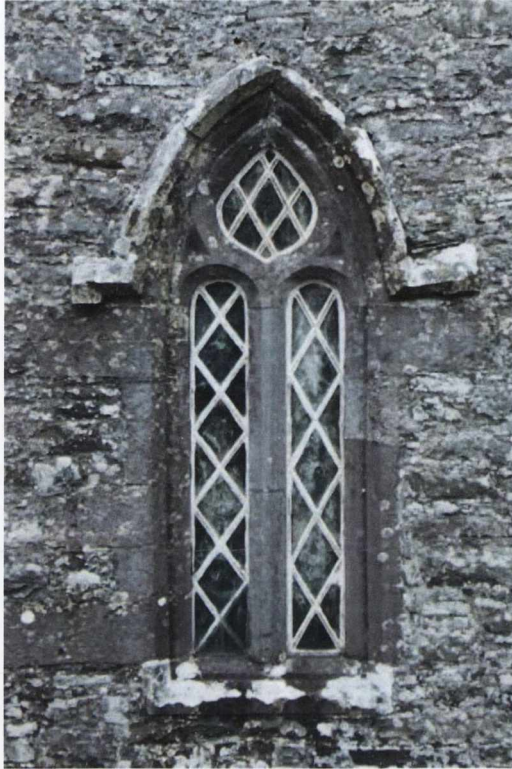
**Units**

<b>Most likely:</b> 0.274m
<b>Within 10%:</b> 0.219 0.273
<b>Within 20%:</b> 0.220 0.275

**Proportions**

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.529	0.532
TFH/LHAP		0.488	0.490
TFH/OWH	0.335		
OWW/OWH	0.332		
OWW/WHS	0.499		
OWH/AS	0.982		
LW/LHSP		0.261	0.276
LW/LHAP		0.241	0.254
LW/OWW		0.497	0.522
LW/OWH		0.165	0.165
LW/AS		0.488	0.513
OWW/LHSP		0.526	0.528
OWW/LHAP		0.484	0.487
MW/OWW		0.197	
MW/LW		0.397	0.377

**Old Leighlin cathedral: Nave north, western  
Co. Carlow, Ormond**



**Measurements**

Light1	
width	0.549
overall height	1.664
height to spring	1.420
Light2	
width	0.553
overall height	1.675
height to spring	1.463
Window	
overall width	1.090
overall height	2.644
height to spring	1.535
Arch	
span	1.107
height from spring	1.109
Mullion	
width	0.136

**Units**

<b>Most likely:</b> 0.333m
<b>Within 10%:</b> 0.278 0.334
<b>Within 20%:</b> 0.220 0.277 0.316 0.332

**Proportions**

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.781	0.758
TFH/LHAP		0.666	0.662
TFH/OWH	0.419		
OWW/OWH	0.412		
OWW/WHS	0.710		
OWH/AS	0.984		
LW/LHSP		0.387	0.378
LW/LHAP		0.330	0.330
LW/OWW		0.504	0.508
LW/OWH		0.208	0.208
LW/AS		0.496	0.500
OWW/LHSP		0.767	0.745
OWW/LHAP		0.655	0.651
MW/OWW		0.125	
MW/LW		0.247	0.245



## Old Leighlin cathedral: Nave south, eastern Co. Carlow, Ormond



### Measurements

Light1		Light2	
width	0.744	width	0.781
overall height	2.887	overall height	2.881
height to spring	1.976	height to spring	1.989
Light3		Window	
width	0.749	overall width	2.273
overall height	2.868	overall height	3.686
height to spring	1.990	height to spring	2.005
Arch		Mullion 1	
span	2.585	width	0.205
height from spring	1.682	Mullion 2	
		width	0.224

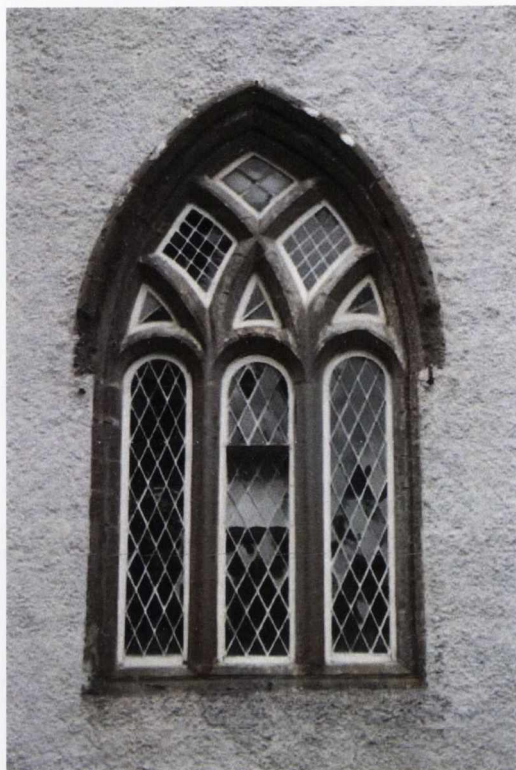
### Units

<b>Most likely:</b> 0.298m
<b>Within 10%:</b> 0.296
<b>Within 20%:</b> 0.295 0.297 0.299

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.851	0.846	0.845
TFH/LHAP		0.583	0.584	0.586
TFH/OWH	0.456			
OWW/OWH	0.617			
OWW/WHS	0.882			
OWH/AS	0.879			
LW/LHSP		0.376	0.393	0.377
LW/LHAP		0.258	0.271	0.261
LW/OWW		0.327	0.344	0.330
LW/OWH		0.202	0.212	0.203
LW/AS		0.288	0.302	0.290
OWW/LHSP		0.869	0.875	0.875
OWW/LHAP		0.787	0.789	0.793
MW/OWW		0.090	0.099	
MW/LW		0.276	0.263	0.274
MW/LW		0.301	0.287	0.299

## Old Leighlin cathedral: Nave south, western Co. Carlow, Ormond



### Measurements

Light1		Light2	
width	0.524	width	0.582
overall height	1.906	overall height	1.882
height to spring	1.651	height to spring	1.650
Light3		Window	
width	0.544	overall width	1.650
overall height	1.910	overall height	3.356
height to spring	1.657	height to spring	1.655
Arch		Mullion 1	
span	1.908	width	0.155
height from spring	1.702	Mullion 2	
		width	0.145

### Units

<b>Most likely:</b> 0.220m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.970	0.970	0.974
TFH/LHAP		0.893	0.904	0.891
TFH/OWH	0.507			
OWW/OWH	0.492			
OWW/WHS	0.997			
OWH/AS	0.865			
LW/LHSP		0.318	0.353	0.328
LW/LHAP		0.275	0.309	0.285
LW/OWW		0.318	0.353	0.330
LW/OWH		0.156	0.174	0.162
LW/AS		0.275	0.305	0.285
OWW/LHSP		1.000	1.000	0.996
OWW/LHAP		0.866	0.877	0.864
MW/OWW		0.094	0.088	
MW/LW		0.295	0.266	0.285
MW/LW		0.276	0.248	0.266



## Old Leighlin cathedral: Nave west Co. Carlow, Ormond



### Measurements

Light1		Light2	
width	0.546	width	0.479
overall height	1.726	overall height	1.726
height to spring	1.505	height to spring	1.500
Light3		Window	
width	0.498	overall width	1.522
overall height	1.736	overall height	3.038
height to spring	1.508	height to spring	1.483
Arch		Mullion 1	
span	1.771	width	0.120
height from spring	1.555	Mullion 2	
		width	0.118

### Units

<b>Most likely:</b> 0.325m
<b>Within 10%:</b> 0.237 0.323 0.324 0.326 0.328 0.347 0.348
<b>Within 20%:</b> 0.314 0.315 0.322 0.327 0.346

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.968	0.965	0.970
TFH/LHAP		0.901	0.901	0.896
TFH/OWH	0.512			
OWW/OWH	0.501			
OWW/WHS	0.974			
OWH/AS	0.860			
LW/LHSP		0.363	0.319	0.330
LW/LHAP		0.316	0.277	0.287
LW/OWW		0.359	0.315	0.327
LW/OWH		0.180	0.158	0.164
LW/AS		0.308	0.271	0.281
OWW/LHSP		0.988	0.985	0.990
OWW/LHAP		0.882	0.882	0.877
MW/OWW		0.079	0.077	
MW/LW		0.220	0.251	0.241
MW/LW		0.215	0.246	0.236

**Old Leighlin cathedral: North aisle east**  
Co. Carlow, Ormond



**Measurements**

None taken due to access issues

**Units**

**Proportions**



## Portumna Dominican priory: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.656	width	0.663
overall height	2.675	overall height	2.672
height to spring	2.328	height to spring	2.323
Light3		Light4	
width	0.670	width	0.652
overall height	2.675	overall height	2.671
height to spring	2.319	height to spring	2.322
Window		Mullion 1	
overall width	2.641	width	0.136
overall height	5.206		
height to spring	2.335	Mullion 2	
		width	0.140
Arch			
span	2.644	Mullion 3	
height from spring	2.871	width	0.141

### Units

<b>Most likely:</b> 0.274m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.811	0.809	0.808	0.809
TFH/LHAP		0.932	0.931	0.932	0.930
TFH/OWH	0.551				
OWW/OWH	0.507				
OWW/WHS	0.884				
OWH/AS	0.999				
LW/LHSP		0.282	0.285	0.289	0.281
LW/LHAP		0.245	0.248	0.251	0.244
LW/OWW		0.248	0.251	0.254	0.247
LW/OWH		0.126	0.127	0.129	0.125
LW/AS		0.248	0.251	0.253	0.247
OWW/LHSP		0.882	0.882	0.878	0.879
OWW/LHAP		0.987	0.988	0.987	0.989
MW/OWW		0.052	0.053	0.053	
MW/LW		0.208	0.206	0.211	
MW/LW		0.209	0.211	0.217	

**Portumna Dominican priory: South transept south**  
Co. Galway, Connaught



**Measurements**

Light1		Light2	
width	0.656	width	
overall height	2.562	overall height	2.753
height to spring	2.294	height to spring	2.304
Mullion 1		Arch	
width	0.154	span	2.020
		height from spring	1.777

**Units**

<b>Most likely:</b> 0.263m
<b>Within 10%:</b> 0.238
<b>Within 20%:</b> 0.237

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.775	0.771	
TFH/LHAP		0.694	0.645	
LW/LHSP		0.286		
LW/LHAP		0.256		
LW/AS		0.325		
MW/LW		0.234		



## Rathkeale Augustinian priory: Chancel east Co. Limerick, Desmond



### Measurements

Light1		Light2	
width	0.613	width	0.363
overall height	3.606	overall height	3.634
height to spring	2.439	height to spring	2.435
Light3		Light4	
width	0.639	width	0.618
overall height	3.649	overall height	3.643
height to spring	2.445	height to spring	2.454
Window		Mullion 1	
overall width	2.504	width	0.137
overall height	5.244		
height to spring	2.460	Mullion 2	
		width	0.148
Arch			
span	3.180	Mullion 3	
height from spring	2.840	width	0.139

### Units

<b>Most likely:</b> 0.228m
<b>Within 10%:</b> 0.231 0.233 0.270 0.317 0.318 0.365 0.366
<b>Within 20%:</b> 0.235 0.251 0.252 0.271 0.272 0.316 0.363 0.364 0.367

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.859	0.857	0.861	0.864
TFH/LHAP		0.788	0.782	0.778	0.780
TFH/OWH	0.542				
OWW/OWH	0.478				
OWW/WHS	0.982				
OWH/AS	0.787				
LW/LHSP		0.251	0.261	0.261	0.252
LW/LHAP		0.170	0.175	0.175	0.170
LW/OWW		0.245	0.254	0.255	0.247
LW/OWH		0.117	0.121	0.122	0.118
LW/AS		0.193	0.200	0.201	0.194
OWW/LHSP		0.974	0.974	0.976	0.980
OWW/LHAP		0.694	0.689	0.686	0.687
MW/OWW		0.055	0.059	0.055	
MW/LW		0.223	0.215	0.233	
MW/LW		0.232	0.217	0.225	

**Roscommon Dominican friary: Chancel east**  
Co. Roscommon, Connaught



**Measurements**

Light1	
height to spring	3.773
Light4	
height to spring	3.782
Window	
overall width	3.334
overall height	7.051
height to spring	4.773
Arch	
span	4.975
height from spring	2.800

**Units**

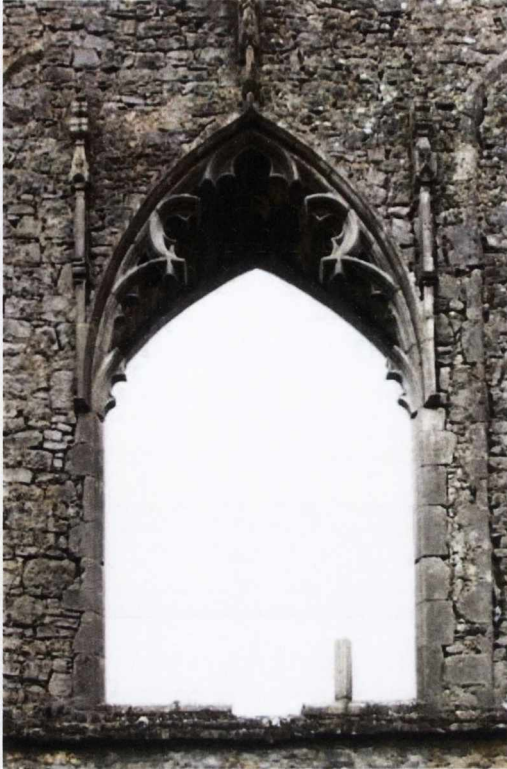
<b>Most likely:</b> 0.240m
<b>Within 10%:</b> 0.292 0.351
<b>Within 20%:</b>

**Proportions**

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
	Single				
TFH/LHSP		0.742		0.740	
TFH/OWH	0.397				
OWW/OWH	0.473				
OWW/WHS	0.698				
OWH/AS	0.670				
LW/LHSP				0.158	
LW/OWW				0.179	
LW/OWH				0.085	
LW/AS				0.120	
OWW/LHSP		0.883	0.883	0.881	



## Roscommon Dominican friary: Nave west Co. Roscommon, Connaught



### Measurements

Light 1	
width	0.668
height to spring	2.338
Light 4	
width	0.695
height to spring	2.336
Window	
overall width	2.721
overall height	4.562
height to spring	2.327
Arch	
span	2.639
height from spring	2.237
Mullion 1	
width	0.158
Mullion 3	
width	0.108

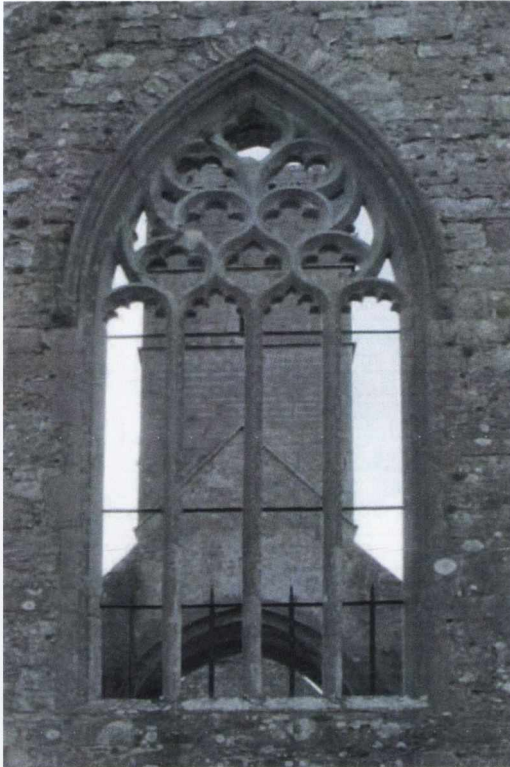
### Units

<b>Most likely:</b> 0.302m
<b>Within 10%:</b> 0.222 0.360
<b>Within 20%:</b> 0.243 0.256 0.261 0.324

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.957			0.957
TFH/OWH	0.490				
OWW/OWH	0.597				
OWW/WHS	0.855				
OWH/AS	0.970				
LW/LHSP		0.286			0.297
LW/OWW		<b>0.245</b>			0.255
LW/OWH		0.146			0.152
LW/AS		<b>0.253</b>			0.263
OWW/LHSP		0.859	0.859		0.858
MW/OWW		0.058		0.040	
MW/LW		0.237			
MW/LW				0.155	

## Rosserk Franciscan Friary: Chancel east Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.464	width	0.503
overall height	3.543	overall height	3.586
height to spring	3.271	height to spring	3.289
Light3		Light4	
width	0.501	width	0.453
overall height	3.575	overall height	3.535
height to spring	3.319	height to spring	3.340
Window		Outer Frame	
overall width	1.908	Width	2.215
overall height	5.547	Overall height	5.632
height to spring	3.131	Height to spring	3.249
Arch			
span	2.223	Mullion 2	
height from spring	2.423	width	0.121
Mullion 1		Mullion 3	
width	0.124	width	0.123

### Units

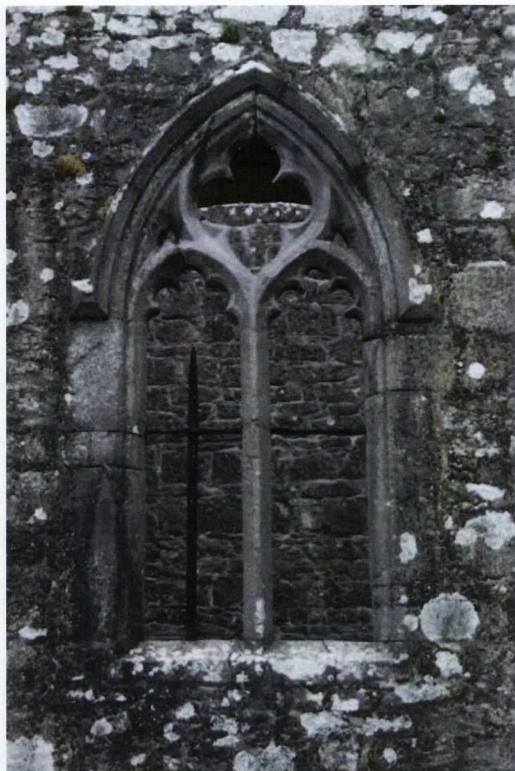
<b>Most likely:</b> 0.261m
<b>Within 10%:</b> 0.260 0.303 0.333 0.334
<b>Within 20%:</b> 0.286 0.287 0.332 0.336

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.741	0.737	0.730	0.725
TFH/LHAP		0.684	0.676	0.678	0.685
TFH/OWH	0.437				
OWW/OWH	0.344				
OWW/WHS	0.609				
OWH/AS	0.859				
LW/LHSP		0.142	0.153	0.151	0.136
LW/LHAP		0.131	0.140	0.140	0.128
LW/OWW		0.243	0.264	0.263	0.237
LW/OWH		0.084	0.091	0.090	0.082
LW/AS		0.209	0.226	0.225	0.204
OWW/LHSP		0.583	0.583	0.575	0.571
OWW/LHAP		0.539	0.532	0.534	0.540
MW/OWW		0.065	0.064	0.064	
MW/LW		0.267	0.246	0.241	
MW/LW		0.242	0.245	0.271	



## Rosserk Franciscan Friary: South transept east Co. Mayo, Connaught



### Measurements

Light1	
width	0.423
overall height	1.343
height to spring	1.104
Light2	
width	0.420
overall height	1.338
height to spring	1.085
Window	
overall width	0.843
overall height	1.856
height to spring	1.070
Arch	
span	0.834
height from spring	0.786
Mullion 1	
width	0.103

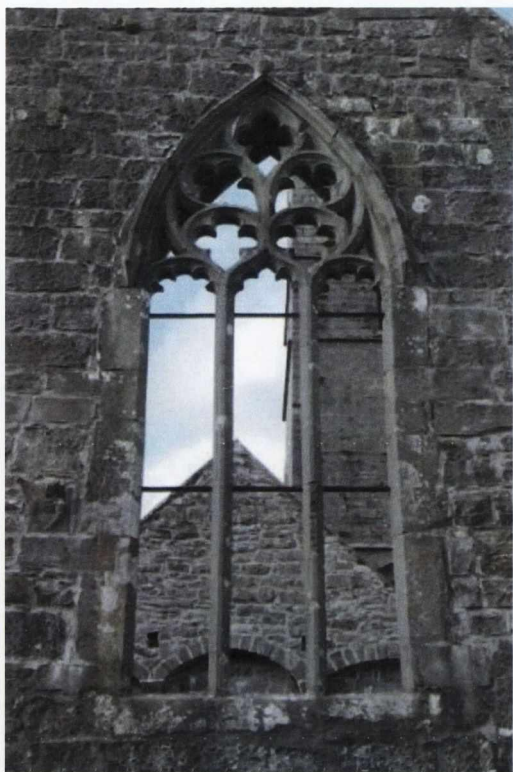
### Units

<b>Most likely:</b> 0.310m
<b>Within 10%:</b> 0.309
<b>Within 20%:</b> 0.311 0.314

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.712	0.724
TFH/LHAP		0.585	0.587
TFH/OWH	0.423		
OWW/OWH	0.454		
OWW/WHS	0.788		
OWH/AS	0.989		
LW/LHSP		0.383	0.387
LW/LHAP		0.315	0.314
LW/OWW		0.502	0.498
LW/OWH		0.228	0.228
LW/AS		0.508	0.504
OWW/LHSP		0.764	0.777
OWW/LHAP		0.628	0.630
MW/OWW		0.122	
MW/LW		0.242	0.244

## Rosserk Franciscan Friary: South transept south Co. Mayo, Connaught



### Measurements

Light1		Light2	
width	0.470	width	0.478
overall height	2.756	overall height	2.808
height to spring	2.345	height to spring	2.581
Light3		Window	
width	0.465	overall width	1.411
overall height	2.782	overall height	4.172
height to spring	2.738	height to spring	2.493
Arch		Mullion 1	
span	1.442	width	0.103
height from spring	1.780	Mullion 2	
		width	0.128

### Units

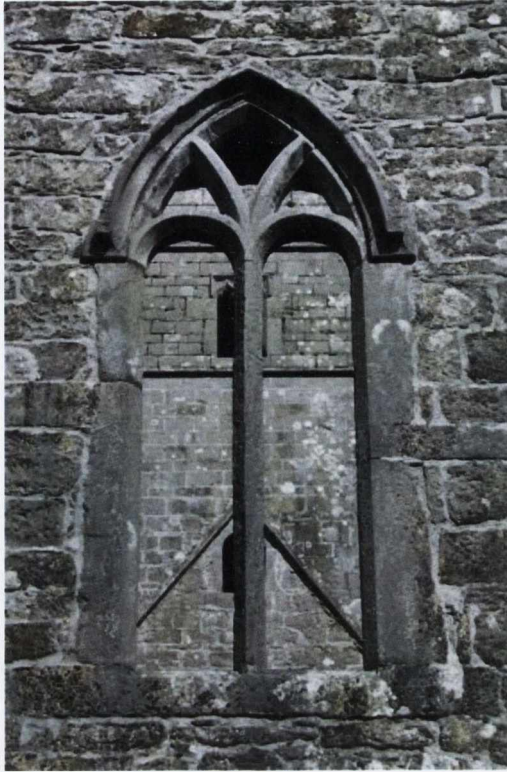
<b>Most likely:</b> 0.267m
<b>Within 10%:</b> 0.368 0.369
<b>Within 20%:</b> 0.312 0.321 0.322

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.759	0.690	0.650
TFH/LHAP		0.646	0.634	0.640
TFH/OWH	0.427			
OWW/OWH	0.338			
OWW/WHS	0.566			
OWH/AS	0.979			
LW/LHSP		0.200	0.185	0.170
LW/LHAP		0.170	0.170	0.167
LW/OWW		0.333	0.339	0.330
LW/OWH		0.113	0.115	0.111
LW/AS		0.326	0.332	0.323
OWW/LHSP		0.602	0.547	0.516
OWW/LHAP		0.512	0.503	0.507
MW/OWW		0.073	0.091	
MW/LW		0.220	0.216	0.222
MW/LW		0.273	0.268	0.276



## Rosserk Franciscan Friary: Nave west Co. Mayo, Connaught



### Measurements

Light1	
width	0.431
overall height	1.885
height to spring	1.695
Light2	
width	0.421
overall height	1.882
height to spring	1.691
Window	
overall width	0.850
overall height	2.546
height to spring	1.730
Arch	
span	0.915
height from spring	0.816
Mullion 1	
width	0.108

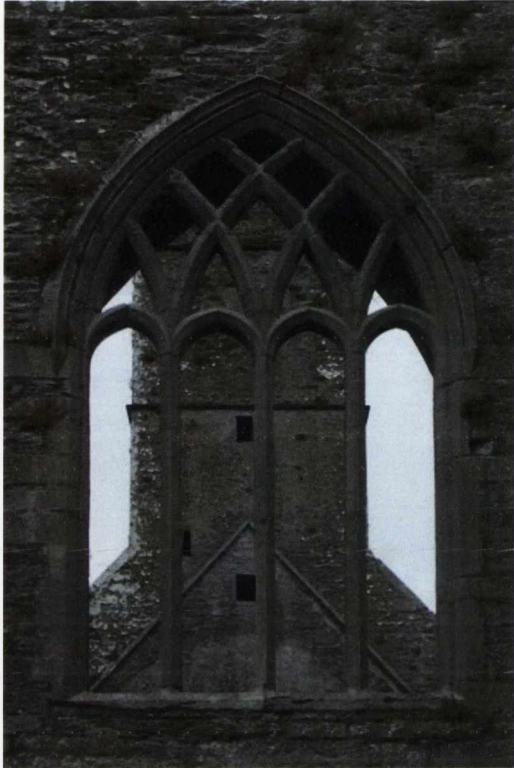
### Units

<b>Most likely:</b> 0.243m
<b>Within 10%:</b> 0.226
<b>Within 20%:</b>

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.481	0.483
TFH/LHAP		0.433	0.434
TFH/OWH	0.321		
OWW/OWH	0.334		
OWW/WHS	0.492		
OWH/AS	0.930		
LW/LHSP		<b>0.254</b>	<b>0.249</b>
LW/LHAP		0.228	0.224
LW/OWW		<b>0.507</b>	<b>0.495</b>
LW/OWH		0.169	0.169
LW/AS		0.471	0.460
OWW/LHSP		<b>0.502</b>	<b>0.503</b>
OWW/LHAP		<b>0.451</b>	<b>0.452</b>
MW/OWW		0.127	
MW/LW		<b>0.251</b>	<b>0.257</b>

## Rosserrilly Franciscan friary: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.589	width	0.596
overall height	3.023	overall height	2.994
height to spring	2.702	height to spring	2.700
Light3		Light4	
width	0.598	width	0.576
overall height	2.982	overall height	3.019
height to spring	2.690	height to spring	2.714
Window		Mullion 1	
overall width	2.356	width	0.127
overall height	4.587		
height to spring	2.689	Mullion 2	
		width	0.123
Arch			
span	2.278	Mullion 3	
height from spring	1.900	width	0.133

### Units

<b>Most likely:</b> 0.360m
<b>Within 10%:</b> 0.361
<b>Within 20%:</b> 0.359

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.703	0.704	0.706	0.700
TFH/LHAP		0.629	0.635	0.637	0.629
TFH/OWH	0.414				
OWW/OWH	0.514				
OWW/WHS	0.876				
OWH/AS	0.967				
LW/LHSP		0.218	0.221	0.222	0.212
LW/LHAP		0.195	0.199	0.201	0.191
LW/OWW		0.250	0.253	0.254	0.244
LW/OWH		0.128	0.130	0.130	0.125
LW/AS		0.259	0.262	0.263	0.253
OWW/LHSP		0.872	0.872	0.876	0.868
OWW/LHAP		0.779	0.787	0.790	0.780
MW/OWW		0.054	0.052	0.056	
MW/LW		0.216	0.213	0.206	
MW/LW		0.205	0.222	0.231	



## Rosserrilly Franciscan friary: South transept east, northern Co. Galway, Connaught



### Measurements

Light1	
width	0.475
overall height	1.547
height to spring	1.353
Light2	
width	0.483
overall height	1.548
height to spring	1.359
Window	
overall width	0.958
overall height	2.124
height to spring	1.431
Arch	
span	1.099
height from spring	0.699
Mullion	
width	0.111

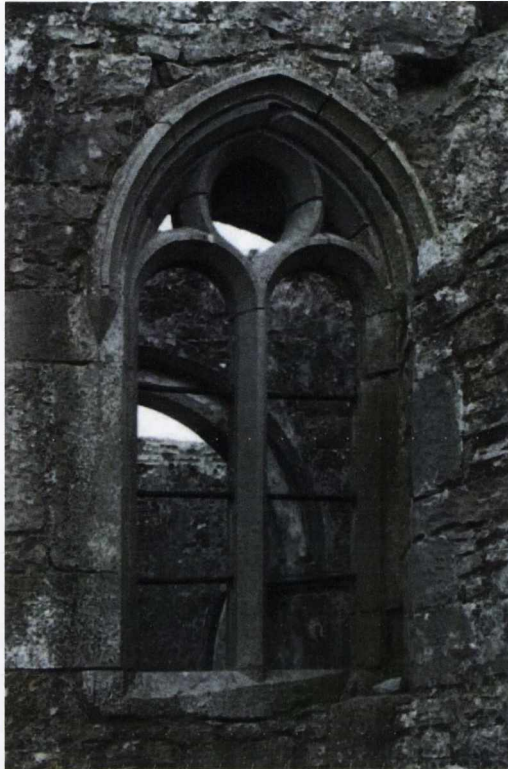
### Units

<b>Most likely:</b> 0.358m
<b>Within 10%:</b> 0.238 0.290 0.357 0.359
<b>Within 20%:</b> 0.236 0.237 0.272 0.291 0.360 0.361 0.362 0.363 0.364

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2
TFH/LHSP		0.516	0.514
TFH/LHAP		0.452	0.451
TFH/OWH	0.329		
OWW/OWH	0.451		
OWW/WHS	0.669		
OWH/AS	0.871		
LW/LHSP		0.351	0.356
LW/LHAP		0.307	0.312
LW/OWW		0.496	0.505
LW/OWH		0.224	0.224
LW/AS		0.432	0.440
OWW/LHSP		0.708	0.705
OWW/LHAP		0.619	0.619
MW/OWW		0.116	
MW/LW		0.234	0.230

## Rosserrilly Franciscan friary: South transept east, southern Co. Galway, Connaught



### Measurements

Light1	
width	0.546
overall height	1.512
height to spring	1.316
Light2	
width	0.539
overall height	1.500
height to spring	1.312
Window	
overall width	1.084
overall height	1.992
height to spring	1.311
Arch	
span	1.093
height from spring	0.681
Mullion	
width	0.108

### Units

<b>Most likely:</b> 0.228m
<b>Within 10%:</b> 0.229 0.231 0.232 0.239 0.328 0.329
<b>Within 20%:</b> 0.230 0.233 0.273 0.274 0.327 0.330 0.331 0.332 0.333

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.518	0.519
TFH/LHAP		0.450	0.454
TFH/OWH	0.342		
OWW/OWH	0.544		
OWW/WHS	0.827		
OWH/AS	0.992		
LW/LHSP		0.415	0.411
LW/LHAP		0.361	0.359
LW/OWW		0.503	0.497
LW/OWH		0.274	0.274
LW/AS		0.500	0.493
OWW/LHSP		0.824	0.827
OWW/LHAP		0.717	0.723
MW/OWW		0.100	
MW/LW		0.198	0.201



## Rosserrilly Franciscan friary: South transept chapel east Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.471	width	0.478
overall height	1.392	overall height	1.381
height to spring	1.217	height to spring	1.215
Light3		Window	
width	0.462	overall width	1.410
overall height	1.385	overall height	2.652
height to spring	1.206	height to spring	1.516
Arch		Mullion 1	
span	1.394	width	0.116
height from spring	1.136	Mullion 2	
		width	0.114

### Units

<b>Most likely:</b> 0.348m
<b>Within 10%:</b> 0.347
<b>Within 20%:</b> 0.346 0.349

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.934	0.935	0.942
TFH/LHAP		0.816	0.823	0.820
TFH/OWH	0.428			
OWW/OWH	0.532			
OWW/WHS	0.930			
OWH/AS	0.988			
LW/LHSP		0.387	0.393	0.383
LW/LHAP		0.338	0.346	0.333
LW/OWW		0.334	0.339	0.328
LW/OWH		0.178	0.180	0.174
LW/AS		0.338	0.343	0.331
OWW/LHSP		0.863	0.861	0.855
OWW/LHAP		0.987	0.979	0.982
MW/OWW		0.082	0.081	
MW/LW		0.246	0.243	0.251
MW/LW		0.242	0.239	0.247

## Rosserrilly Franciscan friary: South transept south, eastern Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.559	width	0.576
overall height	2.633	overall height	2.629
height to spring	2.335	height to spring	2.335
Light3		Window	
width	0.575	overall width	1.709
overall height	2.630	overall height	4.135
height to spring	2.339	height to spring	2.337
Arch		Mullion 1	
span	1.708	width	0.109
height from spring	1.798	Mullion 2	
		width	0.107

### Units

<b>Most likely:</b> 0.359m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.318 0.360

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	<b>Single</b>			
TFH/LHSP		0.770	0.770	0.769
TFH/LHAP		0.683	0.684	0.684
TFH/OWH	0.435			
OWW/OWH	0.413			
OWW/WHS	0.731			
OWH/AS	<b>1.001</b>			
LW/LHSP		0.239	<b>0.247</b>	<b>0.246</b>
LW/LHAP		0.212	0.219	0.219
LW/OWW		<b>0.327</b>	<b>0.337</b>	<b>0.336</b>
LW/OWH		0.135	0.139	0.139
LW/AS		<b>0.327</b>	<b>0.337</b>	<b>0.337</b>
OWW/LHSP		0.732	0.732	0.731
OWW/LHAP		0.649	0.650	0.650
MW/OWW		0.064	0.063	
MW/LW		0.194	0.189	0.189
MW/LW		0.192	0.187	0.187



## Rosserrilly Franciscan friary: South transept south, western Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.571	width	0.580
overall height	2.613	overall height	2.599
height to spring	2.315	height to spring	2.295
Light3		Window	
width	0.563	overall width	1.714
overall height	2.595	overall height	4.092
height to spring	2.299	height to spring	2.572
Arch		Mullion 1	
span	2.711	width	0.111
height from spring	2.027	Mullion 2	
		width	0.112

### Units

<b>Most likely:</b> 0.341m
<b>Within 10%:</b> 0.340
<b>Within 20%:</b> 0.339

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
	Single			
TFH/LHSP		0.875	0.883	0.882
TFH/LHAP		0.776	0.780	0.781
TFH/OWH	0.495			
OWW/OWH	0.419			
OWW/WHS	0.666			
OWH/AS	0.632			
LW/LHSP		0.247	0.253	0.245
LW/LHAP		0.219	0.223	0.217
LW/OWW		0.333	0.338	0.328
LW/OWH		0.140	0.142	0.138
LW/AS		0.211	0.214	0.208
OWW/LHSP		0.740	0.747	0.745
OWW/LHAP		0.656	0.659	0.660
MW/OWW		0.065	0.066	
MW/LW		0.195	0.192	0.197
MW/LW		0.197	0.194	0.200

## Rosserrilly Franciscan friary: South transept west Co. Galway, Connaught



### Measurements

Light1	
width	0.625
overall height	1.651
height to spring	1.431
Light2	
width	0.649
overall height	1.650
height to spring	1.412
Window	
overall width	1.273
overall height	2.735
height to spring	1.392
Arch	
span	1.268
height from spring	1.343
Mullion	
width	0.120

### Units

<b>Most likely:</b> 0.254m
<b>Within 10%:</b>
<b>Within 20%:</b>

### Proportions

		Light/ Mullion1	Light/ Mullion2
	Single		
TFH/LHSP		0.939	0.951
TFH/LHAP		0.813	0.814
TFH/OWH	0.491		
OWW/OWH	0.465		
OWW/WHS	0.914		
OWH/AS	1.004		
LW/LHSP		0.437	0.460
LW/LHAP		0.378	0.393
LW/OWW		0.491	0.510
LW/OWH		0.228	0.228
LW/AS		0.493	0.512
OWW/LHSP		0.890	0.901
OWW/LHAP		0.771	0.772
MW/OWW		0.094	
MW/LW		0.192	0.185



## Rosserrilly Franciscan friary: Nave west Co. Galway, Connaught



### Measurements

Light1		Light2	
width	0.625	width	0.634
overall height	2.765	overall height	2.763
height to spring	2.428	height to spring	2.426
Light3		Window	
width	0.621	overall width	1.879
overall height	2.754	overall height	4.536
height to spring	2.398	height to spring	2.400
Arch		Mullion 1	
span	1.889	width	0.116
height from spring	2.137	Mullion 2	
		width	0.121

### Units

<b>Most likely:</b> 0.356m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.357

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.880	0.881	0.891
TFH/LHAP		0.773	0.773	0.776
TFH/OWH	0.471			
OWW/OWH	0.414			
OWW/WHS	0.783			
OWH/AS	0.995			
LW/LHSP		0.257	0.261	0.259
LW/LHAP		0.226	0.229	0.225
LW/OWW		0.332	0.337	0.330
LW/OWH		0.138	0.140	0.137
LW/AS		0.331	0.336	0.329
OWW/LHSP		0.774	0.775	0.784
OWW/LHAP		0.680	0.680	0.682
MW/OWW		0.062	0.064	
MW/LW		0.186	0.184	0.188
MW/LW		0.194	0.191	0.195

## Sligo Dominican priory: Chancel east Co. Sligo, Connaught



### Measurements

Light1		Light2	
width	0.470	width	0.495
overall height	4.496	overall height	4.452
height to spring	4.248	height to spring	4.242
Light3		Light4	
width	0.506	width	0.458
overall height	4.469	overall height	4.486
height to spring	4.259	height to spring	4.240
Window		Mullion 1	
overall width	1.916	width	0.163
overall height	6.190		
height to spring	4.094	Mullion 2	
frame width	3.126	width	0.151
Arch		Mullion 3	
span	3.093	width	0.165
height from spring	2.117		

### Units

<b>Most likely:</b> 0.334m
<b>Within 10%:</b>
<b>Within 20%:</b> 0.333

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4
TFH/LHSP		0.498	0.499	0.497	0.499
TFH/LHAP		0.471	0.476	0.474	0.472
TFH/OWH	0.342				
OWW/OWH	0.310				
OWW/WHS	0.468				
OWH/AS	0.620				
LW/LHSP		0.111	0.117	0.119	0.108
LW/LHAP		0.104	0.111	0.113	0.102
LW/OWW		<b>0.245</b>	0.258	0.264	0.239
LW/OWH		0.076	0.080	0.082	0.074
LW/AS		0.152	0.160	0.164	0.148
OWW/LHSP		0.451	0.451	0.450	0.452
OWW/LHAP		0.426	0.430	0.429	0.427
MW/OWW		0.085	0.079	0.086	
MW/LW		0.347	0.329	0.305	
MW/LW		0.298	0.326	0.360	



**Strade Dominican friary: North transept east**  
Co. Mayo, Connaught



**Measurements**

Light1	
width	0.612
overall height	1.610
height to spring	1.346
Light2	
width	0.589
overall height	1.615
height to spring	1.345
Window	
overall width	1.200
overall height	2.408
height to spring	1.358
Arch	
span	1.209
height from spring	1.051
Mullion 1	
width	0.124

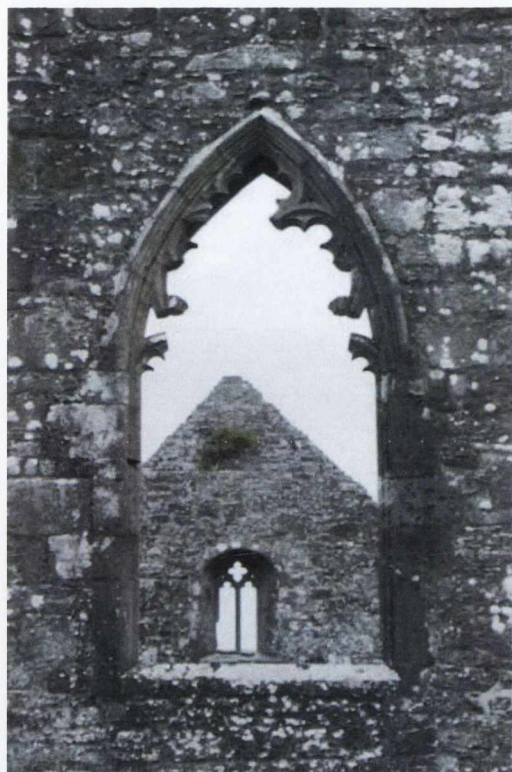
**Units**

<b>Most likely:</b> 0.359m
<b>Within 10%:</b> 0.301 0.358 0.360 0.361
<b>Within 20%:</b> 0.302 0.357

**Proportions**

	Single	Light/ Mullion 1	Light/ Mullion 2
TFH/LHSP		0.781	0.781
TFH/LHAP		0.653	0.650
TFH/OWH	0.436		
OWW/OWH	0.498		
OWW/WHS	0.884		
OWH/AS	0.993		
LW/LHSP		0.454	0.438
LW/LHAP		0.380	0.364
LW/OWW		0.510	0.491
LW/OWH		0.254	0.254
LW/AS		0.506	0.487
OWW/LHSP		0.892	0.892
OWW/LHAP		0.745	0.743
MW/OWW		0.103	
MW/LW		0.202	0.210

## Urlaur Dominican friary: Chancel east Co. Galway, Connaught



### Measurements

Light1		Light3	
width	0.564	width	0.581
height to spring	2.046	height to spring	2.012
Light2		Window	
width	0.522	overall width	1.654
		overall height	3.793
Arch		height to spring	2.152
span	1.642	frame width	1.651
height from spring	1.644		
Mullion 1		Mullion 2	
width	0.124	width	0.091

### Units

<b>Most likely:</b> 0.353m
<b>Within 10%:</b> 0.248 0.344 0.354 0.355 0.356
<b>Within 20%:</b> 0.247 0.292

### Proportions

	Single	Light/ Mullion1	Light/ Mullion2	Light/ Mullion3
TFH/LHSP		0.804		
TFH/LHAP				
TFH/OWH	0.433			
OWW/OWH	0.436			
OWW/WHS	0.769			
OWH/AS	0.993			
LW/LHSP		0.276		
LW/OWW		0.341	0.316	0.351
LW/OWH		0.149	0.138	0.153
LW/AS		0.344	0.318	0.354
OWW/LHSP		0.808		
OWW/LHAP				
MW/OWW		0.075	0.055	
MW/LW		0.220	0.237	0.213
MW/LW		0.161	0.174	0.156



**Urlaur Dominican friary: Nave west**  
Co. Galway, Connaught



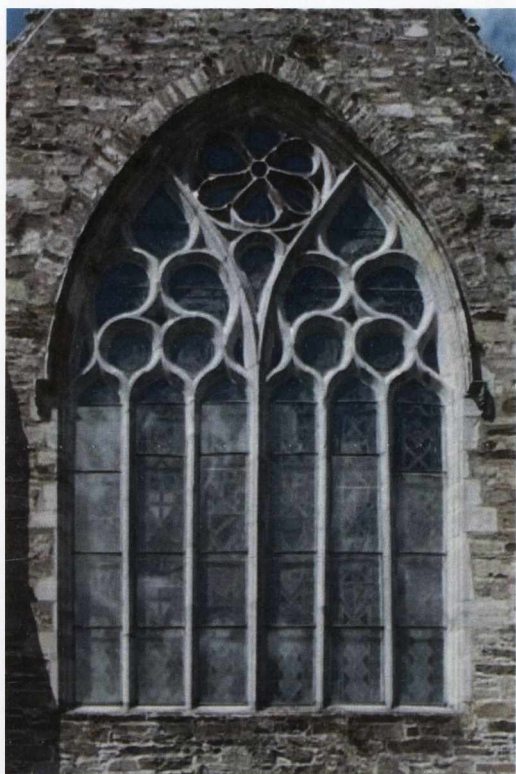
**Measurements**

None taken due to access issues

**Units**

**Proportions**

## Youghal collegiate church: Chancel east Co. Cork, Desmond



### Measurements

Light1		Light2	
width	0.894	width	0.797
overall height	4.101	overall height	4.124
height to spring	3.735	height to spring	3.733
Light3		Light4	
width	0.831	width	0.844
overall height	4.115	overall height	4.103
height to spring	3.736	height to spring	3.743
Light5		Light6	
width	0.889	width	0.916
overall height	4.089	overall height	4.102
height to spring	3.710	height to spring	3.740
Window		Arch	
overall width	5.162	span	5.264
overall height	7.688	height from spring	3.891
height to spring	4.467		
		Mullion 3	
Mullion 1		width	0.228
width	0.169	Mullion 4	
Mullion 2		width	0.173
width	0.161	Mullion 5	
		width	0.149

### Units

Most likely: 0.224m

Within 10%: 0.299

Within 20%:

### Proportions

		Light/ Mullion1	Light/ Mullion2	Light/ Mullion3	Light/ Mullion4	Light/ Mullion5	Light/ Mullion6
	Single						
TFH/LHSP		0.960	0.944	0.960	0.962	0.953	0.961
TFH/LHAP		0.949	0.944	0.946	0.948	0.952	0.949
TFH/OWH	0.506						
OWW/OWH	0.671						
OWW/WHS	0.494						
OWH/AS	0.981						
LW/LHSP		0.239	0.213	0.222	0.225	0.240	0.245
LW/LHAP		0.218	0.193	0.202	0.206	0.217	0.223
LW/OWW		0.173	0.154	0.161	0.163	0.172	0.177
LW/OWH		0.116	0.104	0.108	0.110	0.116	0.119
LW/AS		0.170	0.151	0.158	0.160	0.169	0.174
OWW/LHSP		0.724	0.723	0.724	0.725	0.719	0.725
OWW/LHAP		0.795	0.799	0.797	0.795	0.792	0.795
MW/OWW		0.033	0.031	0.044	0.034	0.029	
MW/LW		0.189	0.212	0.202	0.193	0.274	0.270
MW/LW		0.205	0.195	0.168	0.163		