

74 St. Georges Drive - Revision A

Volume of Hip to gable change

Volume = Volume of gable -(1/2 a pyramid)

Equation for pyramid =

area of base x 1/3 height

Volume of gable roof =

Area of triangular end x length of roof

Area of end =

Length	1/2 height	Area
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Length of roof =

5.152	0.971	5.000 sq.m
6.191	m	

Volume of gable roof =

30.955 cu.m

Volume of hipped roof =

part of gable roof + 1/2 pyramid

Length of gable part of roof =

2.324 m

Volume of gable part =

11.620 cu.m

Remaining length of roof =

1.934

Volume of half pyramid =

6.445 cu.m

Total volume of hipped roof =

18.065 cu.m

Volume of hipped to gable conversion =

12.890 cu.m

Volume of dormer window - 1

Area of end x length

Length	1/2 height	Area
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Area of end =

2.313	0.971	2.245 sq.m
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Length of roof =

6.191 m

Volume of dormer window =

13.897 cu.m

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Volume of dormer window - 2

Area of end x length	Length	1/2 height	Area
Area of end =	2.313	0.971	2.246 sq.m
Length of roof =	1.28 m		
Volume of dormer window =	2.875 cu.m		

Volume of dormer window - 3

Area of end x length	Length	1/2 height	Area
Area of end =	1.157	0.486	0.562 sq.m
Length of roof =	4.91 m		
Volume of dormer window =	2.758 cu.m		

Total volume of hip to gable conversion and dormer 32.420 cu.m