

47 St. Mary's Road

Volume of dormer window

Area of end x length	Length	1/2 height	Area
Area of end =	3.596	1.399	5.031 sq.m
Length of roof =	5.99 m		
Volume of dormer window =	30.135 cu.m		

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
	8.190	1.607	13.157 sq.m
Length of roof =	6.102 m		
Volume of gable roof =	80.285 cu.m		
Volume of hipped roof =	part of gable roof + 1/2 pyramid		
Length of gable part of roof =	2.125 m		
Volume of gable part =	27.959 cu.m		
Remaining length of roof =	3.977		
Volume of half pyramid =	34.884 cu.m		
Total volume of hipped roof =	62.843 cu.m		
Volume of hipped to gable conversion =	17.442 cu.m		
Total volume of hip to gable conversion and dormer	<u>47.577</u> cu.m		