74 St. Georges Drive

Volume of Hip to gable change

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

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
	7.868	1.651	12.986 sq.m
Length of roof =	7.965 m		
Volume of gable roof =	103.435 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 =	30.180 cu.m		
Remaining length of roof =	2.821		
Volume of half pyramid =	48.837 cu.m		
Total volume of hipped roof =	79.016 cu.m		
Volume of hipped to gable conversion =	24.418 cu.m		

Volume of dormer window - 1

Area of end x length	Length	1/2 height	Area
Area of end =	2.314	0.971	2.246 sq.m
Length of roof =	8.947 m		
Volume of dormer window =	20.093 cu.m		

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Volume of dormer window - 2

Area of end x length	Length	1/2 height	Area
Area of end =	1.157	0.486	0.562 sq.m
Length of roof =	6.383 m		
Volume of dormer window =	3.585 cu.m		

Total volume of hip to gable conversion and dormer   <u>48.096</u> cu.m