5 Birch drive, Maple cross, Rickmansworth, WD3 9UL

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## Calculation for hip to gable loft conversion

|  | $(\mathrm{m})$ |
| :--- | ---: |
| A Depth of main roof | 7.45 |
| B Width of main roof | 6.28 |
| C Height of main roof | 2.40 |
| D Ridge to eaves in plan | 3.81 |
| E Projection of dormer | 3.61 |
| F Height of dormer | 2.06 |
| G Width of dormer | 5.87 |



Volume of triangular prism
Area of triangle $x$ length

$$
((\mathrm{A} * \mathrm{C}) / 2) *(\mathrm{D} * 2)
$$

$68.12 \mathrm{~m}^{3}$
Volume of the pyramid
Base area $\times 1 / 3 h e i g h t$

$$
\left(A^{*}\left(D^{*} 2\right) *(1 / 3 \text { of } C)\right.
$$

$45.42 \mathrm{~m}^{3}$
Volume of the additonal segment
((Prism - Pyramid)/2)
$11.35 \mathrm{~m}^{3}$
Volume of additional dormer
Area of triangle $x$ length of dormer
$((E * F) / 2) * G$
$21.82 \mathrm{~m}^{3}$
Total volume of development
$33.17 \mathrm{~m}^{3}$

## Rear GF Extension

Front Porch
$3 m$ Depth, Eaves 2.928 m
$1.24 m \times 2.4 m=2.976 m$ (Under $3 s q / m$ )
Overall height not higher than $3 m$

