

Calculations for Roof Volume

Proposed Dormer enlargement

Volume of the rear dormer - Area
of the triangle x its length

Formula - $V = D \times E/2 \times F$

$$V = 3402 \times 1/2 \times 2588 \times 5450 =$$

Hip to gable with rear dormer

23.99 CUBIC METRES

Hip to gable enlargement -

Volume of hip to gable segment - Pyramid -
Base area x 1/3 height

Formula - $V = A \times 1/2 B \times 1/3 C$

$$V = 9497 \times 1/2 \times 3530 \times 1/3 \times 4630 =$$

25.86 CUBIC METRES

A - Depth of the main roof - 9497 mm

B - Height of main roof - 3530 mm

C - Ridge to eaves in plan - 4630 mm

D - Projection of rear dormer - 3402 mm

E - Height of rear dormer - 2588 mm

F - Width of dormer - 5450 mm

Total Calculation of roof enlargement

49.85 m³

Client - Mr & Mrs Jackson

Address - 16 Manor Close
Burgess Hill
RH15 0NN

D - 3402 mm
E - 2588 mm
F - 5450 mm
C - 4630 mm
B - 3530 mm
A - 9497 mm

