

Volume of Rear Dormer

$V_d = (h \times d \times w) / 2$
 $= (2.4 \times 3.4 \times 6.5) / 2$
 $= 26.5 \text{ m}^3$

Volume of Hip to Gable Extension

$V_g = (h \times d \times w) / 6$
 $= (3.7 \times 9.5 \times 3.9) / 6$
 $= 22.8 \text{ m}^3$

Total Additional Roof Volume

$TOTAL = V_d + V_g$
 $= 26.5 + 22.8$
 $= 49.3 \text{ m}^3$

