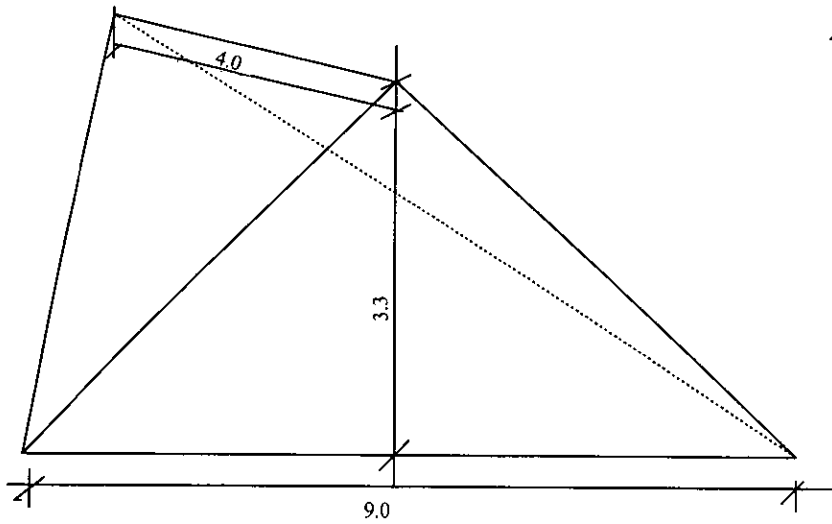
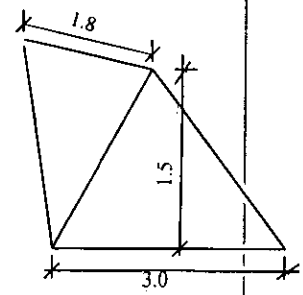




HIP END

Surface area of gable triangle is 1/2 base x height. 1.5 x 1.5 = 1.125 sq.m

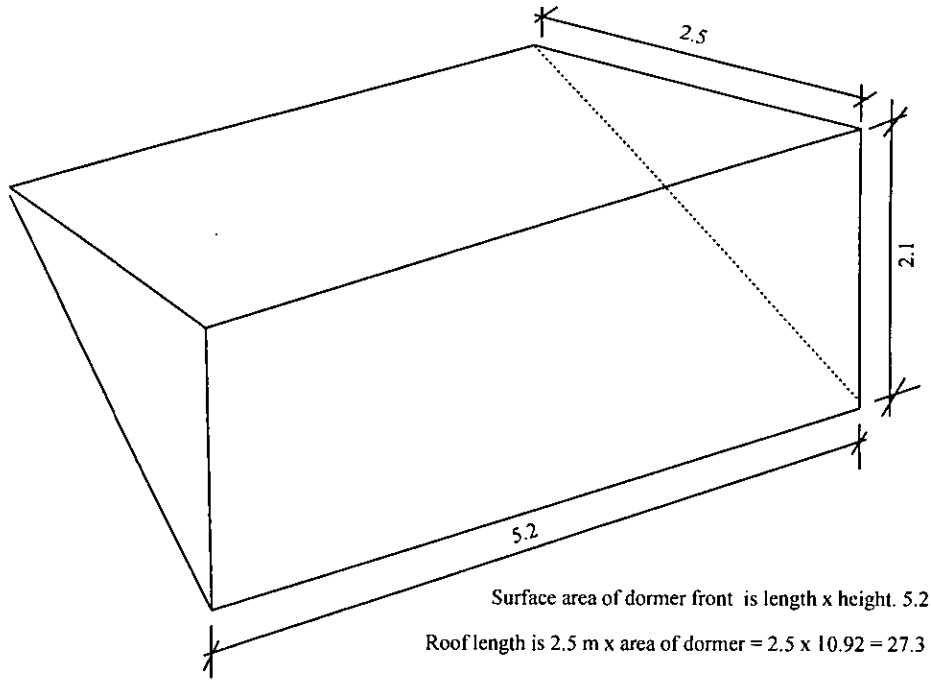
Ridge length is 1.8 m x area of gable = 1.80 x 1.125 = 2.025 halved = 1.012 Cub Metres

FULL GABLE

Surface area of gable triangle is 1/2 base x height. 4.5 x 3.3 = 14.85 sq.m

Ridge length is 4.0 m x area of gable = 4.0 x 14.85 = 59.4 halved = 29.70 Cub Metres

Full gable capacity 29.70 minus Hip End 1.012 = 28 .68 cubic Metres



Surface area of dormer front is length x height. 5.2 x 2.1 = 10.92 sq.m

Roof length is 2.5 m x area of dormer = 2.5 x 10.92 = 27.3 halved = 13.65 Cub Metres

REAR DORMER

Increase in cubic area for extended gable	= 28.68
Rear Dormer cubic area	= 13.65
Total Increase in roof capacity	= 42.33 Cubic meters