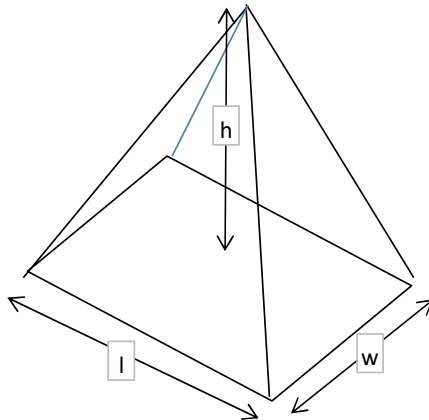
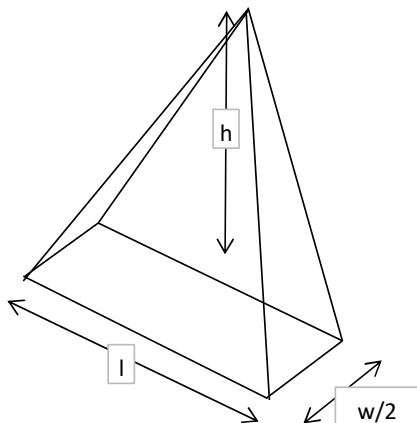


<div>SKM</div> <div>Planning & Design</div>	Project 24 Campden Road			Project no SKMPD/24CR																																					
	Part of Structure Hip to gable volume calc			Page 1	of 1																																				
	Drawing Ref	Prepared SKM	Date	Rev N/a	Date N/a																																				
Subject																																									
<div>for a rectangular pyramid</div> <div>Volume = (l * w * h) / 3</div> <div></div> <div>for half a rectangular pyramid</div> <div>Volume = (l * (w/2) * h) / 3</div> <div></div> <div>Hip to gable volume = prism comprising gable side face, less half pyramid</div> <div><div>Triangular Prism Volume Proposed (including existing pitch):</div><table><tr><td>Gable external height</td><td>2.76</td><td>m</td></tr><tr><td>Gable base external length (overall house depth)</td><td>8.55</td><td>m</td></tr><tr><td>Prism length (distance from gable wall to original ridge)</td><td>3.99</td><td>m</td></tr><tr><td>Volume of triangular prism = 0.5*h*b*l</td><td>47.08</td><td>m3</td></tr></table><div>Half Rectangular Pyramid Volume (volume of existing pitch):</div><table><tr><td>w/2 i.e. distance from gable wall to original ridge</td><td>3.99</td><td>m</td></tr><tr><td>l (i.e 2 x gable base)</td><td>8.55</td><td>m</td></tr><tr><td>h (same as height of gable)</td><td>2.76</td><td>m</td></tr><tr><td>Volume</td><td>31.38534</td><td>m3</td></tr></table><div>Net additional volume required for hip to gable</div><table><tr><td></td><td>15.69267</td><td>m3</td></tr></table><div><div>Volume available for dormer (50m3 allowance)</div><table><tr><td></td><td>34.31</td><td>m3</td></tr><tr><td>Dormer area = height x dormer depth / 2</td><td>5.48</td><td>m2</td></tr><tr><td>Max Dormer width</td><td>6.26</td><td>m</td></tr></table></div></div> <div>(6.035m proposed)</div>						Gable external height	2.76	m	Gable base external length (overall house depth)	8.55	m	Prism length (distance from gable wall to original ridge)	3.99	m	Volume of triangular prism = 0.5*h*b*l	47.08	m3	w/2 i.e. distance from gable wall to original ridge	3.99	m	l (i.e 2 x gable base)	8.55	m	h (same as height of gable)	2.76	m	Volume	31.38534	m3		15.69267	m3		34.31	m3	Dormer area = height x dormer depth / 2	5.48	m2	Max Dormer width	6.26	m
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