

Guess Values

$l := 200 \text{ m}$
 $w := 200 \text{ m}$
 $h := 400 \text{ m}$
 $A := 40000 \text{ m}^2$

Constraints

$2(w+l) + h = 1200 \text{ m}$
 $h^2 = l^2 + w^2$
 $A = l \cdot w$
 $l > 0 \text{ m}$
 $w > 0 \text{ m}$

Solver

$\begin{bmatrix} a \\ b \\ c \\ d \end{bmatrix} := \text{find}(l, w, h, A) = \begin{bmatrix} 191.254 \text{ m} \\ 250.975 \text{ m} \\ 315.542 \text{ m} \\ (4.8 \cdot 10^4) \text{ m}^2 \end{bmatrix}$

$Tot_l := 2 \cdot (a + b) + c = 1200 \text{ m}$