

$$z = x + 845\frac{5}{16} \longrightarrow 45 \quad x = 71.4?$$

$$y = (48 + 12 \cdot 4/\sqrt{3}) + \frac{x}{\sqrt{3}} \longrightarrow \text{side wall}$$

$$z = 221\frac{7}{16} - 5(x + 48 \cdot \frac{\sqrt{3}}{2})/24 - 5y \frac{\sqrt{3}}{24} \longrightarrow \text{ceiling}$$

$$x + 845\frac{5}{16} = 221\frac{7}{16} - \frac{5(x + 48 \frac{\sqrt{3}}{2})}{24} - 5y \frac{\sqrt{3}}{24}$$

$$x = 137\frac{1}{8} - \frac{5(x + 24\sqrt{3})}{24} - 5y \frac{\sqrt{3}}{24}$$

$$24x = 3291 - 5x - 120\sqrt{3} - 5y\sqrt{3}$$

$$\begin{aligned} 29x &= 3291 - 120\sqrt{3} - 5y\sqrt{3} \\ &= 3291 - 120\sqrt{3} - 5\sqrt{3} \left((48 + 12 \cdot 4/\sqrt{3}) + \frac{x}{\sqrt{3}} \right) \\ &= 3291 - 120\sqrt{3} - 240\sqrt{3} + 240 + 5x \end{aligned}$$

$$34x = 3291 - 360\sqrt{3} + 240$$

$$34x = 3051 - 360\sqrt{3}$$

$$x = \frac{3051 - 360\sqrt{3}}{34}$$

$$x = \underline{\underline{71.3959}}$$

$$45z = 155.7084$$

$$y = 116.933$$

$$\text{Ceiling } z = 155.7085$$