APPENDIX 12

ESTIMATION OF THICKNESS OF MAT PIECE FOR SENSING

Area of mat spread = 4 cm$^2$
Volume of mat spread = 1 cm$^2$
Area of one mat piece = 1 cm$^3$

\[ \therefore \text{Volume of 1 mat piece} = \frac{1}{4} = 0.25 \text{cm}^2 \]

ie. volume of the mat piece = $1 \times 1 \times h$

ie. 0.25 = $1 \times 1 \times h$

\[ \therefore h = \frac{0.25}{1} = 0.25 \text{cm} \]

Here $h$ is the thickness of the mat piece.

Hence, the thickness of the mat piece is 0.25 cm.