

- **Worked example for Shelter Compliance**



The above smoking shelter was erected prior to the smoking ban and the owner wished to know whether it complied. The perimeter in this case is set by the roof, which slopes from back to front.

**Total area on perimeter (T) = front + back + 2 sides**

Front area =  $2.2\text{m} \times 5.1\text{m} = 11.22\text{m}^2$

Back area =  $3.4\text{m} \times 5.1\text{m} = 17.34\text{m}^2$

Side area (combined) =  $2(2.2 \times 2.3) + 1(1.2 \times 2.3) = 12.88\text{m}^2$

$T = 41.44\text{m}^2$

**Total area of solids (X) = front walls + back wall + side walls**

Front solid =  $1.6\text{m} \times 1.0\text{m} + 1.8\text{m} \times 1.0\text{m} = 3.4\text{m}^2$

Back solid =  $3.4\text{m} \times 5.1\text{m} = 17.34\text{m}^2$

Sides solid =  $2(2.3\text{m} \times 1.0\text{m}) = 4.6\text{m}^2$

$X = 25.34\text{m}^2$

Totals area of gaps (space) to open air (Y) =  $T - X = 41.44\text{m}^2 - 25.34\text{m}^2 = 16.1\text{m}^2$

$Y = 16.1\text{m}^2$ .

Expressed as %, X (solid) is 61 % of the smoking structure and Y (space) is 39%, so Y is not at least 50% of the structure.

**The structure is therefore deemed to be “substantially enclosed” and smoking cannot be allowed.**



To make the structure compliant two complete panelled sections from front and side and half of further panelled section of the front must be removed.

Solid material removed to equivalent of 4.9 m<sup>2</sup>, so X = 20.44 m<sup>2</sup> and Y = 21 m<sup>2</sup>.

Expressed as %, X (solid) is 49.3 % of the smoking structure and Y (space) is 50.7%, so Y is now at least (exceeds) 50% of the structure.

**The structure is no longer “substantially enclosed” and smoking is therefore permitted.**