How to Calculate Whether an Area is Enclosed or Unenclosed based on the following Commission for Public Health Rule:

(a) An area is enclosed if it has

<u>(1)</u>	a roof or other overhead covering and
(2)	permanent or temporary walls or side coverings on three or more sides that
	make up 55 percent or more of the total combined perimeter surface area.

## Step 1

Measure the **WIDTH** and **HEIGHT** of each wall or side forming the perimeter of the area under consideration. (Use only vertical sides; roof and floor are not included.)

## Step 2

Multiply the **WIDTH** times the **HEIGHT** of each wall or side to determine the **Square Footage** of each wall or side.

## Step 3

Add the Square Footage of each wall or side to find the Total Combined Perimeter Surface Area.

### Step 4

Measure the **WIDTH** and **HEIGHT** of the <u>openings to the outdoors</u> in each wall or side.

### Step 5

Multiply the **WIDTH** times the **HEIGHT** of each <u>opening to the outdoors</u> in the walls or sides to determine the **Square Footage** of each opening(s).

### Step 6

Add the **Square Footage** of each <u>opening to the outdoors</u> in the walls or sides to find the **Open Surface Area**.

### Step 7

Divide the **Open Surface Area** by the **Total Combined Perimeter Surface Area** to determine the percentage of the walls or sides that is open to the outdoors.



Illustration of Example 1

## Example 1:

There is an area in a restaurant (has a roof) with one side consisting of a solid wall and three sides containing openings to the outdoors.

The Square Footage of each side is a follows:

North wall: 500 square feet

South Wall: 500 square feet

East Wall: 400 square feet

West Wall: 400 square feet

Total Combined Perimeter Surface Area: 1800 square feet

The Square Footage of the openings to the outdoors in the sides is as follows:

North wall: 400 square feet

South Wall: 400 square feet

East Wall: 300 square feet

West Wall: 0 square feet

# Open Surface Area: 1100 square feet

N.C. Tobacco Prevention and Control Branch 8-21-14

The 1100 square feet of Open Surface Area is divided by the 1800 square feet of Total Combined Perimeter Surface Area to show that 61 percent of the Total Combined Perimeter Surface Area is open to the outdoors. This means that 39 percent of the Total Combined Perimeter Surface Area is enclosed. Therefore, less than 55 percent of the Total Combined Perimeter Surface Area is enclosed and this area is **unenclosed** under the rule.



Illustration of Example 2

# Example 2:

There is an area in a bar (has a roof) with two sides consisting of solid walls and two sides containing openings to the outdoors.

The Square Footage of each side is as follows:

North wall: 500 square feet

South Wall: 500 square feet

East Wall: 1000 square feet

West Wall: 1000 square feet

Total Combined Perimeter Surface Area: 3000 square feet

The Square Footage of the openings to the outdoors in the sides is as follows:

North wall: 0 square feet

South Wall: 0 square feet

East Wall: 900 square feet

West Wall: 900 square feet

# Open Surface Area: 1800 square feet

N.C. Tobacco Prevention and Control Branch 8-21-14

The 1800 square feet of Open Surface Area is divided by the 3000 square feet of Total Combined Perimeter Surface Area to show that 60 percent of the Total Combined Perimeter Surface Area is open to the outdoors. This means that 40 percent of the Total Combined Perimeter Surface Area is enclosed. Therefore, less than 55 percent of the Total Combined Perimeter Surface Area is enclosed and this area is **unenclosed** under the rule.



Illustration of Example 3

### Example 3:

The Square Footage of each side is a follows:

North wall: 500 square feet

South Wall: 500 square feet

East Wall: 400 square feet

West Wall: 400 square feet

### Total Combined Perimeter Surface Area: 1800 square feet

### The Square Footage of the openings to the outdoors in the sides is as follows:

North wall: 200 square feet

South Wall: 200 square feet

East Wall: 200 square feet

West Wall: 0 square feet

### Open Surface Area: 600 square feet

The 600 square feet of Open Surface Area is divided by the 1800 square feet of Total Combined Perimeter Surface Area to show that 33 percent of the Total Combined Perimeter Surface Area is open to the outdoors. This means that 67 percent of the Total Combined Perimeter Surface Area is enclosed. Therefore, more than 55 percent of the Total Combined Perimeter Surface Area is enclosed and this area is <u>enclosed</u> under the rule.



State of North Carolina • Pat McCrory, Governor Department of Health and Human Services

Aldona Z. Wos, M.D., Secretary

Division of Public Health • www.publichealth.nc.gov

The Department of Health and Human Services does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.