

# AireShield How To Ordering Guide

1

## Select Communication Type

**A**

**S**

Part number automatically will start with AS-

## Choose One:

**A**

Analog  
(4-20mA, 0-20mA)

**D**

Digital  
Modbus RTU

2

## Choose Sensor Configurator

Description

Code

1 Integral Sensor

10



1 Remote Sensor

11



1 Integral / 1 Remote

21



2 Remote Sensors

22



Please contact Macurco for replacement parts.

3

## Determine Sensor Ordering Code

| Gas Type | Range     | Code |
|----------|-----------|------|
| NA       | NA        | 000  |
| R-22     | 2,000 PPM | 739  |
| R-32     | 2,000 PPM | 740  |
| R-123    | 3,000 PPM | 742  |
| R-134a   | 2,000 PPM | 742  |
| R-143    | 2,000 PPM | 743  |
| R-277    | 3,000 PPM | 741  |
| R-404A   | 3,000 PPM | 741  |
| R-407A   | 5,000 PPM | 745  |
| R-407C   | 2,000 PPM | 744  |
| R-407F   | 2,000 PPM | 745  |
| R-410A   | 2,000 PPM | 745  |
| R-449A   | 3,000 PPM | 744  |
| R-452B   | 3,000 PPM | 742  |
| R-454A   | 100 % LEL | 723  |
| R-454B   | 2,000 PPM | 749  |
| R-454C   | 100 % LEL | 725  |
| R-455A   | 100 % LEL | 726  |
| R-507    | 2,000 PPM | 743  |
| R-513A   | 2,000 PPM | 742  |
| R-1233zd | 2,000 PPM | 745  |
| R-1234yf | 2,000 PPM | 744  |
| R-1234ze | 2,000 PPM | 745  |

\*All sensors listed above are 32mm and do not work in dual integral housing.

\*\*Profile 000 is utilized in Sensor 2 box if only one sensor is needed.

If an integral sensor and remote is ordered the first sensor type is on the transmitter and the second is the remote sensor.

4

## Select On Board Buzzer

## Choose One:

Description

Code

Buzzer

**B**

No Buzzer

**N**

\*Buzzer is located on the transmitter only (not the remote sensor).

**See below for more gas options.**

Please contact  
Macurco for more  
refrigerant options.

info@macurco.com / (877) 367-7891

Example: AireShield, Analog, 1 Integral Sensor, R-410A 2,000PPM, No Buzzer

**A** **S** - **A** **1** **0** - **7** **4** **5** - **0** **0** **0** - **N**

| SMART SENSOR DESCRIPTION | SENSOR ORDERING CODE | GAS(ES) DETECTED                             | RANGE       | RESOLUTION | TEMPERATURE RANGE             | DEFAULT CAL-GAS & CONCENTRATION | EXPECTED LIFE (YEARS) |
|--------------------------|----------------------|----------------------------------------------|-------------|------------|-------------------------------|---------------------------------|-----------------------|
| R22                      | <b>739</b>           | R22                                          | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R22, 1000 ppm                   | 10                    |
| R32                      | <b>740</b>           | R32                                          | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R32, 1000 ppm                   | 10                    |
| R32                      | <b>764</b>           | R32                                          | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R32, 1000 ppm                   | 10                    |
| R32                      | <b>700</b>           | R32                                          | 0-10000 ppm | 50 ppm     | 14 to 122°F (-10 to 50°C)     | R32, 5000 ppm                   | 10                    |
| R32                      | <b>720</b>           | R32                                          | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R32, 50% LEL                    | 10                    |
| R32                      | <b>782</b>           | R32                                          | 0-100% LEL  | 1% LEL     | -40 to 140 °F (-40 to +60 °C) | R32, 50% LEL                    | 10                    |
| R123                     | <b>742</b>           | R123, R134a, R452B, R513A                    | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R134a, 1000 ppm                 | 10                    |
| R125                     | <b>741</b>           | R125, R227ea, R404A, R422D                   | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R125, 1000 ppm                  | 10                    |
| R134a                    | <b>742</b>           | R123, R134a, R452B, R513A                    | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R134a, 1000 ppm                 | 10                    |
| R134a                    | <b>701</b>           | R134a                                        | 0-5000 ppm  | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R134a, 3000 ppm                 | 10                    |
| R134a                    | <b>760</b>           | R134a                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R134a, 1000ppm                  | 10                    |
| R143                     | <b>743</b>           | R143, R417A, R507                            | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R507, 1000 ppm                  | 10                    |
| R227ea                   | <b>741</b>           | R125, R227ea, R404A, R422D                   | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R125, 1000 ppm                  | 10                    |
| R404A                    | <b>765</b>           | R404A                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R404A, 1000ppm                  | 10                    |
| R404A                    | <b>741</b>           | R125, R227ea, R404A, R422D                   | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R125, 1000 ppm                  | 10                    |
| R404A                    | <b>702</b>           | R404A                                        | 0-5000 ppm  | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R404A, 3000 ppm                 | 10                    |
| R407A                    | <b>766</b>           | R407A                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R407A, 1000ppm                  | 10                    |
| R407A                    | <b>745</b>           | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |
| R407C                    | <b>744</b>           | R407C, R449A, R1234yf                        | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234yf, 1000 ppm               | 10                    |
| R407C                    | <b>703</b>           | R407C                                        | 0-5000 ppm  | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R407C, 3000 ppm                 | 10                    |
| R407F                    | <b>745</b>           | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |
| R410A                    | <b>745</b>           | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |

**\*SENSOR HOUSING SIZE: 32 MM**

**\*TECHNOLOGY: NDIR SENSOR**

| SMART SENSOR DESCRIPTION | SENSOR ORDERING CODE | GAS(ES) DETECTED                             | RANGE       | RESOLUTION | TEMPERATURE RANGE             | DEFAULT CAL-GAS & CONCENTRATION | EXPECTED LIFE (YEARS) |
|--------------------------|----------------------|----------------------------------------------|-------------|------------|-------------------------------|---------------------------------|-----------------------|
| R410A                    | <b>767</b>           | R410A                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R410A, 1000ppm                  | 10                    |
| R410A                    | <b>704</b>           | R410A                                        | 0-10000 ppm | 50 ppm     | 14 to 122°F (-10 to 50°C)     | R410A, 5000 ppm                 | 10                    |
| R417A                    | <b>743</b>           | R143, R417A, R507                            | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R507, 1000 ppm                  | 10                    |
| R422D                    | <b>741</b>           | R125, R227ea, R404A, R422D                   | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R125, 1000 ppm                  | 10                    |
| R422D                    | <b>768</b>           | R422D                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R422D, 1000ppm                  | 10                    |
| R448A                    | <b>769</b>           | R448A                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R448A, 1000ppm                  | 10                    |
| R448A                    | <b>745</b>           | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |
| R449A                    | <b>770</b>           | R449A                                        | 0-2000 ppm  | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R449A, 1000ppm                  | 10                    |
| R449A                    | <b>744</b>           | R407C, R449A, R1234yf                        | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234yf, 1000 ppm               | 10                    |
| R449A                    | <b>705</b>           | R449A                                        | 0-5000 ppm  | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R449A, 3000 ppm                 | 10                    |
| R449A                    | <b>721</b>           | R449A                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R449A, 50% LEL                  | 10                    |
| R450A                    | <b>747</b>           | R450A                                        | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R450A, 1000 ppm                 | 10                    |
| R452A                    | <b>748</b>           | R452A                                        | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R452A, 1000 ppm                 | 10                    |
| R452B                    | <b>742</b>           | R123, R134a, R452B, R513A                    | 0-3000 ppm  | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R134a, 1000 ppm                 | 10                    |
| R452B                    | <b>722</b>           | R452B                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R452B, 50% LEL                  | 10                    |
| R454A                    | <b>723</b>           | R454A                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R454A, 50% LEL                  | 10                    |
| R454B                    | <b>749</b>           | R454B                                        | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R454B, 1000 ppm                 | 10                    |
| R454B                    | <b>724</b>           | R454B                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R454B, 50% LEL                  | 10                    |
| R454C                    | <b>725</b>           | R454C                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R454C, 50% LEL                  | 10                    |
| R455A                    | <b>726</b>           | R455A                                        | 0-100% LEL  | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R455A, 50% LEL                  | 10                    |
| R507                     | <b>743</b>           | R143, R417A, R507                            | 0-2000 ppm  | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R507, 1000 ppm                  | 10                    |

**\*SENSOR HOUSING SIZE: 32 MM**

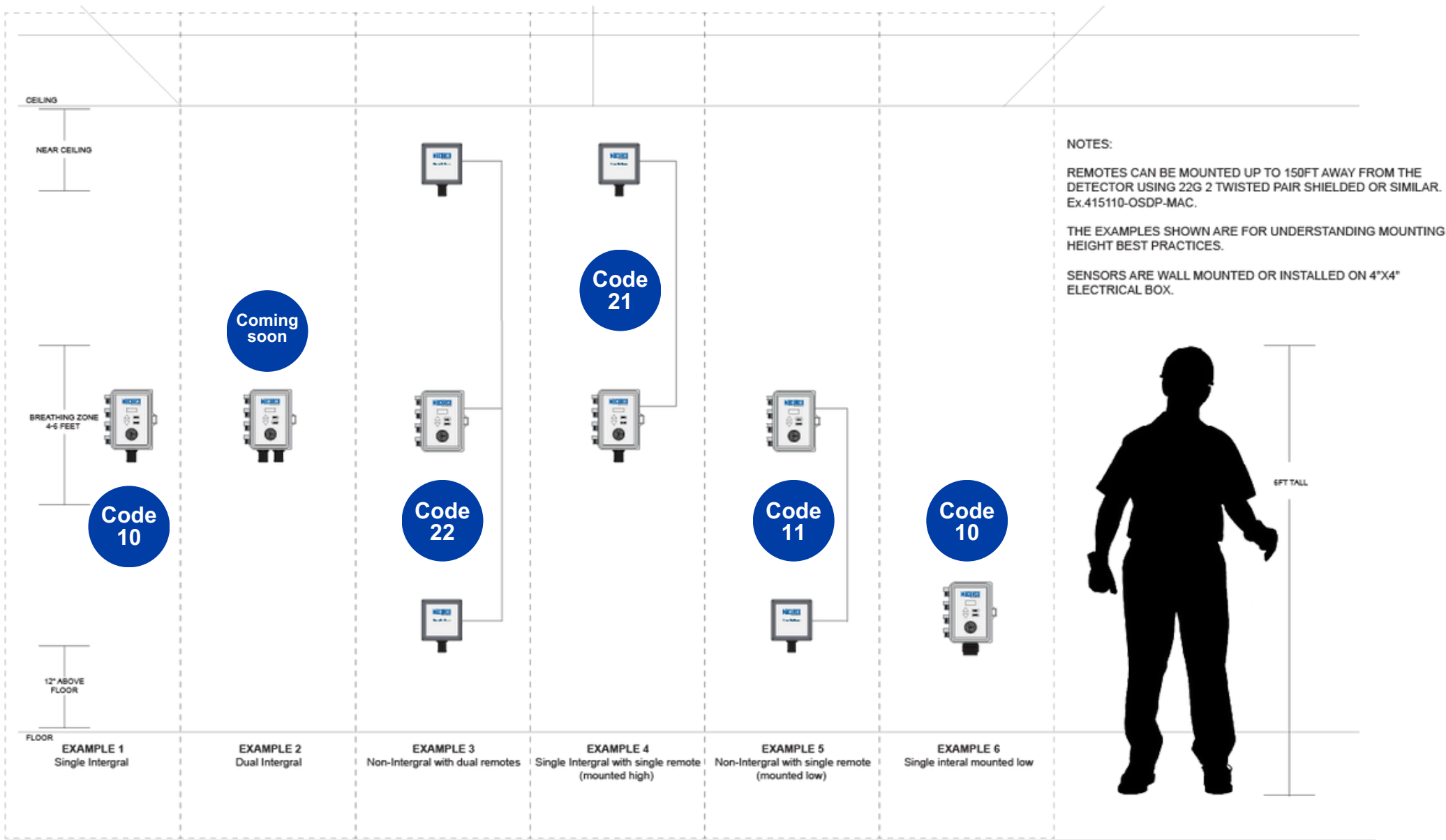
**\*TECHNOLOGY: NDIR SENSOR**

| SMART SENSOR DESCRIPTION | SENSOR ORDERING CODE | GAS(ES) DETECTED                             | RANGE                   | RESOLUTION | TEMPERATURE RANGE             | DEFAULT CAL-GAS & CONCENTRATION | EXPECTED LIFE (YEARS) |
|--------------------------|----------------------|----------------------------------------------|-------------------------|------------|-------------------------------|---------------------------------|-----------------------|
| R507                     | 771                  | R507                                         | 0-2000 ppm              | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R507, 1000ppm                   | 10                    |
| R513A                    | 742                  | R123, R134a, R452B, R513A                    | 0-2000 ppm              | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R134a, 1000 ppm                 | 10                    |
| R1234yf                  | 744                  | R407C, R449A, R1234yf                        | 0-2000 ppm              | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R1234yf, 1000 ppm               | 10                    |
| R1234yf                  | 762                  | R1234yf                                      | 0-2000 ppm              | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R1234yf, 1000ppm                | 10                    |
| R1234yf                  | 706                  | R1234yf                                      | 0-5000 ppm              | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R1234yf, 3000 ppm               | 10                    |
| R1234yf                  | 727                  | R1234yf                                      | 0-100% LEL              | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R1234yf, 50% LEL                | 10                    |
| R1234yf                  | 780                  | R1234yf                                      | 0-100% LEL              | 1% LEL     | -40 to 140 °F (-40 to +60 °C) | R1234yf, 50% LEL                | 10                    |
| R1233zd                  | 745                  | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-3000 ppm              | 10 ppm     | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |
| R1233zd                  | 761                  | R1233zd                                      | 0-5000 ppm              | 25 ppm     | -40 to 140 °F (-40 to +60 °C) | R1233zd, 1000ppm                | 10                    |
| R1234ze                  | 745                  | R407A, R407F, R410A, R448A, R1233zd, R1234ze | 0-2000 ppm              | 5 ppm      | -4 to 122°F (-20 to 50°C)     | R1234ze, 1000 ppm               | 10                    |
| R1234ze                  | 763                  | R1234ze                                      | 0-2000 ppm              | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | R1234ze, 1000ppm                | 10                    |
| R1234ze                  | 707                  | R1234ze                                      | 0-5000 ppm              | 25 ppm     | 14 to 122°F (-10 to 50°C)     | R1234ze, 3000 ppm               | 10                    |
| R1234ze                  | 728                  | R1234ze                                      | 0-100% LEL              | 1% LEL     | 14 to 122°F (-10 to 50°C)     | R1234ze, 50% LEL                | 10                    |
| R1234ze                  | 781                  | R1234ze                                      | 0-100% LEL              | 1% LEL     | -40 to 140 °F (-40 to +60 °C) | R1234ze, 50% LEL                | 10                    |
| SF6                      | 746                  | SF6                                          | 0-2000 ppm              | 5 ppm      | -4 to 122°F (-20 to 50°C)     | SF6, 1000 ppm                   | 10                    |
| SF6                      | 772                  | SF6                                          | 0-2000 ppm              | 5 ppm      | -40 to 140 °F (-40 to +60 °C) | SF6, 1000ppm                    | 10                    |
| CO2                      | 400                  | CO2                                          | 0-5000 ppm              | 10 ppm     | -40 to 140 °F (-40 to +60 °C) | CO2, 2000 ppm                   | 10                    |
| CO2                      | 401                  | CO2                                          | 0-5% v/v (0-50,000 ppm) | 100 ppm    | -40 to 140 °F (-40 to +60 °C) | CO2, 2% v/v                     | 10                    |
| CO2                      | 402                  | CO2                                          | 0-100% v/v              | .2% v/v    | -40 to 140 °F (-40 to +60 °C) | CO2, 50% v/v                    | 10                    |
| Methane                  | 310                  | Methane                                      | 0-100% LEL              | 1% LEL     | -40 to 140 °F (-40 to +60 °C) | Methane, 50% LEL                | 10                    |
| Propane                  | 311                  | Propane + Others                             | 0-100% LEL              | 1% LEL     | -40 to 140 °F (-40 to +60 °C) | Propane, 50% LEL                | 10                    |

**\*SENSOR HOUSING SIZE: 32 MM**

**\*TECHNOLOGY: NDIR SENSOR**

# AireShield Mounting Examples



\*Please contact sales for more questions regarding the Macurco AireShield.

info@macurco.com | (877) 367-7891