Examples of How to Come Up With the Net Worst Case CAZ Depressurization

The *BPI Building Analyst Professional Standards* includes a table titled ***CAZ Depressurization Limits.*** The reason for this is that technicians need to measure the pressure in the CAZ with reference to the outdoors because BPI specifies the maximum depressurization allowed when the CAZ is under worst case conditions.

The house to outside pressure test while the CAZ is under worst case conditions (WC)
Minus
The house to outside pressure test while the house is in natural conditions (NAT)
Equals
The Net CAZ pressure with reference to the outdoors (Net WC)

WC* – NAT = Net WC Pressure*****

***WC means when the CAZ is under the most negative pressure with reference to the outdoors when the house is configured in the scenario to make the CAZ the most negative: Exhaust fan settings, air handler settings, door positions.**
****NAT means natural. BPI calls this Base Pressure on page 12 of the Building Analyst Professional Standards.**
*****Net WC Pressure is the WC pressure minus the NAT pressure. BPI calls this "worst case depressurization" on page 12 of the Standards. THIS is the number you compare to the CAZ Depressurization Limits table on page 14 of the Standards.**

Calculating Net Worst Case Pressure is tricky for some. To assist you, please read on.

Negative Number Rules

Subtraction: Change the sign of the second number. Then add the two numbers using the rules for addition.

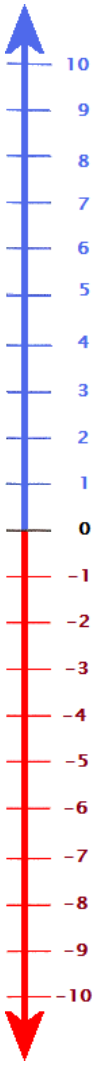
Examples:

6 - 2 = 6 + (-2) = 4

-6 - -2 = -6 + (+2) = -4

-6 – 2 = -6 + (-2) = -8

6 - -2 = 6 + (+2) = 8



ADD Negative = Move Down

SUBTRACT Negative = Move Up

ADD Positive = Move Up

SUBTRACT Positive = Move Down

Examples

A.

1. The baseline pressure in the CAZ WRT outside: -2
2. The pressure in the CAZ WRT outside when the CAZ is under worst case conditions (fans on etc.): -6
3. Answer: Net WC CAZ depressurization is -4

B.

1. The baseline pressure in the CAZ is +1
2. The pressure in the CAZ WRT outside when the CAZ is under worst case conditions (fans on etc.): -3
3. Answer: Net WC CAZ depressurization is -4

C.

1. The baseline pressure in the CAZ is 0
2. The pressure in the CAZ WRT outside when the CAZ is under worst case conditions (fans on etc.): -4
3. Answer: Net WC CAZ depressurization is -4

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