

1005.1.1 MULTIPLE MEANS OF EGRESS (PASSES)

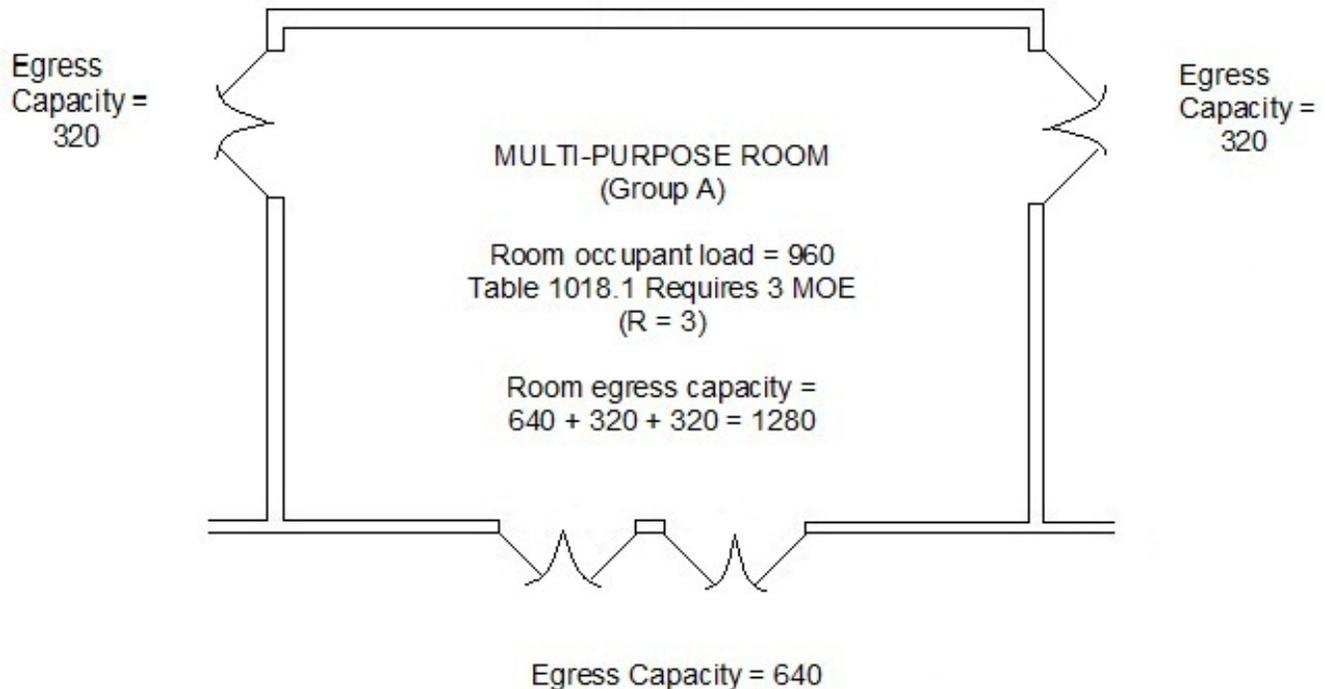
This requirement applies to new rooms and floors that are required to have more than one means of egress.

The loss of any one means of egress (MOE) shall not result in the remaining MOE having a capacity less than that required by the formula:

$$(R - 1) / R = C$$

R = The required number of MOE

C = The minimum fraction of required egress capacity remaining after the loss of any one (largest) MOE.



For this example the formula looks like this:

$$(3 - 1) / 3 = C \quad 0.66667\% = C \quad 960 \times 0.66667\% = 640$$

Actual egress capacity remaining after subtracting the capacity of the largest exit

$$1280 - 640 = 640$$

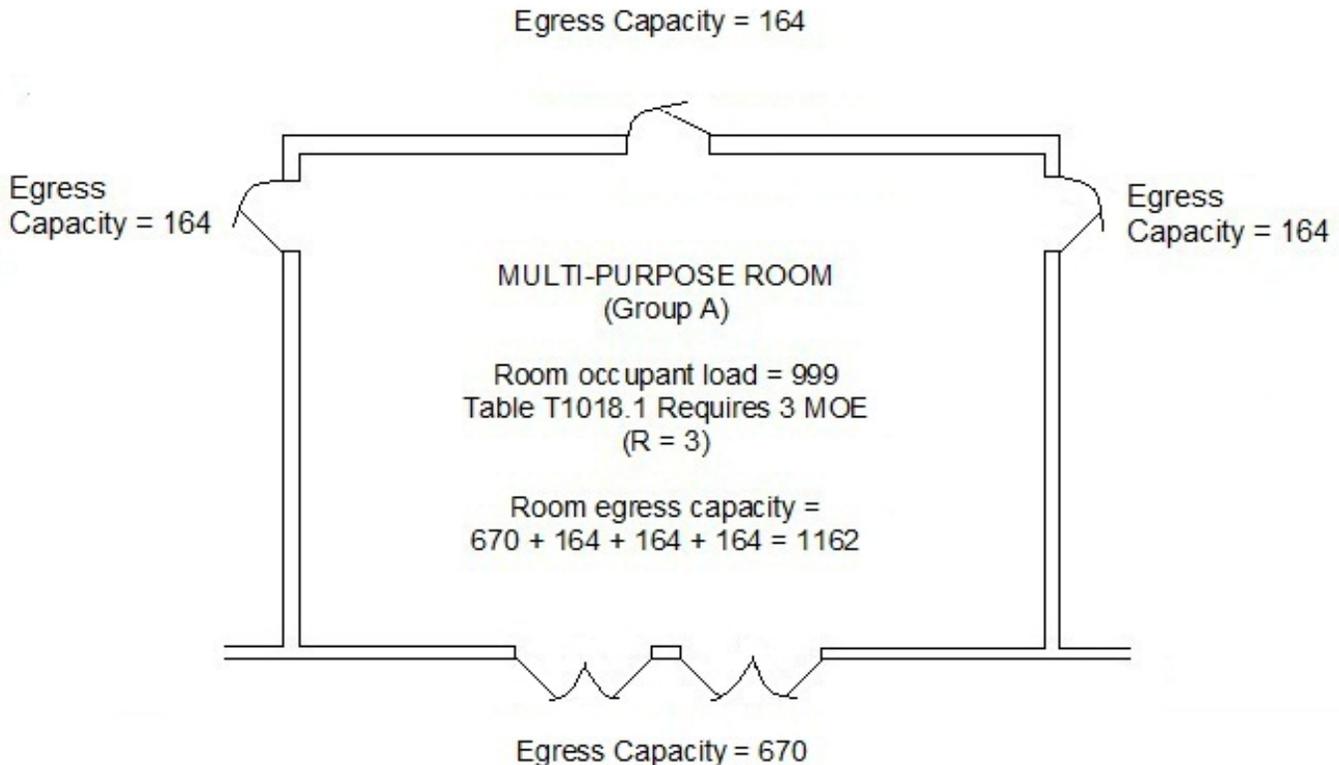
In this example the elimination of the largest doors(s) would require the remaining doors to have a capacity of at least 640.

320 + 320 = 640. Result 640 >= 640: PASSES, this design complies with 1005.1.1

Show this formula (using values appropriate to the situation) on code plans for each new space and each new floor that requires more than one means of egress

SBC Section 1005.1.1 MULTIPLE MEANS OF EGRESS (FAILS)

This requirement applies to new rooms and floors that are required to have more than one means of egress. The loss of any one means of egress (MOE) shall not result in the remaining MOE having a capacity less than that required by the formula: $(R - 1) / R = C$. R = The required number of MOE (see SBC Table T1018.1). C = The minimum fraction of required egress capacity remaining after the loss of any one (the largest) MOE.



For this example the formula looks like this:

$$(3 - 1) / 3 = C \quad 0.66667\% = C \text{ (include this data on the code plan)}$$

This room has a required egress capacity (design occupant load) of 999

$$999 \times 0.66667\% = 666 \text{ (include this data on the code plan)}$$

Actual egress capacity remaining after subtracting the capacity of the largest exit:

$$1162 - 670 = 492 \text{ (include this data on the code plan)}$$

In this example the elimination of the largest doors(s) would require the remaining doors to have a capacity of at least 666. $164 + 164 + 164 = 492$ **Result 492 < 666: FAILS**

The result shows that even though the room has more egress capacity than required, and has one more means of egress than required, it does not comply with 1005.1.1. Design adjustments are required.

After a compliant design is completed, show this formula (using values appropriate to the situation) on code plans for each new building floor level, and each new room.