Building as a General Rule Copymaster 6

Here we have a series of interesting buildings with green concrete squares. There are two tasks to complete.

Task 1

How many lavender squares do you need for the first lavender building? The second? The third?
How many lavender squares will you need for the tenth building? The twelfth? The 25th?
What can you say about the number of squares that you will need for any building in this sequence?
What do you think the general rule for the pattern for these buildings is?
Can you test this general rule out with a few examples? Does it work for the first building? The second building? The tenth building?

Task 2

While you’re looking at this pattern, what happens if you put two of the lavender buildings together? Is it possible that you have enough squares for another building?
Experiment by putting the second and third buildings together.
What do you get? What is the significance of the 5 here?
If you add any lavender building to any other lavender building will you always get enough squares for another lavender building?
Experiment some more to see if this is true or not.
If it is true what is the number of the answer building? How can you find out?