## Packing

Problem $43^{e}$. Use CLINGO to pack a given set of squares into a given rectangular area without overlaps. For instance, if the sides of the squares are $4,3,2,2$, and 1 , and the area is $5 \times 8$, then the problem can be solved as follows:

$$
\begin{array}{llllllll}
A & A & A & A & B & B & B & x \\
A & A & A & A & B & B & B & x \\
A & A & A & A & B & B & B & E \\
A & A & A & A & C & C & D & D \\
x & x & x & x & C & C & D & D
\end{array}
$$

(the x's indicate the part of the area that remains unused).

