Documentation for the use of the *tikzcivil* package

Cristóbal Tapia
crtapia@gmail.com

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Contents

Chapter 1

Drawing for the Structural Analysis

1.1 Dynamic

1.1.1 \MassWithSpring command

This command draws a typical mass-spring system. It supports also an optional damper and displacement. The basic behavior of this command is shown in fig. 1.1.
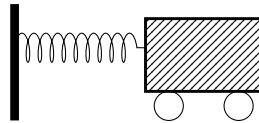

Figure 1.1: Mass-Spring system

```
1  \begin{tikzpicture}[scale=1]
2      \MassWithSpring[]
3  \end{tikzpicture}
```

More interesting behaviours can be achieved using the optional key values, as shown in fig .
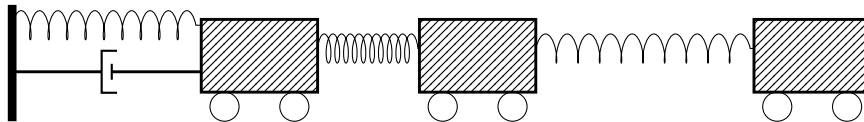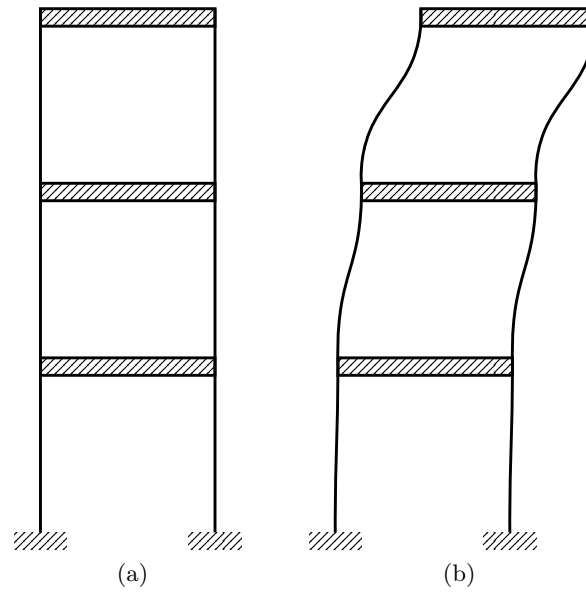

Figure 1.2: More complex mass-spring system

```
1  \begin{tikzpicture}[scale=1]
2      \MassWithSpring[displacement = 2em, with damper = true]
3      \MassWithSpring[displacement = -1em,  with wall = false, position
          = {10.5em,0em}]
4      \MassWithSpring[displacement = 3em,  with wall = false, position =
          {18.0em,0em}]
5  \end{tikzpicture}
```

(a)   (b)

1.1.2   Múltiples marcos apilados

Dibujo izquierdo

```
1  \begin{tikzpicture}[scale=0.6]
2    \FrameDispl{0em,0em}{1}{0em}
3    \FrameDispl{0em,10em}{0}{0em}
4    \FrameDispl{0em,20em}{0}{0em}
5  \end{tikzpicture}
```

Dibujo derecho

```
1  \begin{tikzpicture}[scale=0.6]
2    \FrameDispl{0em,0em}{1}{0.15em}
3    \FrameDispl{0.15em,10em}{0}{1.35em}
4    \FrameDispl{1.5em,20em}{0}{3.4em}
5  \end{tikzpicture}
```

Chapter 2

Dibujos relacionados con la mecánica de suelos