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Designing Sustainability for All

FERROLI P.C., LIBRELLOTTO L.I., GERALDO, N., UFSC

Alternative Materials to Improve the Assembly Process of Furniture Focused on Sustainability Design

1) The Importance of Improve Assembly process

The assembly of the furnishing is a relatively complex process, and often requires qualified professionals to perform it. Few companies provide the public detailed and easily understandable instructions that would allow the installation, even to those who are unaware of the concepts of technical drawing.

Nowadays homes tend to be unoccupied during office hours, when it would be most proper for assemblers perform their job. So, many consumers prefer assembling the furniture they have purchased, to avoid waiting for that long. Some stores even offer different prices for those shoppers that purchase, take and assemble the furnishing themselves, which reflects the adoption of a new strategy.

When addressing this problem, it was decided to import the study of furniture correct design to project disciplines, as a part of design project. Designers need to consider the mounting procedures by the user's point of view, in order to make it as easy as possible, so it can be done by unaware people. So, in order to the user be the constructor of own furniture, it is necessary the project to forecast that, what is not necessarily occurring.

2) Self-assembly on House-Building sector

The “Do It Yourself” (DIY) approach has disseminated to other areas, and one of these is the house-building sector. In this field, the DIY methods brings new initiatives which always use the local materials available, as clay or bamboo, and not-necessarily includes the prefabrication method, although it could implicate on preforming. Obviously, some of the traditional characteristics, as prefabrication and installation facility, were updated and modified in reason of the local resources available. Many of these, as bamboo, requires a different way of designing and building, where the designer often interacts with the construction and ends being the final user of his product.

Keeping the DIY approach, it was realized the assembly of a bamboo housing modular prototype (figure 4), in partnership with Architecture & Urbanism Department of Universidade Federal de Santa Catarina, (VITOR, 2018).

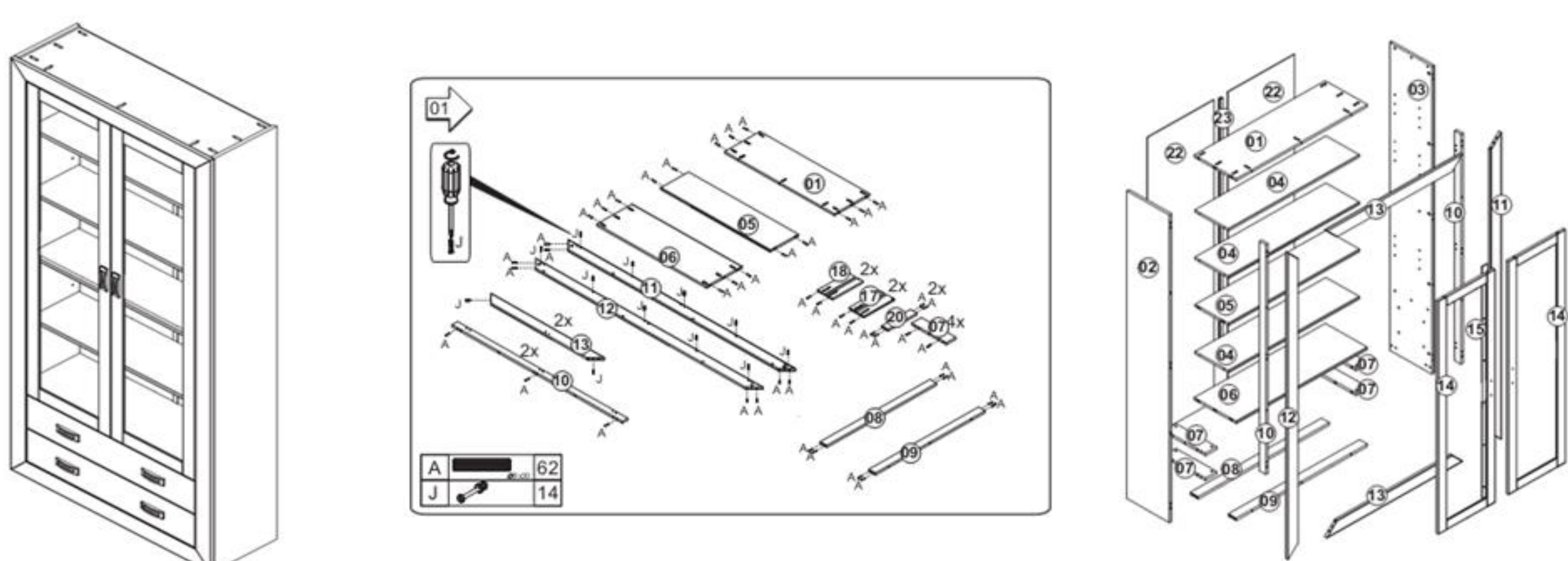


Fig. 1, 2, 3: Illustrations about assembling furniture.
Source: : <http://meumoveldemadeira.com.br>, 2013



Fig. 4: Bamboo habitation prototype. Source: VITOR(2018)