

STOCK ITEMS REQUIRED TO ASSEMBLE TREE OF WATER AND POWER INSTALLATION:

ALUMINUM 6061 TUBES (for trunk and branches) in the following sizes:
<http://www.mcmaster.com/#standard-aluminum-hollow-tubing/=xqauda>

| | OUTER DIAMETER | INNER DIAMETER |
|----|----------------|----------------|
| 1. | 5" | 3" |
| 2. | 3.75" | 2.25" |
| 3. | 3" | 2" |
| 4. | 2.25" | 1.25" |
| 5. | 1.75" | 1.25" |
| 6. | 1.25" | .75" |
| 7. | 1" | .5" |
| 8. | .75" | .5" |
| 9. | .5" | .375" |

Aluminum tubes require polishing and anodizing/same finish as branch connectors. Can be anodized at any number of anodizers in Los Angeles. Requires very light anodization.

POLYVINYLIDENE DIFLUORIDE TUBES .25" outer diameter (for leaf stalks)
Requires testing. Will withstand UV, is non-toxic and suitable for outdoors. <http://www.mcmaster.com/#pvdf/=xqakp3>

POLYVINYLIDENE DIFLUORIDE FILM (as a piezoelectric polymer to be rolled up inside leaf stalks)
Currently the only effective polymer that is effective as a piezoelectric material. The film may have to be treated or otherwise with further piezo electric material. requires testing. Will withstand UV, is non-toxic and suitable for outdoors. <http://www.mcmaster.com/#pvdf/=xqarjg>

SLIP RINGS are data and power connectors that can rotate while still maintaining a connection; they are used extensively in the auto industry <http://www.slipring.com.cn/index.php?m=Product&a=index&id=38#tabs1-2> they would allow remarkably convenient installation, and the ability to 'flat-pack' the trees for efficient transportation and further cost savings. It would also allow for easy repositioning of the branches, as by its nature every tree is slightly different, and a little like a work of art.

The remaining parts; the branch connectors, the leaf connectors, and the leaves must be metal sintered and/or 3D printed, depending on scale, and printed and die-cut respectively.