

# SÖREN – made of recycling materials

## construction manual for an irrigation system for your plants

### material list:

- 1x bucket for the reservoir
- 1x bucket for the floating valve
- 2x buckets of the same size \*
- 1x floating valve
- 1x fitting with an internal thread and 90°
- 2x fitting with an external thread and 90°
- 1x T-fitting with an external thread
- 3x union nut\*
- 1x fleece \*

### tool list:

- 1x sharp knife
- 1x Forstner bit 20mm
- 1x sealant/ glue

\* depending on the number of flower boxes



#1

- drill two holes with the Forstner drill into the one bucket on top of each other (next to the ground)
- there must be enough space for the union nuts left



#2

- screw the floating valve into the upper hole
- screw the fitting with the external thread and 90° in the lower hole
- screw the fitting with the internal thread and 90° over the floating valve



#3

- drill a hole into the (reservoir-) bucket (at the height of the floating valve)
- screw the fitting with the external thread and 90° in the hole
- the union nut from the other side



#4

- drill a hole into another bucket next to the bottom
- screw the T-piece-fitting in the hole
- there must be enough space for the union nut left

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#5

- cut a slit for the fleece into an other bucket
- pull the fleece to the half of it through the slit



#6

- distance pieces are needed, stable enough to handle the bucket filled with soil (Margarine tub, polystyrene, expanded clay, ...)
- the bucket needs a distance to the waterlevel, it has to be stable and the fleece has to hang into the water



#7

- the distance pieces will be putted into the bucket from #4
- the bucket from #5 will be putted on it
- #5 can be filled with soil and can be planted



#8

- the buckets are connected by tubes
- tube connectores can be put optionally - they improve manageability



#9

- make the union nut waterproof with glue or sealant

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# SÖREN – in a flower box

without holes  
for underdrain

## construction manual for an irrigation system for your plants

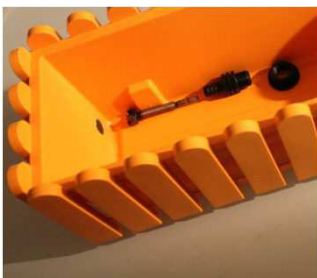
### material list:

- 1x flower box (without holes for underdrain)
- 1x fittings with external thread \*
- 1x union nut\*
- 1x fleece (big or small)\*

### tool list:

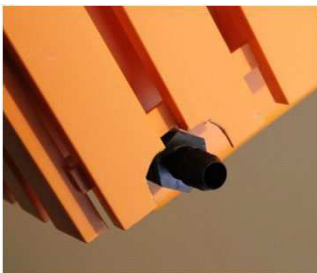
- 1x sharp knife
- 1x Forstner bit 20mm
- 1x sealant/ glue

\* depending on the number of flower boxes



#1

- drill a hole with the Forstner drill into the flower box next to the ground of the flower box
- there must be enough space for the union nut left



#2

- screw the fitting into the hole
- screw the union nut from the other side
- in this case: ensure working clearance (with a sharp knife)



#3

- in this case: a bulging side allows putting a intermediate floor made of recycled plastic
- a fleece hangs down to the ground



#4

- is there no bulging side put some stones or some other filling materials in
- the fleece ensures now the flow of water through the tubes

# SÖREN – in a flower box

without holes  
for underdrain

## construction manual for an irrigation system for your plants



#5

- the filling material is covered by a piece of fleece, no soil can flush into the filling material



#6

- combine the flower box with other flower boxes or with the floating valve putting some tubes and tube connectors



#7

- make the union nut waterproof with glue or sealant

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