

# Sheet Mulch

## Restoring and Preparing Cultivated Soil

A passive process - typically for perennials, but can be used to establish annual beds as well - kills and recycles unwanted grass and weeds, creates fertile topsoil, restores a healthy soil community, protects against frost, erosion and drying out in the summer and reduces the maintenance requirements (weeding and irrigating) during the growing season.

### Season

- Ideally *SM* is installed in the early fall after the first measurable rain event for planting the following late winter and early spring.
- Plan to install *SM* before or during a rain event to avoid needing to wet it with domestic water.
- The speed of the restoration process depends on the temperature, amount of precipitation and the density of the grass/weeds present.

### Materials

It is important to keep in mind that the type of materials used will directly effect the soil and it's biologic community which in turn can effect the plants and possibly your health.

- Reusing cardboard boxes is a free material resource, but it may contain toxic glues and dyes.
- Non-organic straw may contain herbicides and pesticides.
- Synthetic nitrogen fertilizers may contain excessive amounts of salt and other chemicals.
- We recommended using recycled floor protection products (X-Board), organic rice straw and organic fertilizers (composted chicken manure) and locally sourced wood chips.



### Layers

#### **Layer 1: Cardboard**

This is the layer that is directly responsible for smothering the grass and weeds, so be sure that adjacent pieces are overlapped by at least 12-inches.

#### **Layer 2: Straw**

This is the second layer responsible for smothering the grass and weeds so be generous in your application.

#### **Layer 3: Nitrogen**

After two layers of carbon (cardboard and straw) an application of nitrogen is required to begin the breakdown process.



#### **Layer 4: Woody Mulch**

Nitrogen left uncovered will volatilize (become a gas and be lost to the atmosphere); therefore, a generous layer of wood chips is applied. This layer will also weigh down the straw and reduce the air gaps which will make it more accessible to break down by the soil community.

