

Terrace

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 600



DEFINITION

A terrace is an earth embankment, channel, or a combination ridge and channel constructed across the slope to intercept runoff water.

PRACTICE INFORMATION

This practice generally applies to cropland but may also be used on other areas where field crops are grown such as wildlife or recreation lands.

Terraces are installed for one or more of the following purposes:

- Reduce slope length for erosion control
- Intercept and conduct runoff to a safe outlet
- Retain runoff for moisture conservation
- Prevent gully development
- Reform the land surface for better farmability

A variety of terrace configurations have been developed as a result of research and field experience. Four common types of terraces are:

- **Broad-based** which are farmed on both sides.
- **Steep backslope** which have a steep downstream slope in permanent cover.
- **Narrow based** which are steep on both sides and have permanent cover planted on both sides.
- **Level terraces** which are used to conserve moisture as well as control erosion.

Terraces may be parallel on fairly uniform terrain or vary from parallel when the terrain is undulating. Since parallel terraces are more acceptable, designs often provide for cuts and fills to improve terrace alignment and farmability. Channel grades may be uniform or variable as long as the water velocity is nonerosive and meet other design criteria. The runoff from terraces may be handled by grassed waterways or underground pipe outlets depending on site conditions. Soil infiltration may also be utilized as the outlet for runoff when level terraces are installed and the soil is sufficiently permeable to remove the water stored in the channel before crop damage occurs.

Terraces require careful design, layout and construction. Additional information including standards and specifications are on file in the local NRCS Field Office Technical Guide.