

# FIELD METHOD FOR IDENTIFYING SOIL TEXTURE

This OSHA form may be found at <http://www.osha.gov> or [dewalt.com/guides](http://dewalt.com/guides).

| Soil Texture      | Visual Detection of Particle Size and General Appearance of the Soil  | Squeezed in Hand and Pressure Released                              |  | Soil Ribboned Between Thumb and Finger When Moist |
|-------------------|---|---|--|---|
|                   |   | When Air Dry  | When Moist   |   |
| <b>Sand</b>       | Soil has a granular appearance in which the individual grain sizes can be detected. It is free-flowing when in a dry condition.   | Will not form a cast and will fall apart when pressure is released. | Forms a cast that will crumble when lightly touched.           | Cannot be ribboned.                               |
| <b>Sandy Loam</b> | Essentially a granular soil with sufficient silt and clay to make it somewhat coherent. Sand characteristics predominate.   | Forms a cast that readily falls apart when lightly touched.         | Forms a cast that will bear careful handling without breaking. | Cannot be ribboned.                               |
| <b>Loam</b>       | A uniform mixture of sand, silt, and clay. Grading of sand fraction quite uniform from coarse to fine. It is mellow, has somewhat gritty feel, yet is fairly smooth and slightly plastic. | Forms a cast that will bear careful handling without breaking.      | Forms a cast that can be handled freely without breaking.      | Cannot be ribboned.                               |

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| <b>Silt Loam</b>     | Contains a moderate amount of the finer grades of sand and only a small amount of clay. Over half of the particles are silt. When dry it may appear quite cloddy, which readily can be broken and pulverized to a powder.   | Forms a cast that can be freely handled. Pulverized, it has a soft, flourlike feel. | Forms a cast that can be freely handled. When wet, soil runs together and puddles.            | It will not ribbon, but it has a broken appearance, feels smooth, and may be slightly plastic.         |
| <b>Silt</b>          | Contains over 80% of silt particles with very little fine sand and clay. When dry, it may be cloddy; readily pulverizes to powder with a soft, flourlike feel.  | Forms a cast that can be handled without breaking.                                  | Forms a cast that can freely be handled. When wet, it readily puddles.                        | It has a tendency to ribbon with a broken appearance; feels smooth.                                    |
| <b>Clay Loam</b>     | Fine-textured soil breaks into very hard lumps when dry. Contains more clay than silt loam. Resembles clay in a dry condition; identification is made on physical behavior of moist soil.   | Forms a cast that can be freely handled without breaking.                           | Forms a cast that can be handled freely without breaking. It can be worked into a dense mass. | Forms a thin ribbon that readily breaks, barely sustaining its own weight.                             |
| <b>Clay</b>          | Fine-textured soil breaks into very hard lumps when dry. Difficult to pulverize into a soft, flourlike powder when dry. Identification based on cohesive properties of the moist soil.  | Forms a cast that can be freely handled without breaking.                           | Forms a cast that can be handled freely without breaking.                                     | Forms long, thin, flexible ribbons. Can be worked into a dense, compact mass. Considerable plasticity. |
| <b>Organic Soils</b> | Identification based on the high organic content. Muck consists of thoroughly decomposed organic material with considerable amount of mineral soil finely divided with some fibrous remains. When considerable fibrous material is present, it may be classified as peat. The plant remains or sometimes the woody structure can easily be recognized. Soil color ranges from brown to black. They occur in lowlands, in swamps, or swales. They have high shrinkage upon drying. |   |   |  |