

# Illinois Mining Limestone

Limestone is a sedimentary rock composed of calcite (calcium carbonate). Generally, Illinois' limestone deposits are estimated to be between 300 and 500 million years old. In mining industry usage, the term limestone includes dolomite, a rock commonly created from limestone by the replacement of some of the calcium with magnesium.

Quarried throughout the state, limestone is Illinois' most valuable mineral resource. Most often limestone quarries are surface operations excavating material up to hundreds of feet below the natural ground surface. Illinois also has a few underground limestone quarries.

After the overlying soil is removed, the limestone is initially fragmented by blasting to a reasonable size for handling. This allows for transportation via various methods to a crusher, which further breaks the rock. Screens and sometimes washers, possibly in conjunction with a secondary crusher, are used to sort and otherwise further process the raw materials



Drilling



Loading Blast Holes



Loading and Hauling Blasted Rock



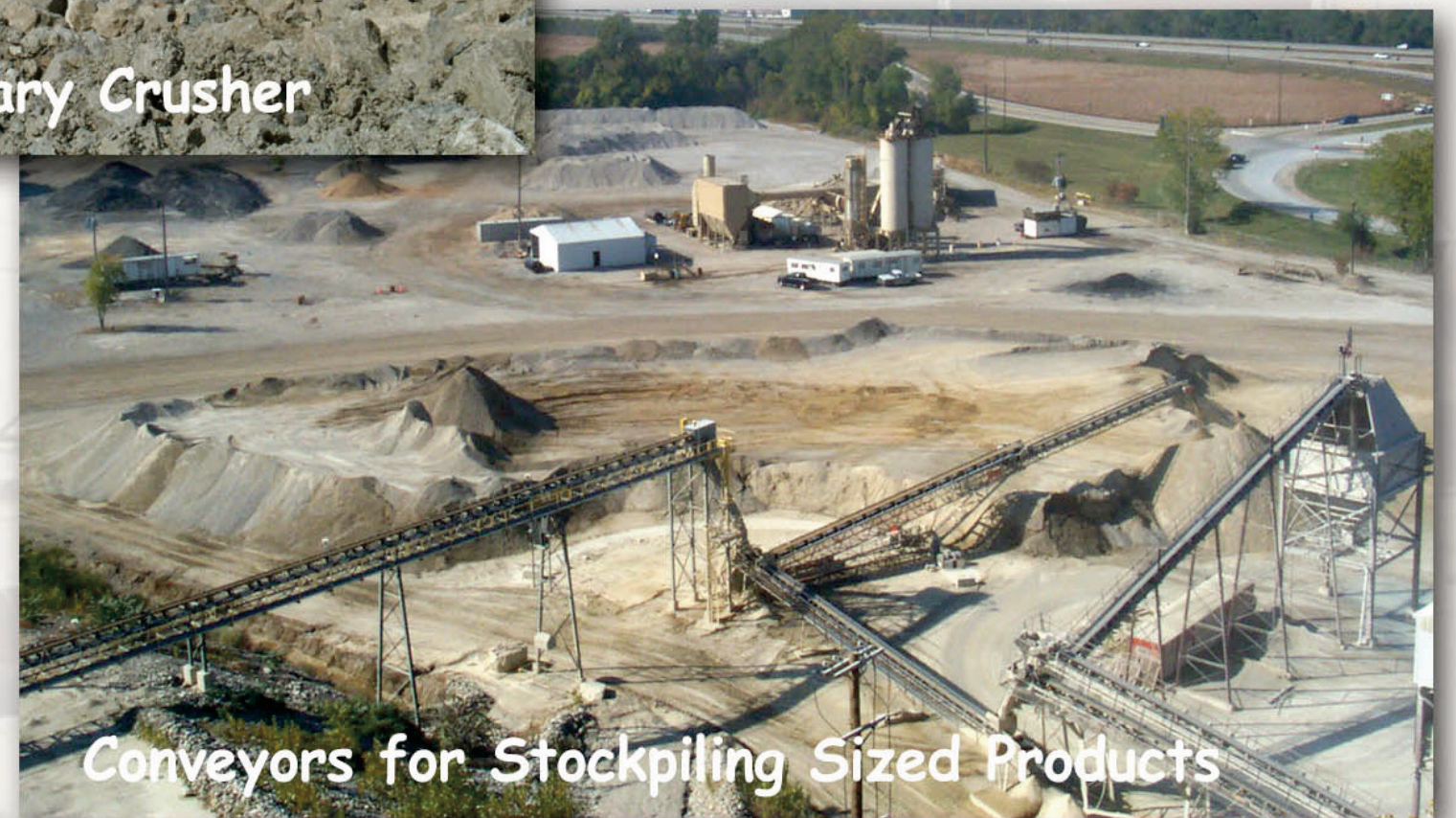
Primary Crusher



Sizing Screens



Blast Detonation



Conveyors for Stockpiling Sized Products



## Aglime

This very finely ground (no specifications) limestone is used to neutralize acidic soils and enhance crop production. The material is also used as trench backfill.



## CA 6

CA (coarse aggregate) 6 is a 1 1/2 inch or less product used for road base purposes, since it can be compacted by heavy machinery. Although some rocks up to 1 1/2 inches may be present, 60 to 90 percent is less than 1/2 inch.

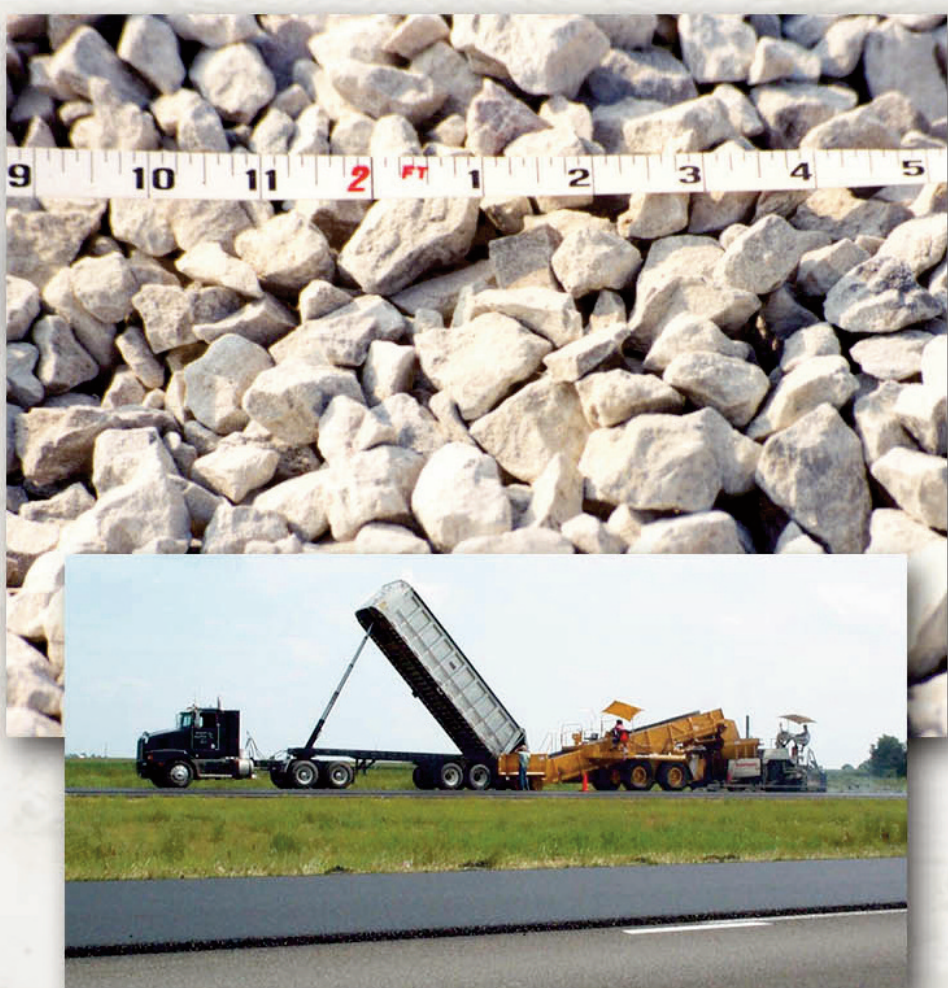


## CA 16

These 3/8 inch chips are typically used in asphalt and as chip-seal for road surfaces.

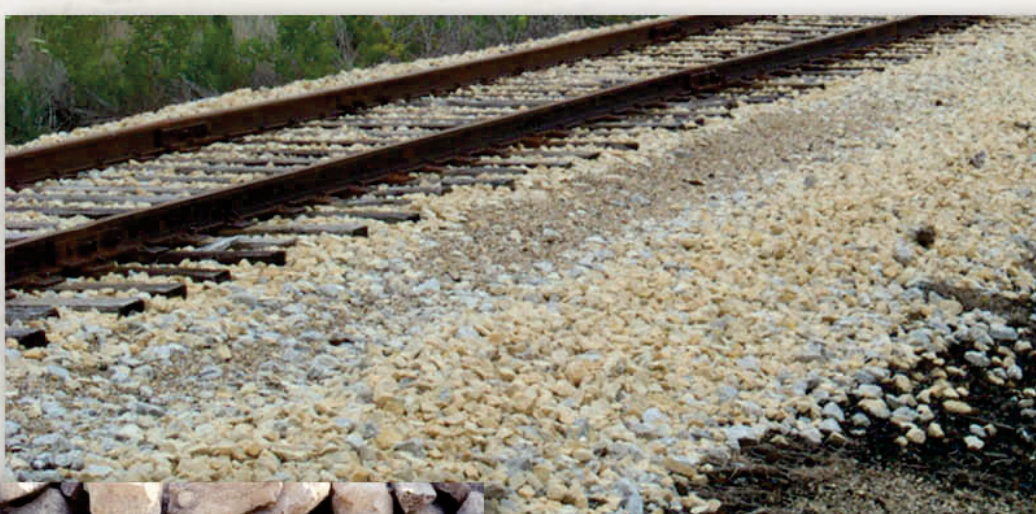
## Rip Rap

Typically 3 to 21 inch diameter stone (dependent on application), rip rap is used for erosion control around lakes, rivers and drainage ways. The material is also used to fill mine shafts.



## CA 7/CA 11

These products are typically used as concrete or asphalt stone. CA 7, which is a washed concrete stone, grades primarily from 1 1/2 to 3/16 inches. CA 11 is less than 1 inch rock with a greater percentage of fine material and is used for asphalt. These products also work for pipe bedding.



## CA 1

This coarse product grades from 1 to 3 inches and is used for sub grade, structured embankments and for railroad ballast.

